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GOVERNMENT OF PAKISTAN

# MINISTRY OF FOOD, AGRICULTURE & COOPERATIVES

## FOOD SECURITY MANAGEMENT PROJECT

(ECONOMIC & POLICY ANALYSIS)

# MARKETING MARGINS OF SELECTED CROPS IN THE CONTEXT OF FARMING SYSTEMS AND ECOLOGICAL ZONES

## Volume I—MAIN REPORT

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UCGL


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## EXECUTIVE SUMMARY

Marketing activities involve transformation of commodities in time, space and form. In developing countries, markets do not always function in the best interests of a broad section of society, especially where communications and transportation facilities are poor, markets are highly segmented and access for marketing participants is greatly restricted. The role of middlemen in these conditions is generally reviewed in critical and negative terms. It is therefore a major empirical issue to determine how efficiently and effectively marketing agents and institutions are playing their role in the food marketing system. The present study was thus undertaken as an important part of the overall food policy analysis.

The main objective of the study was to measure the costs of each of the marketing services as a component of the marketing margin for the major food crops of wheat, rice and pulses. It was also intended to assess the extent of marketing services and the constraints on the growth of these services in relation to the services available in the more developed markets.

The analytical framework had the following major components:

- Review of literature and institutions.

- Survey of growers of the reference crops.

- Cost survey of firms/agencies in the marketing operations.

- Consumers survey.

- Evaluation of marketing development constraints.

## Marketing System of Wheat

The growers sample consisted of 306 households. The shares of the small, medium and large size farms were 37, 36 and 27 percents respectively. The average size of the operational holdings was 33.02 acres of which almost one-half was under wheat. The percentage share under wheat tended to decline with increase in the size of the holdings. The average yields showed opposite trend.

Domestic consumption was the single most important use accounting for 27 percent of the total output. This ratio tended to vary inversely with the size of the farm. The absolute quantities kept for domestic consumption by the large farms were higher because of their greater total outputs. The analysis thus shows positive correlation between per capita domestic consumption and the size of the farms. The ratio of marketed surplus to total production varied directly with the size of the farm the ratio for the small, medium and large farmers being 35, 40 and 52 percents respectively.

Wheat harvesting generally starts in April and almost the entire quantities are sold by the growers within the following three months. The larger growers however tended to sell greater proportion in later months. Thus 87 percent of the marketed surplus was sold during the three months of April to June while 11 percent was sold in July. Only 2 percent of the total sales were reported during other months of the year. The average sale price obtained by the farmers was Rs. 79.56 per maund as against the official support price of Rs. 82.50 per maund.

The important actors, in order of importance and their relative shares in the total sales were village beopari 33 percent, Food Department 25 percent, katcha arhati 15 percent and local sales 14 percent.

The average marketing costs of growers were Rs. 3.69 per maund for sales to pacca arhatis and Rs. 3.95 per maund for katcha arhati. Average costs for sales to Food Department were however significantly lower at Rs. 2.83 per maund. These marketing costs formed 5.03, 5.16 and 3.57 percents of the net farmgate prices obtained by them for sale to these three market actors.

The major components of the marketing costs were other market charges for the katcha and pacca arhatis and 'deductions' for sales to the Food Department.

The average farmgate prices were the highest for sales made to the Food Department followed by sales to village shopkeeper and village beoparis. The prices paid by katcha and pacca arhatis were higher than those paid by village market actors. However, after deduction of market charges, the net farmgate prices for sales to arhatis were lower than in the case of local market actors.

Eight major marketing channels were identified on the basis of the present survey and farmers shares in the retail price were estimated for each of these channels. These ranged between 62.46 to 67.24 percent in the Punjab. For Sind the ratios were 64.77 and 67.69 percents for the two marketing channels as compared to 67.74 for the one channel of NWFP.

The analysis of gross margins shows that the processor got the maximum share followed by retailers and wholesalers. The net margins formed a very high proportion of gross margins, varying between 71.45 percent for wholesaler to 82.64 percent for processors. The high ratios of net margins to gross margins indicate the scope for reducing the gross margins in the overall price structure.

## Marketing System of Rice

The growers sample consisted of 301 households. The shares of the small, medium and large size farms were 77, 15 and 8 percents respectively. More than two thirds of the sample area in the Punjab was under basmati rice, the different size holdings recording only marginal differences. In the case of the Sind, almost the entire holdings of all sizes were devoted to the cultivation of irri rice.

Ratio of output kept for domestic production and payments in kind varied inversely with the size of the farm.

The ratio of the marketed surplus varied directly with the size of the farms. A major share of the marketed surplus was sold immediately after harvest and almost the entire quantities were disposed of within a period of 3 to 4 months.

The marketing behaviour of the three sized growers showed distinct trends. The small group with upto 12.5 acres sold as much as 98 percent of the total by the month of

November. The large farmers, however, sold only 66 percent of the total during November while selling the remaining 34 percent after two months in January when they were able to realize on the average, 17 percent higher price as compared to their previous sales.

The average sale price obtained for basmati and irri paddy were Rs. 135.48 and Rs. 63.59 per maund as against the official support prices of Rs. 130 and Rs. 55 per maund.

Village beopari was the most important market actor for the sample basmati rice growers, accounting for almost one-third of the total sales.

In the case of irri producers direct sales to rice mills was by far the most important channel accounting for 47 percent of the total sales.

In the case of basmati rice, the average marketinv costs of the growers for sales to katcha and pacca arhatis do not show much variations, being Rs. 10.52 per maund for sales to pacca arhati and Rs. 10.24 per maund for sales to katcha arhati. The average costs were however significantly lower for direct sales to rice mills, being almost one-fourth of those of other market actors.

The average costs of irri growers were about 40 percent higher for sales through katcha arhatis while these were the least for direct sales to the rice mills. The average marketing costs formed about 8 to 9 percent of the average farmgate prices for both basmati and irri sample growers.

The average farmgate prices were the highest for sales made to the rice mills, followed by village shopkeepers, and the village beoparis.

Basmati growers were able to obtain prices higher than support prices for sales to village shopkeepers, village beoparis and rice mills. In the case of irri rice, the farmgate prices were generally higher for all sales.

On the basis of the present survye, six major channels for basmati rice and seven major channels for irri rice were identified and farmer's shares in retail prices were estimated for each channel. These ranged between 49.27 to 57.16 percents for basmati rice and from 42.16 to 51.50 percents for irri rice sample growers respectively. The results show that, generally, the shares of farmgate prices are inversely related to the length of the intermediaries. Where sales by growers to processor have taken place without the intervention of any intermediary, the farmers were able to get a higher share of the consumer price. It thus shows that integration of the various marketing stages could help in reducing gross marketing margins.

Processor got the maximum share of the gross margin in the case of basmati rice followed by retailers and wholesalers in that order. In the case of irri rice, retailers absorbed the maximum share followed by wholesalers and retailers.

The net margins formed a very high proportion of gross margins, varying, for basmati rice, from 47.81 percent for processors to 89.73 percent for retailers. In the case of irri rice, these ratios range between 35. 21 for processors to 88.42 percents for retailers.

## Marketing System of Gram

The growers sample consisted of 117 growers. The shares of the small, medium and large size farms in the total were 42, 21 and 37 percents respectively.

The relative shares of area under gram were negatively correlated with the size of the sample holdings for the Punjab and total samples. In the case of NWFP and Sind samples, however, no clear trend was noticed.

Domestic consumption, payments in kind and seed requirements taken together accounted for 31 percent of the total output.

69 percent of the total produce was marketed. The corresponding ratios for the small, medium and large farms were 71, 59 and 70 percents respectively.

As much as 82 percent of the total produce was sold during the harvest season. In the case of NWFP sample, sales were more evenly distributed. In this case only 47 percent of the output was sold during the harvest season.

In the case of the Punjab, village beopari was the most predominant market actor to whom 92 percent of the marketed surplus was sold by the sample growers. For Sind and NWFP sample growers pacca and katcha arhatis were the main marketing channels.

The average marketing costs for sales to pacca and katcha arhatis were estimated at Rs. 19.17 and Rs. 9.16 per maund respectively. These costs formed 8.6 percent and 3.9 percents of the farmgate prices realized for sales through these agencies and 8.0 and 3.8 percents of the average sale prices.

The farmgate prices realized varied from Rs. 206.00 per maund in the case of local sales to Rs. 233.71 per maund for katcha arhatis.

Four major marketing channels were identified and farmer's share in retail prices were estimated for each of these channels. These shares varied between 60.02 to 74.54 percent for the sample growers.

Processors got the maximum share of the gross margin followed by retailers and market dealers. The net margins formed a very high proportion of gross margins varying from 94.90 percent for processor to 84.25 percent for the retailers.

The average marketing and operation costs of second stage actors varied between Re. 0.49 for beopari to Re. 1.53 per maund for katcha arhati.

Marketing System of Mung

The growers sample consisted of 64 growers. The share of the small, medium and large sized farms in the total were 36, 16 and 48 percents respectively.

Payments in kind were the major element which influenced the share of the total output which was sold in the market. Mung was mainly grown as a cash crop and 73 to 99 percent of the output was sold by different sized sample growers. The ratio of the marketed surplus varied directly with the size of the farm in the Punjab, though no distinct trend was noticeable for the sample of the other provinces.

Village beopari was the only market actor for the sale of mung by the sample growers of Sind and NWFP province. In the Punjab also, sales to him formed 82 percent of the total sales the remaining quantity being sold to pacca arhatis.

For sales to pacca arhatis, the average marketing cost formed 6.21 percent of the farmgate prices

Three major marketing channels were identified and the farmers shares in the final retail prices, have varied between 59.19 to 66.20 percents.

Processors got the maximum share of the gross margin followed by dealers and retailers.

The net margins varied from 93.74 percent for processors to 78.87 percent for the retailers.

## Marketing System of Mash

The growers sample consisted of 78 households of which 64 percent belonged to the group of small farmers, 21 percent were medium farmers and 15 percent were large farmers.

Area under mash constituted 22 percent of the total cultivated area for the total sample. The ratio appeared to be inversely correlated with the size of the holdings. The average yields varied between 2.72 maunds to 2.57 maunds per acre. These average were also negatively correlated with the size of the holding. Domestic consumption and payments in kind each accounted for 10 percent of the total output while another 6 percent was kept for seed.

73 percent of the produce was marketed. A major share estimated at 72 percent was sold immediately after harvest.

Village beopari was the most important market actor accounting for more than two thirds of the total sales. Pacca arhatis was the second most important market actor with a share of 26 percent of the total sales.

The average marketing costs for pacca arhati were Rs. 18.40 per maund as against Rs. 21.70 per maund for katcha arhati. These cost formed 8.69 percent to 9.40 percent of the farm gate prices and 8.00 and 8.60 percents of the average sale prices.

The average farm gate prices were the highest at Rs. 252.00 per maund for sales made to village shopkeepers, and the least at Rs. 211.72 per maund for sale to pacca arhatis.

Three major marketing channels were identified and the farmers shares in the final retail prices varied between 55.00 to 59.95 percents for the sample growers. Processors get the maximum share of the gross margin followed by wholesalers and retailers. The net margins formed a very high proportion of gross margins varying from 92.89 percent for wholesaler to 78.00 percent for the dealers.

## Marketing System of Masoor

The growers sample consisted of 76 households of which 71 percent belonged to the group of small farmers, 25 percent were medium farmers and 4 percent were large farmers. Domestic consumption payment in kind and seed were major uses accounting for almost equal shares, the total being 20 percent for the sample as a whole. 80 percent of the produce was marketed. The ratio of the marketed surplus varied directly with the size of the holdigns.

A major share estimated at 69 percent of the marketed surplus was sold immediately after harvest.

Village beopari was the most important market actor for the sample growers, accounting for about two thirds of the total sales. Pacca arhatis was the second most important market actor with a share of 25 percent of the total sales.

The average marketing costs for sales to pacca arhati were Rs. 22.72 per maund as against Rs. 15.22 per maund for katcha arhati. These costs formed 9.05 and 6.92 percents of the sale prices and 9.95 and 7.44 percents of the farm gate prices. The average farmgate prices were the highest at Rs. 245.43 per maund for sales made to village shopkeepers, and the least at Rs. 204.78 per maund for sales to katcha arhatis or about 16.4 percent lower as compared to the former.

Dealer got maximum share of the gross margin followed by retailers and wholesaler. The net margins formed a very high proportion of gross margins varying from 92.66 percent for wholesalers to 76.69 percent for the processor.

## Public Sector Institutional Framework

At the Federal level, agricultural marketing is the responsibility of the Department of Agricultural and Livestock Products Marketing and Grading under the Ministry of Food, Agriculture and Cooperatives. The Department provides advice on all matters related to agricultural marketing. It also has the responsibility of providing guidance to the Provinces in the marketing field and of coordinating provincial activities at the national level. The specific functions of the Department are grading of agricultural commodities for export, agricultural commodity research and marketing intelligence.

So far grading of 13 commodities has been introduced on compulsory basis. Wheat, rice and pulses are not included in this group of 13 commodities.

It collects wholesale prices of about 200 items from 40 important markets of the country mainly through Market Committees and staff of the agriculture marketing directorates/cells of the provincial Agriculture Departments. These prices are compiled on monthly basis and are published in the Departments monthly journal entitled 'Market and Prices.'

In the Punjab there exists a Directorate of Agriculture Economics and Marketing under the Directorate General of

Agriculture Field of the Department of Agriculture. In Sind, the function is performed by the Bureau of Supply and Prices. In the North West Frontier Province and Baluchistan, marketing sections of the Directorates of Agriculture are responsible for marketing improvements.

The major constraints noticed in the functioning of the Federal and Provincial departments were inadequate organizational and functional base, absence of coordination andlimited scope of market intelligence service.

Regulated markets had been set up in the Punjab and Sind and the provisions in force in both the Provinces are similar, except for minor differences in items of market fees and license fees. The enforcement agencies of these laws are the Directorate of Agriculture (Economic and Marketing). Agriculture Department in Punjab and the Bureau of Supply and Prices in Sind.

The Pakistan Agricultural Storage and Services Limited (PASSCO) was established in 1973 as a public limited company. It aims at stabilizing prices of selected commodities by making direct purchases from the growers and releasing stocks in the market when prices become unduly high.

The main functions of PASSCO are purchase and sale of agricultural commodities, acquire, construct and operate warehouses and provide "Machinery Pool Services".

The two major commodities procured by PASSCO are wheat and paddy. Among the other commodities gram was procured only during 1986-87.

PASSCO has been progressively increasing its storage capacity which presently stands at 558,200 tonnes. It sells wheat to the deficit provinces and agencies at the same price on which it is purchased. The Corporation is allowed incidental expenses for these operations.

The Rice Export Corporation of Pakistan (RECP) was set up in 1947 as a private limited company to undertake exports of rice on monopoly basis in the public sector. The procurement of paddy is undertaken by the two subsidiaries of RECP viz. the Pakistan National Produce Co. Limited (PNCL) and the Doaba Rice Mills Limited (DRML) who together operate 8 rice milling units.

RECP has been procuring 2.3 to 3.0 million tonnes of rice each year during the last five years, the ratio of procurements to total output ranging between 29 and 52 percents during the period.

RECP cleaning and grading facilities consist of 14 plants with a total capacity of 817,000 tonnes. An automatic packing plant is also in commission to meet the demand of the buyers for packetted rice.

The private sector has been allowed to export basmati rice from 1987-88 in packets of upto 20 kg. They can obtain rice from RECP or may use their own rice. All exports are however subject to RECP's inspection and quality control procedures. An export duty of Rs. 4000 per tonne is also levied on packetted rice. The impact of the policy has not been encouraging as only 3600 tonnes were exported under the scheme during 1987-88.

## The Agricultural Prices Commission

The entity playing an important role in formulating agricultural pricing policy and in fixing support prices, is the Agricultural Prices Commission (APCOM) which has been active since 1981.

APCOM advises the Government on price policies for major agricultural commodities like wheat, rice, cotton, sugarcane, oilseeds, potatoes, and onions, and for agricultural inputs such as fertilizers, pesticides, and quality seeds. In doing so, the Commission takes into account production costs of crops in different ecological zones, keeping in view the need to: (a) provide incentives to the producers to raise productivity and production by adopting improved technology; (b) avoid waste and ensure rational use of inputs as well as of land and water; (c) develop production and cropping patterns in line with national requirements.

The Commission also suggests appropriate non-price measures to back up the price policies.

## Consumer Survey

A consumer's survey was organized as a part of the present study to assess their desires for and willingness to pay for marketing services. The major findings of the survey are given below:

- More than 50 percent of the households purchased wheat flour and rice on monthly basis. In the case of other items consumed at infrequent intervals, fortnightly purchases were more common.

- Items consumed in a fresh form like chapati, tandori roti and nan were purchased almost on daily basis.

- About one-third of the sample households purchased or obtained wheat in the grain form.

- The ratio of consumers obtaining paddy were lower at 9.57 percent.

- Price is the most important single factor influencing decision making for more than half of the sample households.

- 'Mohalla shop' or store located in the near vicinity was the most important place for buying food items.

- Wholesale market was teh second mostimportant place of buying for all the items except baked products.

- Only 5.43 percent of the sample households purchased food items in a packetted form.

- In the case of the atta, the predominanat type of package was gunny bags for the rural sample and cloth bags for the urban sample.

- The ratio for desire to buy packetted food items were directly correlated with income groups.

- None of the rural respondents were prepared to pay any higher price for additional marketing service.

- In the case of urban sample too, most of the respondents, varying between 50 to 75 percents of the total, were reluctant to pay for the additional services for most the items.

## Evaluation of the Marketing System

In Pakistan, the typical food marketing functions are performed by separate individuals or small firms, often dealing in a relatively few products. Since farmers are also typically very small operators, the number of transactions necessary to move a small quantity of product through the marketing system is quite large.

The basic features of the existing food distribution system include lengthy poorly coordinated distribution chains and the small-scale limited line retailer. There is absence of integration in so far as each trader operates independently forming a link in a long chain of intermediaries.

Among the crops under study, wheat shows the highest share of farmers at 64.77 percent of the consumers price as compared to the minimum of 48.57 percent for irri rice. The lower rates for rice are due to relatively higher processing costs as well as lower conversion ratio in processing as compared to other crops.

The high ratios of net margins to gross margins estimated during the study indicate economic inefficiency as unreasonably high prices are being charged for the marketing services being provided by various intermediaries. There thus exists sufficient scope for reducing net margins and hence the gross margins for improving the overall efficiency of the marketing system.

The positive implications of efficiency status are generally linked with the extent of competition prevailing at different stages of the marketing pro[illegible] of producers and consum[illegible] [illegible] and the last stages of the [illegible], are large enough to ensure their competitive behaviour. The average number of intermediaries operating in the sample markets also appears large enough to make unlikely any collusion among them. Further, the entry of new participants is permitted on satisfying general conditions of financial and moral background. In theory these conditions are not very difficult to satisfy and do not debar new entrants to the marketing trade. There also exists reasonable network for supplying market intelligence at least for the major crops. In practice, the extent to which the conditions of market access and knowledge are satisfied to ensure competitive behaviour in a marketing system is reflected in the final result, viz. absence of excess profits earned at any stage of the marketing process. In this respect the analysis of gross and net margins conclusively bring out the economic inefficiency of the marketing system.

## Guidelines for Developing Marketing Services

The existing marketing systems of food products is not geared to meet the requirements of a modern developing agricultural economy. A number of recent social and cultural developing have underscored the need for the transformation of the marketing services. With the introduction of technology, better means of packaging, preserving and handling food products are being introduced and getting popular with an increasing part of the urban population.

The food marketing system in the developed countries has undergone drastic transformation over the last few decades. Structurally, the improvements have involved close integration -- both horizontally and vertically -- of the various marketing activities in the shape of supermarket chains. Functionally, new developments have involved extensive use of modern technology in packing, processing, transport, storage and information processing.

A number of environmental factors have to be kept in view while examining the prospects of introducing modern integrated marketing system represented by supermarket chain approach in developing countries like Pakistan. Supermarketing techniques are not appropriate for the small distributive institutions that make up so much of the economic activity in this country. Further, it is comparatively more expensive and does not create jobs needed to absorb the rapidly expanding labour force in the country. Supermarkets are primarily merchandisers of processed food which few poor people can afford to buy as observed during the consumer survey. The supermarket, even in its more rudimentary version, is ill-equipped to service the low-and middle-income consumers in less developed countries.

The action proposed for improving the marketing structure in Pakistan involves an evolutionary process aimed at more effective coordination of the various marketing stages, leading to a simpler prototype of an integrated marketing structure. Thus appropriate policy instruments need to be initiated for providing incentives to the dealers to install modern processing facilities or the processors to establish selective wholesale and retail outlets. This would reduce the length of the marketing chain.

The proposed approach would require a basic change in the philosophy, orientation and work method on the part of the Agricultural Marketing Departments. Instead of confining their activities to regulating marketing practices and activities they may also be charged with the responsibility of assisting the marketing functionaries in adopting more efficient and innovative methods and in extending their activities to other related functional areas to become viable agro-business units.

# CHAPTER I

## 1. INTRODUCTION

### 1.1 BACKGROUND TO THE STUDY

An efficient marketing system is of critical importance to the country under all conditions and at each stage of its development. The collection and distribution of agricultural products, particularly food, is an important mechanism for redistributing resources, wealth and power. This is particularly true of a developing country like Pakistan, where production technology is undergoing rapid changes leading to the emergence of commercial agriculture. The marketing system has to be re-organized to serve the needs of both the producers and the consumers.

It is generally agreed that as countries become more commercialized with an increasing proportion of their population living in towns, sound internal marketing machinery becomes essential for the satisfaction of food needs at reasonable prices. The provision of basic foodstuffs is a fundamental nutritional necessity and their costs and quality a major factor in consumer welfare. If consumers cannot obtain the staple items of their diet at cost within their capacity to pay, their own ability to work is prejudiced and discontent is chronic. Time and experience have also shown that with increased production, markets do not develop automatically and that the lack of a well-functioning market can severely hinder the increase of production.

Marketing activities involve transformation of commodities in time, space and form. This is a process by which a commodity grown by farmers is changed into an item of food consumption to be consumed in another time and place. These activities are performed by a number of marketing agents and institutions. In developing countries, markets do not always function in the best interests of a broad section of society, especially where communications and transportation facilities are poor, markets are highly segmented and access for marketing participants is greatly restricted. The role of middlemen in these conditions is generally reviewed in critical and negative terms. It is therefore a major empirical issue to determine how efficiently and effectively marketing agents and institutions are playing their role in the food marketing system. The present study was thus undertaken as an important part of the overall food policy analysis.

The importance of the study in relation to the macro environment can never be over emphasized. In Pakistan, agriculture remains the largest single sector of the economy, contributing 26 percent of the GDP and providing employment to over half of the country's labour force. With the gradual development of the urban and industrial sectors, commercialization of agriculture and linkage between agriculture and other sectors of the economy have assumed special significance. The commercialization of agriculture has been extended through a number of developments in the non-agricultural sector of the economy. These include increase in the relative proportion of non-agricultural population, growth of non-farm sector in rural areas and growth in population and incomes. All these factors point to the need for a developed agricultural marketing system. The present study involving evaluation of constraints in the existing system would thus help in developing guidelines for improving and strengthening agricultural marketing, processing, storage and transportation systems to meet quantitative and qualitative requirements of the ultimate consumer.

## 1.2 OBJECTIVES OF THE STUDY

The primary objective of the study was to measure the costs of each of the marketing services as a component of the marketing margin for the major food crops of wheat, rice and pulses (gram, mung, mash and masoor). These services included assembling and transportation, storage and distribution of the raw commodities. In the next phase, processing, storage, packaging, distribution and retailing of processed products were studied.

The secondary objective of the study was to assess the extent of marketing services and the constraints on the growth of these services in relation to the services available in the more developed markets. Consumers were also surveyed to determine their desire and willingness to pay for additional services.

Finally the efficiency of the marketing system was evaluated in terms of unit costs of services in comparison to unit costs in other systems and services that consumers desired and for which they were willing to pay.

## 1.3 THE ANALYTICAL FRAMEWORK

The analytical framework developed for achieving the objectives of the study had the following major components.

- Review of literature and institutions involved directly or indirectly in the marketing system for wheat, rice and pulses.
- Survey of growers of the reference crops.
- Cost survey of firms/agencies in the marketing operations from the farm-gate stage to the ultimate consumers.
- Consumers survey for determining their preferences and willingness to pay for improved marketing services.
- Evaluation of marketing development constraints in relation to unit costs for existing and potential market services.

### Literature and Institutional Survey

A detailed review of the relevant literature, issued abroad as well as in Pakistan, was carried out as a part of the study, highlighting findings and recommendations relevant for the present analysis. A review of the public sector institutional framework, both at the Federal and Provincial levels, relating to various aspects of marketing of wheat, rice and pulses had also been included.

## Growers Survey

The growers survey was planned to collect data on the following aspects:

- Farm-gate prices
- Factors influencing farm-gate prices
- Marketing services performed by the growers and the related marketing costs.

Two schedules were developed to meet the above data requirements.

- Village profile schedule
- Grower schedule

The village profile schedule provided background information which was likely to influence farmers decision about the place of selling his produce. This included:

- Location
- Marketing facilities available in the village
- Cropping scheme

The growers schedule provided data on the following aspects along with the necessary background information on:

- Cropping pattern

- Produce balance sheet

- Storage facilities

- Transportation facilities

- Marketing operations and costs

The sample design for the growers survey was based on three stage sampling involving selection of:

- Districts

- Villages

- Growers

Districts were purposely selected to represent major producing areas under different physical characteristics for each of the reference crops. Major producing districts were determined on the basis of the annual average area under each of these crops for the three year period ending 1985-86. The number of sample districts was 5 for wheat, 4 for rice, 4 for gram, 3 for mung and 2 each for mash and masoor pulses.

Three villages were selected for each crop from each of the sample districts through systematic sampling. The sampling frame for the selection of villages was the village lists of the District Population Census Reports (1981).

The size of the growers sample was as follows:

- Wheat 306
- Rice 301
- Pulses 335

The sample for pulses was distributed among the four crops as follows:

| | | |
|---|---|---|
| - | Gram | 117 |
| - | Mung | 64 |
| - | Mash | 78 |
| - | Masoor | 76 |
| | Total: | 335 |

The grower's sample was distributed equally among the sample villages of each crop. A list of sample villages with number of sample growers for each crop is given in Table 1.1 of the Statistical Appendix.

The selection of growers was made through stratified systematic random sampling. Lists of growers in each sample village was prepared and classified on the basis of the size of the cultivated holding into three groups, small growers with holdings of upto 12.5 acres, medium growers with holdings of between 12.5 and 25 acres and large growers with holdings of more than 25 acres. The sample growers were thus selected proportionately from each of the three groups through systematic sampling from a random start.

## Markets and Market Dealers Survey

The object of market dealers survey was to meet data requirements of cost analysis of firms engaged in marketing operations at different stages. The basic approach used was to follow the specific commodity lots through various stages between the farm gate and the retail store. Thus the list of agencies to whom the sample growers sold their produce were used as sample frame for the selection of the sample for markets and the dealers. At this stage, however, due to the 'bulking' of the individual consignments, the procedure for selection of subsequent stage sample was modified to include major outlets of the sample markets and dealers.

All the dealers who purchased from the sample growers were surveyed except for some beoparis (itinerant dealers) who could not be located. These dealers purchase at the village level during the harvest season and sell the assembled produce in the nearest market. They do not have a permanent place of business and usually deal in more than one crop. They thus move from village to village according to the harvesting season of different crops.

A total of 173 second stage market actors of different types were thus surveyed. The classification of the sample by types of dealers and by crop is given in Table 1.2 of the Statistical Appendix.

It may be noted that the above sample included 45 village beoparis out of the 71 whose names were given by the sample growers.

Two schedules were used to meet data requirements of cost analysis of firms engaged in the marketing operations. These schedules related to:

- Market profile,
- Middle men/dealers/other market functionaries.

The first schedule provided information about the market in respect of:

- Location
- Number of different types of market functionaries
- Storage facilities
- Market charges
- Market turnover

The dealers schedule was intended to obtain data about market operations and costs classified by major components.

Processors Survey

A case study approach was used for the processors survey. A number of processing units were purposely selected, located at places to which major commodity flows from the sample markets were observed. A total of 52 processing untis were surveyed. The classification of these units by types, crops and location is shown in Table 1.3 of the Statistical Appendix.

Separate schedules were used for collecting data about processing operations and cost from rice mills, flour mills and pulses grinding units.

## Wholesalers/Retailers of the Processed Commodities

The wholesalers and retailers of the processed commodities formed the next stage of the marketing chain. Their sample was selected from areas representing major outflows from the sample processing units. Thus a total of 40 wholesalers and 45 retailers were surveyed. The classification of these units by location and crops is also shown in Table 1.3 of the Statistical Appendix.

## Consumers Survey

The sample size of the consumer survey consisted of 1400 households, selected through stratified random sampling. The basic features of the sample design were as follows:

- The total sample size was distributed between urban and rural areas in equal proportions.

- The urban and rural samples were distributed among various provinces in proportion to the provincial shares in the total urban and rural population.

- For selection of urban sample for each province, list of all urban localities (wards) was prepared and weights were assigned to them in proportion to their share in population. The number of sample wards were then selected on the basis of ten (10) sample households for each sample ward.

- For the selection of rural sample in each province, a list of 'rural districts' was prepared. A rural district was defined as the one where ratio of rural population to total district population exceeded the provincial ratio of rural population to total provincial population. Rural districts were assigned weights according to the share of their population and villages were then selected by using random number tables.

- In each sample ward/village, 10 households were selected through systematic random sampling with a random start.

The schedule used for the consumers survey provided for the following data:

- Demographic, educational, occupational and income status.

- Consumption of selected items of food.

- Decision making and purchasing process.

- Preference status and willingness to pay for improved marketing services and semi-prepared products like enriched flour, baking mix dough, pre-cooked rice and semi cooked items like pakora mix, cake mix etc.

Survey Schedules

A total of ten survey schedules were used to meet the data requirements of the study. These were:

i) Village profile schedule

ii) Growers schedule

iii) Market profile schedule

iv) Dealers/market functionary schedule

v) Processor schedule - wheat

vi) Processor schedule - rice

vii) Processor schedule - pulses

viii) Wholesaler/retailer schedule

ix) Institutional trading schedule

x) Consumer schedule

Copies of these schedules are included in Appendix B.

Periods of implementation of the surveys are shown in Table 1.1 on the next page.

The crop seasons covered were as follows:

| | | |
|---|---|---|
| Kharif 1987 | - | Rice basmati |
| | - | Rice irri |
| | - | Mung |
| | - | Mash |
| Rabi 1987-88 | - | Wheat |
| | - | Gram |
| | - | Masoor |

**TABLE 1.1**

**PERIODS OF IMPLEMENTATION OF THE SURVEY**

| Crop / Survey / Province | WHEAT | | | RICE | | | PULSES | | | Consumers |
|---|---|---|---|---|---|---|---|---|---|---|
| | Growers | Dealers | Processors | Growers | Dealers | Processors | Growers | Dealers | Processors | |
| Punjab | Dec. 1988 April 89 | Dec. 88 April 89 | Feb. 89 | Nov.-Dec. 1988 | Nov.-Dec. 1989 | March 1989 | Octo 88 Jan. 89 | Oct. 88 Jan. 89 | March 88 | Jan. April 1989 |
| Sind | Feb. 89 | Feb. 89 | March 89 | Feb. March 89 | Feb. March 89 | March 89 | Feb. March 89 | Feb. March 89 | — | March May 1989 |
| NWFP | Oct. Dec. 88 | Nov. Dec. 88 | March 89 | — | — | — | Nov. Dec. 88 | Dec. Jan. 89 | — | March -May 1989 |
| Baluchistan | — | — | — | — | — | — | — | — | — | March 89 |

## 1.4 LIMITATIONS OF THE STUDY

As is characteristics of a study where production is affected by vagaries of weather, quite a few limitations were placed on efforts to collect data. Further, some business dealings, which are not exactly in line with the rules and regulations laid down under the relevant acts, but have formed part of the accepted practices in business and trade circles, have assumed the status of accepted norms. A number of problems thus faced during the Survey and the action taken thereon are explained below.

### Wheat Production in Barani Districts

During field survey of Attock District it was found that only 3 farmers had marketable surplus of wheat during 1987-88 season because of the drought conditions. Accordingly, the required number of growers were selected from Chakwal District, also included in the barani tract.

### Mung Growers in Barani Areas

Tharparkar District was originally selected on the basis of previous three years data. However on actual visit to the District, the crop was reported to have been affected by drought conditions. The required number of sample growers was then selected from the adjoining district of Sanghar

Village Beoparis (Itinerary Traders):

The village beoparis, as is the nature of their business, move from village to village during the harvest season, making purchases of whatever lots they could purchase, assembling and taking to wholesale markets. It is very rare that a 'beopari' has a fixed place of business. It was therefore, with much effort that a few could be contacted and data obtained about their contribution to the flow channel for the commodities under study. As a matter of general policy, marketing channels accounting for major flows for the sample growers were followed.

Commission Agents as Sources of Market Information:

Considerable difficulty were experienced in the collection of information from kacha and pacca arhatis. Information about their total turnover and income and expenditure could not be verified from any records and have to be accepted at their face value.

Institutional Trading

It was discovered that purchase register maintained by purchase centres of Food Department and Passco did not show the various categories of sellers, i.e. farmers, beoparis, commission agents. There was difficulty in finding out how many farmers actually made use of these facilities. There was a general practice that beopari, when selling produce to purchase centres, posed as growers since growers were exempt from the payment of market fees.

## 1.5 ARRANGEMENT OF THE REPORT

The arrangement of the report generally follows the scope of work prescribed for the study. After the introductory chapter, a review of literature is included in the next chapter. The analysis of the data generated through growers survey and cost survey of firms providing marketing services for wheat, rice and pulses are covered separately in the next three chapters. The analysis of consumers desire and willingness to pay for additional services are included in the sixth chapter. This is followed by a review of institutional framework relating to the marketing of the reference crops. The evaluation of efficiency status and of marketing development constraints are the subject matters of the last two chapters.

# CHAPTER II

## 2. REVIEW OF LITERATURE

There has been a substantial body of research on the structure and functioning of the agricultural marketing system, both at international and national levels. The problems of the developing countries in particular have been extensively dealt with in several reports issued by a number of institutions. The present section contains a review of the scope and findings, (with particular reference to marketing margins of wheat, rice and pulses) of the major studies conducted in Pakistan and for a few other countries with similar agricultural and socio-economic conditions. The review has been arranged in a chronological order, starting with the latest published papers and publications.

Syed Nawab Haider Naqvi and Peter Cornelisse, (1986) (i) "PUBLIC POLICY AND WHEAT MARKET IN PAKISTAN", The Pakistan Development Review Vol. XXV, No.2 (Summer 1986) - Pakistan Institute of Development Economics, Islamabad (17). (Subsequently published as "The Wheat Marketing Activity in Pakistan" 1987).

Drawing upon a series of country-wide surveys, the study addresses the micro and macro policy issues related to the operations of the wheat market in Pakistan. It focuses on the relative roles of the private traders and the government in determining the prices received by the primary producers and those paid by the final consumers. It finds that the government occupies the 'commanding heights' in the wheat market through its procurement operations, regulation of milling activities and supplying wheat and flour to the consumers through both ration shops and the open market.

The study recommends that while the scope of private traders' activities needs to be widened, the government must continue to operate effectively and more selectively. In particular, the present policy of voluntary procurement of wheat should be used, though at a reduced level, to stabilize farmers' income, and a (restructured) rationing system must function to subsidize the consumption of wheat and wheat flour by the poorer section of the society.

Marketable Surplus:

In general, the size of the marketable surplus of wheat was found negatively correlated with the distance of farm from the market. Further, large farmers tended to sell wheat much later in the post-harvest season than the small farmers. Also, for all classes of farmers, the marketable surplus was higher in the Punjab than in Sind. On the other hand, the small farmers, especially those in the wheat deficit areas, occasionally had to engage in 'distress sales' soon after harvest to repair their fragile liquidity position - only to return to the market in the post harvest season for buying wheat for 'own consumption'. Such practices reduced the real income of the small farmers who had to pay a higher price for wheat repurchases than the one they had earlier received on their (distress) sales.

Reviewing the policy framework, the study drew attention to the need for raising the size of the marketable surplus to 'adequate' levels as well as for stabilizing the price of wheat, especially in the 'off-season' period. Given the production levels achieved and the size of own consumption of wheat, public policy should also ensure that (i) farmers obtain a fair price, (ii) the marketed surplus was sufficient at least for the consumption needs of the population, and (iii) the distribution channels were clearly laid out so that consumers, especially the poor ones, had adequate access to wheat.

State Intervention:

The study reviewed the rationale of state intervention in wheat marketing and pointed out that in some cases actual policies had failed to achieve the intended results. The rationale of the various 'components' of State intervention in the wheat market seemed to rest on the following arguments.

i) The high viability of market prices of food and the possibility of high concentration of market power among private traders in a situation of free trade required that the government through its procurement activity, should act as a stabilizing force with respect to the prices that farmer received both at the harvest time and during the post-harvest period.

ii) The same reasons had dictated an elaborate rationing policy, which had the effect of creating a dual price system to achieve an effective (food) market segmentation. In so far as the production of food grain was 'demand - constrained', a lower price of food than would prevail without government subsidy might indirectly provide an expanding market to the producers of food.

Marketing Margins:

The authors summarized their findings on marketing margins in the following table:

Table: Marketing Margins at Various Stages of Wheat

(Rs. per maund)

| Variable | Shop Keepers | Beoparis | Commission Agents | Whole-Salers |
|---|---|---|---|---|
| Purchase Price | 48-54 | 54-56 | 57-75 | 56-74 |
| Sale Price | 53-58 | 58-64 | - | 58-78 |
| Marketing Margin | 5-4 | 4-8 | - | 2-4 |

Marketing Efficiency:

The authors are of the opinion that efficiency of marketing operations must be examined by considering a set of indicators of efficiency like (i) price spread (the difference between consumer's and producers' prices expressed as a percentage of the consumer's price) (ii) the variations in producers price (iii) credit ties (iv) the rate of turnover of wheat stocks held by private traders (v) seasonal price fluctuations and (vi) the adjustments made by private traders to the requirements of producers and consumers.

The authors conclude that each of these indicators gives the impression that the private wheat market appears to have worked at reasonably low cost to the producers and consumers of wheat.

## Storage:

The authors also review the storage position and conclude that prevailing facilities were in-efficient and of low quality and which are considered by them as the weakest spots in the wheat distribution system. Private storage was inadequate in quantity as well as quality. Both wheat farmers and private traders faced serious problems in storing grain for extended periods, which could be only at a substantial cost. To compensate for inadequate capacity in the private sector, the public sector storage capacity had been expanded at a rapid rate and was considered adequate to hold the present level of wheat stocks, which were required to maintain relatively stable prices in the post harvest season.

## The Wheat-Milling Activity:

The authors also reviewed the wheat milling activity. It was noted that the milling of wheat into flour took place in the private sector. The milling activity used three kinds of technologies - namely, the traditional chakkis, modern grinding plants, and roller flour-mills. Chakkis were commonly employed for small scale operations and were instrumental in meeting a considerable part of the requirements of flour in the rural areas. The flour they produced was preferred by villagers because of its presumed high nutritional value and better taste. The modern grinding plants operated on a much larger scale and also performed the washing and cleaning operations. The millers grinded wheat on three accounts: on their own (for selling in the open market), for other private parties or individuals, and for ration shops. The decision whether or not to mill wheat for ration shops was not left to the millers themselves, as the government selected the mills for this purpose as well as the volumes of wheat they had to process. The profitable flour-milling was that which was done for the open market: the least profitable operation was milling for the government. In the latter case, the 'grinding margin' for turning wheat into flour was not considered sufficient even to cover the milling costs. There was also evidence of the existence of considerable excess capacity in the milling activity, especially in the large flour mills in the Punjab.

Faiz Mohammad Faiz 'PRICES AND THE GREEN REVOLUTION: Some reflections on the performance of private agriculture markets in Pakistan'. The Pakistan Development Review vol. XXIV No. (Summer 1985). (9)

The purpose of this paper was to study the extent to which the farmers might have gained from participating in the marketing process with the relatively large quantities of marketable surplus made possible by the High Yielding Varieties. This was one of the many ways to see whether the existing private marketing system helped or hindered technological improvement in the agricultural sector.

In this study the author has discussed the Green Revolution and changes in marketing conditions. He is of the opinion that while the increased marketable surplus placed additional burden on existing transport and storage facilities, agricultural markets in Pakistan seemed to have borne this by improving the marketing environment within which the price formation process took place. In this survey three areas had been identified which brightened the pricing prospects for the farmer during the Green Revolution period (1967-68 to 1970-71). These are:

- The number of traders and commission agents increased significantly at the village level as well as at the primary wholesale markets due to the following developments.

  - The increased volume of marketable surplus resulted in expansion of trade at each level and thus attracted more traders.

  - Improved farm productivity and introduction of farm mechanization during that period released some of the family labour from work on farms.

- The increase in the number of tractors in rural areas, besides increasing farm power, greatly improved transportation facilities for the farmer, and made access to markets easier and faster.

- The farmers with large marketable surplus became more selective than before with respect to the time and place for selling his produce.

Methodology:

The author has used two approaches to study the behaviour of farm prices during the Green Revolution period:

- Comparison of the farm prices of wheat and rice for the period 1967-71 with those of the preceding years.

- Comparison of traders margins at different levels of marketing for different years.

Subtracting farm-to-market "handling costs" from monthly average wholesale prices (for selected markets) 'net prices' were obtained, which might be the closest to the prices actually received by the farmers. These prices were then deflated by monthly wholesale price index of the respective month to arrive at the 'real prices'.

Marketing Margins:

Two types of margins were calculated for determining the changes in marketing conditions, during the Green Revolution period. These were:

i) Combined margins of the wholesalers and the retailers; and

ii) Storage margins

In the opinion of the author, the most suitable method would have been to calculate the margins separately for every marketing stage between the farmer and the consumer. This required data on the selling and buying at each stage, but unfortunately these were not available in Pakistan. Alternatively, data on wholesale prices (WP) and retail prices (RP) for a number of markets were available and these were used to calculate the gross-margins (GM) of the wholesale and the retailer taken together. Using data on wheat and rice prices in major agricultural markets, absolute magnitude or GM (Gross Margin) was calculated as:

$$GM = (RP - WP)$$

In the absence of data from-primary sources, secondary data on wholesale prices were used to calculate what might be called off-season changes in prices. Subtracting storage costs from these 'Changes' one could get the margin earned by the stock keeper.

The main conclusion of the study was that in countries like Pakistan where there were different levels of marketing, viz. village level, primary wholesale level, and terminal level, the farmer's participation in a particular level could change when he had relatively large amount to sell. This might be so because with a large marketable surplus, per unit cost of marketing a product usually declined and the farmer was encouraged to increase his search for a better price. As a result, he might not only decide to sell his produce in an upper-level market rather than to a traditional buyer in the village market, but also to select a different time for its disposal. Keeping in view the changed marketing environment, the trader at each level of marketing, particularly at the lower level, was likely to reduce his marketing margin to induce the farmer to stay with his traditional buyer. The net price increase received by the farmer would increase in this process.

While accepting the above conclusions, however, a few reservations must be kept in mind. Firstly, it is important to note that most of the estimates were based on secondary data, the soundness of which is always open to question in countries like Pakistan. Secondly, for certain aspects, such as trader's margins in village markets, even secondary data were not available. As a result, the analysis was not as broad-based as it could have been.

"REPORT ON AGRICULTURAL MARKETING IN PAKISTAN" (1984) Planning and Development Division, Government of Pakistan. (19)

This study was carried out by United Consulting Group (Pvt.) Limited, Lahore, for the Planning & Development Division, Economic Research Section, Government of Pakistan.

Objectives:

The main objectives of the study were to specify improvements in the existing arrangements for the marketing of agricultural produce in Pakistan with a view to giving the growers a better price. The scope of work included estimation of trade margins, review of the official marketing infrastructure and the price support mechanism. The study covered the main food and cash crops as well as major fruits and vegetables.

Marketing Margin:

The study deals with different aspects of the marketing scenario. Marketing margin is defined as the difference between the price paid to the first seller and that paid by the final buyer. It is made up of individual margins obtained by intermediaries for marketing services rendered by them.

A significant portion of the price paid by the consumer is absorbed by marketing costs and profit margins of intermediaries. It is then pointed out that the difference between these marketing costs and margins provide an idea about the scope that exists for narrowing down the spread between the producer and consumer prices. Detailed data about the price spreads, marketing margins and of marketing costs for the selected commodities are analysed in the report to arrive at the following findings:

- Among the food grains, the farm-gate price of wheat expressed as percentage of consumer price was the highest. This was primarily because of the price support programme and procurement operation of the government. On the whole, farm gate price ranged between 62 to 74 percent of the consumer prices.

- The wholesalers and retailers absorbed a considerable share of the consumer price. The divisions of their gross margins between costs and net margins showed the excessive profits being made by these intermediaries. Obviously, through further rationalization of the market practices, these net margins could be reduced. This could help in increasing farm gate prices without affecting consumer prices.

- The share of farm gate prices was considerably lower in case of items which required processing before their final consumption. This was borne out by the data about rice, for which the farm gate prices were found to be only 45.83 percent of the consumer prices.

The major recommendations related to the need for upgrading and strengthening the activities of the Federal Department of Agriculture and Livestock Products Marketing and Grading and the setting up of independent and separate Directorates of Economics and Marketing in NWFP and Baluchistan.

The activities of the Federal Department were proposed to be streamlined through:

- Making institutional arrangements for effective coordination of provincial marketing departments which was totally absent;

- preparing 'Situation and Outlook' Report for each major crop each year on a regular basis according to a pre-determined time schedule; and

- arranging for the collection and dissemination of farm gate and retail prices of major commodities.

The study also reviewed the price support programme for agriculture in Pakistan and the procurement operations carried out for wheat and rice crops. It concluded that the production oriented price policies had acted as a major contributory factor for the all round improvement in agricultural production as well as in productivity. Further, the fixation of support prices had reduced the scope of exploitation by various intermediaries in the marketing of concerned crops.

Timmer, Falcon and Pearson, 1983 FOOD POLICY ANALYSIS, World Bank Publication (24).

The book presents tools and framework for analysing marketing functions as a component of food policy analysis. Food policy is viewed in a broad perspective to include the collective efforts of governments to influence the decision making environment of food producers, food consumers and food marketing agents in order to further social objectives. The objectives of the marketing sector are considered to be analogous to the four basic objectives for the food system as a whole: efficient economic growth, a more equal distribution of income, nutritional well-being and food security. Marketing can contribute to all the four objectives through more efficient performance of its various activities.

The authors describe the various issues related to marketing functions, markets and food price formation and suggest framework for understanding the marketing system through analysis of elements of a competitive market, market flows and participants, marketing costs and margins and marketing efficiency status. The analytical framework presented in the book is helpful to all those engaged in marketing research.

Nazir Ahmed, 'MARKETING OF MAJOR PULSES (GRAM, MASH, MUNG AND MASOOR) in Punjab - A case study in Faisalabad market (1983) - Faculty of Agricultural Economics and Rural Sociology - University of Agriculture, Faisalabad. (15)

The investigation was conducted on the marketing of major pulses (Gram, Mash, Mung and Masoor) in the Punjab with special reference to Faisalabad Market. The relevant data were collected from producers, village dealers, commission agents, processors and retailers through personal visits. The data regarding the marketing of pulses by Pakistan Agricultural Storage and Services Corporation (PASSCO) was collected from the Head Office at Lahore and Sub-office at Sargodha.

The main findings of the study were as under:

- The marketable surplus was 75.1, 80.5 and 85.2 per cents of the total production in case of gram, mash, mung and masoor respectively.

- The distribution of sale by the producer to various intermediaries in case of gram, mash, mung and masoor was 90, 95, 80 and 93 per cent respectively to the village dealer and 5, 5, 20 and 7 per cent respectively to the commission agent. In case of gram 5 per cent sale was made to the fellow farmers.

- The main reasons for village level sale were smallness of marketable surplus, transportation problem, lack of market information, existence of social ties and credit bindings with village dealer.

- Reasons for sale in the market were better price expectation, social ties and credit bindings with the commission agent.

- A major portion (75, 90, 80 and 70 percent in case of gram, mash, mung and masoor respectively) of the total marketable surplus was disposed off in the immediate post harvest months. The main factors favouring the immediate sale of pulses were the need to purchase fertilizer and implements, payment of water rate and loans, and to fulfil domestic needs.

- The sales by the village dealer are distributed as 93, 95, 90 and 95 per cent in case of gram, mash, mung and masoor respectively to commission agent and 7, 5, 10 and 5 per cent to the processor.

- The average quantity transacted by the commission agent in case of gram, mash, mung and masoor was 87500, 89200, 88525 and 75350 maunds per annum respectively. Out of which 12, 15, 10 and 11 percent was sold on behalf of the other commission agents, 88 and 75 percent in case of gram and mash respectively and 80 percent each for mung and masoor was transacted on behalf of the village dealers, and 9 percent in case of masoor and 10 percent of mash mung sold on behalf of the producer.

- The margin of commission agent was Rs. 5.13, 5.30 and 4.83 and 4.73 per maund in case of gram, mash, mung and masoor respectively. The net profit was Rs. 2.84, 3.08, 2.62 and 2.50 per maund.

- Quantity purchased by the processor for spliting was 11320, 18825, 14420 and 10975 maunds per annum in case of gram, mash, mung and masoor respectively. Whole of the quantity was purchased from commission agent.

- The recovery of pulses after spliting was 30 and 32 kgs per maund in case of gram and masoor respectively and 34 kgs per maund of mash and mung each. The recovery of mash and mung pulse remained 30 kgs per maund after washing.

- The average quantity purchased by the retailer in case of gram, mash, mung and masoor was 25, 30, 24 and 23.5 maunds per annum respectively. 100 per cent purchase was made from processor/wholesaler. The margin of the retailer in the pulses trade was maximum which was Rs. 45.00 and 40.00 per maund in case of gram and mash respectively and Rs. 35.00 per maund for maung and masoor each, after selling the commodities at a price of Rs. 7.75, 8.00, 7.13 per kg in case of gram, mash and masoor respectively. The profit earned by the retailer after incurring various costs came to Rs. 41.20 and 36.30 in case of gram and mash respectively and in case of mung and masoor each it was Rs. 31.30 per maund.

WHEAT DISPOSAL SURVEY, (1981) University of Agriculture Faisalabad (25)

This survey of wheat disposal by producers was conducted during the 1981 harvesting season in the Punjab, in order to study the efficiency of the price support programme for wheat. It included the estimation of the marketable surplus, disposal pattern, marketing costs, gross and net prices, difficulties experienced by the producers, the inadequacies of the procurement centres, the problems faced by them, and the question of their effective supervision.

Based on data collected from 500 producers representing all farm sizes, covering 34 purchase centres in 19 tehsils of the Punjab, the study concluded that wheat acreage was negatively correlated with farm size, being about 56 percent of the farm area on small farms and 45 percent on large farms. The average marketable surplus was 60 percent on large farms. About 75 percent of the marketable surplus was sold within two months of harvesting, with small farms selling 90 percent and large farms selling 74 percent. Over 53 percent of the marketed quantity was sold in village, 31 percent at procurement centres, 11 percent in market/mandis, and 4 percent to cooperative societies. The sales in villages decreased and those at procurement centres and to cooperative societies increased with increase in the farm size. Gross and net prices received in villages were lower than those obtained in markets and at procurement centres. Farmers did not take their produce to procurement centres because of higher deductions in kind, under-weighing, and delayed payment of sale proceeds at the centres. Only 34 percent of the purchases at procurement centres came from the growers directly, the rest being supplied by village dealers and commission agents. Proximity of procurement centres to production areas being a significant factor in attracting larger stocks directly from the growers, the report recommended that more procurement centres should be set up with adequate staff, storage and funds. It also recommended that the functioning of Supervisory Committees for procurement centres should also be improved and such committees be set up where they did not exist.

ECONOMICS OF PRODUCTION AND MARKETING OF PADDY IN PUNJAB, (1980) University of Agriculture, Faisalabad(8)

The study was conducted in the major rice producing areas and included farm and market level problems. The study revealed that the farmers were facing difficulties of realizing fixed prices, higher deductions in kind and delayed payment of sale proceeds. As regards the use of rice area for next crop, it was found that 90 percent of irri areas was utilized for rabi crops while in case of basmati only 42 percent area could be utilized. The deductions in kind ranged from 7 to 9.5 percent for various farm categories.

Muhammad Manzoor Ali, M.A. Cheema and Atteque Ahmed - 'MARKETING OF FARM PRODUCTS AND FARM IN-PUTS IN 'BARANI' PUNJAB AND NWFP' - Punjab Economic Research Institute, Lahore, Publication No. 176 (1979). (13)

The study covered marketing of major 'Barani' area crops like wheat, gram, ground nut, maize and pulses, and farm inputs like fertilizer, HYV seed, pesticides, and small implements.

Data on various aspects of marketing of farm products and farm inputs referred to above were generated by interviewing 200 farmers located in 20 village and 32 dealers of two markets in the rainfed Punjab. In NWFP, 35 farmers and 18 dealers located in 22 villages were interviewed for this purpose. The sample was mainly drawn through random sampling technique.

Characteristics of 'Barani' Markets:

The market studies in both the provinces exhibited the characteristics of a traditional centralized marketing system. The markets of Punjab province were fairly competitive, organized and regulated under the Agricultural Produce Market Act, 1939. The NWFP markets, were however dominated by a few large dealers and markets were also neither located in an organized premises nor were regulated under the Market Act.

The network of market intermediaries involved in the marketing of farm produce consisted of village shopkeeper/village 'beopari' at the village level, 'kacha' arhti (commission agent) and 'kacha + pacca ' arhti for wholesaler at the market level.

The farm products business in the Punjab markets was carried out mainly by commission agents/wholesalers alongwith a relatively smaller number of itinerant village level dealers. A major portion of marketable produce in NWFP however was handled by village shopkeepers/'beoparies' and ultimately channeled through one large dealer located at the central district headquarter market.

The majority of the dealers of Punjab and NWFP markets had farming as ancestral profession and were handling more business compared to the dealers coming from non-farming families. A vast majority of the sample dealers in both the provinces were running their business in rented shops and also had acquired most of the storage capacity on rental basis.

## Marketable Surplus

Groundnut and pulses (mash, mung) during 'Kharif' and wheat' gram/'rabi' pulses during 'rabi' were the major crops marketed by sample farmers. The sample growers marketed, on an average' 25 and 18 maunds of surplus produce of groundnut and gram respectively. The average quantity of marketable surplus of wheat, and 'rabi' pulses per farm household was about 42 and 7 maunds respectively. Marketable surplus of wheat was, however, available with only 40% of farmers (mostly of large size) whereas, 21 per cent of the sample farmers reported that more than 3/4th of their total production of 'Kharif' pulses was in excess of their household requirements and was thus disposed of in the market. The amount of marketable surplus of major crops was found positively correlated with the farm size.

## Marketing Channels/Place of Sale

Commission agent was the major functionary handling 70 and 85 per cent of gram and groundnut crops respectively, followed by village 'beoparies' and retailers. Very little grading of the marketed produce was done at the farm level.

### Factors Influencing Choice of a Market/Buyer:

While selecting a market and a buyer for sale of marketable produce, competitiveness of the market place and the personal relationship with the dealers were the major considerations kept in view by the sample farmers.

### Farm Storage:

Mud bins and or/separate 'kacha/pacca' rooms were the major storage arrangements at the farm level. Mud bins were used by 74 per cent of small farmers that were meeting only 45 per cent of their total storage requirements. Separate 'kacha'/pacca' rooms though used by a small number of farmers were accounting for the largest share in the total storage space at the farm level.

Farmers seemed to have little perception of and concern about storage losses. Only about four per cent losses were reported in the case of wheat and 4 to 10 per cent in the case of groundnut. As such majority of them did not make any suggestion regarding improvement in storage arrangements. Some of the small farmers, who did not have 'Pacca' rooms of their own, wanted that such a storage facility be provided to them.

### Business Costs:

On an average, Rs. 512 were spent monthly by dealers to run their farm products business. Entertainment followed by shop and godown rent were the major cost components. The costs were related to dealership size.

On an average, Rs. 8 were passed on by dealers to farmers as marketing charges on each transaction. Loss in weight (Wattah) and commission were the major components of such charges. The net price received by the farmer in such cases was about Rs. 92 per maund (given sale price of Rs. 100/- per maund) his (farmer's personal expenses on food and transport and octori.

Marketing Facilities:

The 'Study' revealed that no regulated/organized market existed in NWFP sample area and also that the submarkets in the Punjab were not properly organized, which caused problems for marketing of the produce. This emphasizes the need for establishing new outlets/markets and improving functioning of the existing ones to provide competitive markets with a conduct and performance more to the advantage of the farmers. The role of Market Committee is limited and of lesser benefit to growers in the Punjab as the Agricultural Produce Market Act has not been enforced properly. In the North West Frontier province sample area, the Market Committees are non-existent. These committees need to be established giving full representation to the growers so the mechanism of price formation and other market practices could effectively be improved.

Similarly, no well organized livestock market was available in the study areas for the disposal of livestock. As livestock production is an important activity in 'barani' areas, establishment of livestock markets on scientific lines also needs special priority in the development programes.

Village 'beopari' has been identified as an important functionary in the commodity marketing channels in NWFP. Furthermore, according to the Study, the amount of market charges passed on to farmers by the dealers of the Punjab's sample markets plus farmers' personal expenses incurred for the sale of commodities in the market shows that prices realized by the farmers in the regular markets were depressed more than the village level prices offered by the village dealers. Although the farmers get better prices in the market place than the ones offered by village dealers, yet the receipts, net of marketing margin, are lower in the latter case. Opening new outlets near villages or encouraging village dealer activity were the two major alternatives which could help narrow down the village and market level price margin, catch the margin fully or partially by farmers now going to market functionaries and improve the performance of existing markets. Village level functionaries thus need to be made more viable to provide competitive alternate channel for farmers and encourage price competition. Provision of institutional credit to the village 'beoparies' for financing the commodity trade could be of great consequence.

The study also revealed that road conditions in the sample areas needed lot of improvement. Difficult access to markets was also a major factor influencing farmer's choice of alternate market channels' thus limiting his ability to sell his farm produce through competitive channels. This problem could be alleviated by improving the road network in the rural areas.

Siddiqui <u>et</u> <u>at</u> (1979) conducted a study on 'MARKETING OF AGRICULTURAL PRODUCTS IN SIND'. (23)

The study focussed on two major aspects, namely, determining of cost of production of selected commodities and study of the marketing system including the channels, marketing cost/margins, and price analysis for these commodities. The data were generated by surveying commercial farms and potential markets scattered in all the 12 districts of Sind Province. The total sample size consisted of 1265 respondents that included 310 producers, 115 assembles/ contractors, 420 wholesalers/processors, and 420 retailers involved in production and marketing of various fruits, vegetables and pulses in the province.

The study showed that the marketing system for various commodities covered was centralized, involving a long and complex chain of intermediaries. The commodities moved through the selected few central markets to the retail (consumer) markets. The commodity prices were mainly determined by the marketing agencies located in the central markets. The prices in other markets moved around such predetermined price levels with a little allowance for marketing/shipment costs and a marginal influence of supply and demand in a particular market. This type of marketing system gave rise to several imperfections in the marketing system like wide farm - retail price differentials through accumulated marketing charges and exaggerated margins at various intermediary levels. The study showed that the middle man's profit share as a percent of retail price varied between 28 to 40 for various <u>pulses</u> in the province. The marketing costs were of the order of 27 to 34 percent. Thus farmer share was reduced to 5-9 percent of retail price. Marketing margins were unjust particularly for wholesalers and retailers, the respective margins being 22 to 40 percent (wholesalers) and 10 to 17 percent (retailers). This shows that wholesalers were pocketing the maximum share.

Rajab Ali Memon - Marketing Infrastructure, Margins and Seasonal Price Variations of Selected Agricultural Commodities in Sind Province of Pakistan -- Department of Agriculture Economic and Rural Sociology -- Sind Agricultural University, Tando Jam. (22)

A research project entitle "Study of the Marketing, Infrastructure, Margins and Seasonal Price Variations of Selected Agricultural Commodities in Sind Province of Pakistan" has been operating at Sind Agriculture University, Tandojam since 1974. The main objectives of research were to evaluate various marketing organizations, appraise the existing marketing system and analyse costs, prices, marketing conditions, marketing margins, seasonal price variations and export potentials of seven selected commodities including Banana, Mango, Dates, Onion, Potato, Chillies and Rice. A sample of 1495 respondents comprising of farmers, assemblers, wholesalers, inter-zonal traders processors, rice millers and retailers was interviewed from six districts of Sind province. A number of annual technical reports were prepared and issued dealing with the selected commodities.

The report for the rice crop, relevant for the present study, analyses the data for the year 1977-78.

The analysis revealed that paddy producers on an average spent Rs. 16.33 per maund as cost of production as against farm-gate price of Rs. 25.84 per maund. Rice mills sold parboiled and white rice at an average price of Rs. 49.00 per maund to RECP and at Rs. 48.00 of parboiled and white rice in open market. Wholesalers and retailers in production areas received per maund average price of Rs. 58.52 and Rs. 65.80 for parboiled rice, Rs. 58.92 and Rs. 66.98 of white rice and Rs. 37.14 and 46.63 of broken rice respectively. The wholesalers and retailers of consumption areas received average price of Rs. 61.75 and 67.86 per maund of parboiled rice, Rs. 56.26 and Rs. 70.00 per maund of white rice and Rs. 39.97 and Rs. 50.60 per maund of broken rice respectively. The prices of parboiled and white rice depicted a mixed trend whereas prices of broken rice decreased in all four quarter periods in the production areas. In consumption areas, wholesale and retail prices showed decreasing trends during all the studied quarter periods.

The study showed that consumers rupees was distributed in such a manner that 47 percent on parboiled rice and 53 percent on white rice in production areas and 45 percent on parboiled and 50 percent on white rice in consumption areas went to the producers. The rest of its was availed by various intermediaries.

The policy recommendations of the study related to supply of insecticides, sprayer machine and good seed, removal of salinity and water logging menaces, supply of sufficient water, opening of more paddy purchasing centres, supply of fertilizers, construction of more link roads, announcement of positive price policy in advance, crop zoning, quick transport, installation of modern mills by RECP, adoption of a workable grading system, opening of fair price shop for consumers, removal of interzonal ban on rice and refixing of purchase targets for lower and upper Sind areas.

Planning and Development Division, Government of Pakistan, AGRICULTURAL MARKETING STUDY, 1974-75. (18)

The Planning Division, Government of Pakistan sponsored a study on 'Agricultural Marketing' during 1974-75, spread over all the four provinces. The main objectives of the study were:

- To appraise and describe the existing marketing infrastructure, marketing functions and organization for selected commodities.
- To identify principal marketing agencies and to appraise their impact on the development of an efficient marketing system.
- To estimate cost of production, and costs incurred by various marketing agencies.
- To calculate marketing margins of various functionaries.
- To ascertain the direction and magnitude of change in the structure, organization and operation of markets for selected commodities.

The executing agencies for the study in various provinces were as follows:

Punjab:

Board of Economic Inquiry, Lahore (now renamed as Punjab Economic Research Institute)

Sind:

Sind Agriculture University, Tando Jam.

NWFP and Baluchistan

Board of Economic Inquiry, Peshawar.

Separate study reports were issued by each of the three executing agencies. The main findings are reviewed below:

The Punjab Study covered four pulses, seven vegetables and three fruits and was confined to the five main markets of the province. The sample comprised of both farmers and intermediaries involved in the marketing of the selected commodities at various stages from farm gate to the retailers.

The report observes that market imperfections and the consequent unfair dealing on the part of market functionaries with the farmers in marketing of farm products were due mainly to farmer's lack of knowledge and inadequate marketing facilities, difficult access to and absence of proper regulation in the markets like licensing of market functionaries and absence of clear definition of market charges/deductions. Under-weighment of growers produce and 'watta' at 1 to 2 seers per maund, commission charges over and above the prescribed rates under the market regulations, other deductions on account of mosque fund, weight of gunny bags, and absence of open auction were some of the common trade malpractices found in the markets studied.

The Market Committees were also not supervising auction of products. Furthermore, retailer was pocketing the maximum share of retail market price of pulses followed by miller/wholesaler. Village 'beopari' was also reported to share adequate proportion of retail price. The amount of margin was influenced by the number of intermediaries involved in the marketing channel of a particular commodity.

The survey estimated that 50 percent of the gram crop of the sample growers and 90 percent of mung, mash and masoor crops were sold in the villages.

The Survey Report of Sind explains the prevailing marketing system in the region and highlights various imperfections and inefficiencies. It estimates that middlemen profits in the average retail prices vary from 28 to 40 percent for pulses. Among the measures recommended for improving the marketing conditions, include the following:

- establishment of regulated markets
- reorganization of market committees
- development of processing and preservation facilities for fruits
- exploration of export potential for various fruits and vegetables.

The NWFP and Baluchistan survey estimated that out of the total sales, 63.6 percent of the pulses were sold in the villages. The shares of growers in the retail price in NWFP were estimated at 44.2 percent for pulses. The main recommendation of the study related to the popularization of cooperative approach to marketing to do away with the long and expensive marketing channels and to expose the private functionaries to greater competition.

M. Aslam Chaudry, 'AN ECONOMIC APPRAISAL OF MARKETING MARGINS OF INTERMEDIARIES IN PULSES (gram, mung and mash). A case study of Lyallpur markets' - Faculty of agricultural Economic and Rural Sociology - University of Agriculture, Faisalabed (1974). (6)

The study was undertaken with a view to examine the justification of various intermediaries involved in the marketing of Gram, Mung and Mash in Lyallpur Market.

The research work was carried on for three commodities viz. Gram, Mung & Mash. A preliminary survey was carried out in the Lyallpure Market to find the sources from which the supply originated. It was identified that Gram and Mung were supplied from Leiah tehsil and Mash from Bahawalpur tehsil. These tehsils were then selected for the study. The data was collected through personal interviews of producers, village beoparis, commission agents, processors and retailers. It was found that the usual channels in the marketing of Gram, Mung, Mash in the Lyallpur market which was also applicable to other markets in the Punjab were as under:

- Producer

- Village Beoparai

- Market Commission Agent

- Processor-cum-Wholesaler

- Retailer

- Consumer

The main findings of the study were as follows:

- In case of Gram, Mung and Mash the marketable surplus constituted 85.3 percent, 85.3 percent and 78.5 percent of the total production respectively. The major portion (75 percent) of Gram was disposed off by the producer in the month of June, July and rest (25 percent) was disposed off in different periods of the year. In case of Mung 72.5 percent was disposed off in November, December while the rest (25.7) percent was disposed off in different periods of the year. About 80 percent of Mash was disposed off in November, December while 20 percent in different period of the year.

  The urgent need for cash, fertilizer and storage problems were the major factors responsible for immediate disposal. In cases characterized by sales in all the year round, the better price, more than any other factor, served as the biggest incentive. The major portion of the produce was disposed off to the village beopari. The major factors accounting for village level sales by the producers were the transport problems, late payment of sale proceeds in case of market sales and botheration for taking produce to the market. On the other hand, the better price, absence of bad debt and quick mode of payment in sales to the market were quoted as major incentives for market sales.

- The cost per maund incurred by the producer in sales to other agencies were Rs. 0.82 for Gram, Rs. 1.08 for Mung and Rs. 1.76 for Mash. The net prices received by the producer were Rs. 30.50 per maund for Gram, Rs. 58.40 per maund for Mung and Rs. 88.00 per maund for Mash.

- For Gram, Mung and Mash, the average quantity purchased by one village dealer per annum worked out to be 2, 790 mds., and 1,280 mds., respectively. The distribution pattern of Gram, Mung and Mash sales by the village dealer to commission agent was that 100 percent sales were made to the commission agent.

- The costs per maund incurred by the village dealer were Rs 3.26 per maund for Gram, Rs. 2.09 per maund for Mung and Rs. 2.04 per maund for Mash. The price received by the village dealer in sales to various agencies was Rs. 34.60 per maund for Gram, Rs. 61.00 per maund for Mung and Rs. 90.60 per maund for Mash. The profit of village dealer per maund of Gram, Mung and Mash sales to various agencies was Rs. 0.54, Rs. 0.51 and Rs.0.50 respectively.

- The distribution of Gram, Mung and Mash sales by Commission agent to various agencies was as under:

    o In case of Gram 76.4 percent sales were made to processor and 23.6 percent to other Commission agents.

- In case of Mung 90 percent to processors and 10 percent to other Commission Agents.

- In case of Mash 97.5 percent to processors and 2.5 per cent to other Commission Agents.

The costs per maund incurred by the Commission agent were Rs. 0.39, for Gram, Rs. 0.41 for Mung and Rs. 0.89 for Mash in sales to various agencies. The Commission charged by the commission agent constituted his margin i.e. Rs. 1.03 per maund for Gram, Rs. 1.81 per maund for Mung and Rs. 2.71 per maund for Mash. The profit of the commission agent per maund of Gram, Mung and Mash sales to various agencies was Rs. 0.64, Rs. 1.40 and Rs. 1.82 respectively.

For gram, mung and mash, the average quantity purchases by one processor for a month worked out to be 2,660 maunds, 486 maunds, and 452 maunds respectively. The processor also performed the job of wholesaler in the market channel of pulses. The costs per maund incurred by the processor were Rs. 1.70 for gram, Rs. 3.78 for mung and Rs. 3.94 mash in sales to the retailer and other agencies. The margin of processor in sales to various agencies was estimated at Rs. 2.80, Rs. 5.40, Rs. 5.60 for Gram, Mung and Mash, respectively. The profit of the processor per maund of Gram, Mung and Mash sales to various agencies was Rs. 1.10, Rs. 1.62 and Rs. 1.66 respectively.

From Gram, Mung and Mash, the average quantity purchased by one retailer per annum worked out to be 16.5 mds for the three pulses. As for the distribution of Gram, Mung and Mash sales by the retailer, it were made almost 100 percent to the consumer.

The costs per maund incurred by the retailer were Rs. 1.24 per maund for Gram, Rs. 1.60 per maund for Mung, Rs. 1.68 per maund for Mash in sales to the consumer.

The prices received by retailer in sales to the consumer were Rs. 50.43 per maund in case of Gram, Rs. 81.21 per maund for Mung and Rs. 115.91 per maund in case of Mash.

The retailer's margin in Gram, Mung and Mash was Rs. 12.00 per maund, Rs. 13.00 per maund, Rs. 17.00 per maund respectively.

The retailer earned the highest profit in the market channel of pulses. The profit of the retailer per maund of Gram, Mung and Mash sales to the consumer was 10.76, Rs. 11.40 and Rs. 15.32 respectively.

The per maund distributive margin in Gram, Mung and Mash was Rs. 19.93, Rs. 22.81 and Rs. 27.91 respectively, which was estimated at 39.53 percent, 28.08 percent and 24.07 percent of the consumer's price respectively. In Gram, the share of retailer (60.11 percent) in the distributive margin is higher as compared to village beopari (20.35 percent), commission agent (5.50 percent) and processor (14.04).

In Mung the share of retailer in distributive margin is 56.99 percent whereas the shares of village beopari, commission agent and processor in the distributive margin are 11.39 percent, 7.39 percent and 23.69

percent respectively. In case of Mash, the retailer's share in distributive margin is also higher than that of other intermediaries. The retailer's share is 60.92 percent, village beopari's share is 9.32 percent, commission agent's share is 9.70 percent and processor's share is 20.06 percent.

- The study concluded by emphasizing the need for more efficient operations particularly at the village beopari and retailer levels.

Mushtaq Ahmed, 'AN ECONOMIC APPRAISAL OF INSTITUTIONAL FRAMEWORK IN THE MARKETING OF AGRICULTURAL COMMODITIES'. University of Agriculture Faisalabad (1971). (14)

Mushtaq in a case study entitled "An Economic Appraisal of Institutional Framework in the Marketing of Agricultural Commodities" came to the conclusion that the marketing margin was an increasing function of number of intermediaries. This should apparently suggest that a decrease in marketing margin could be achieved by eliminating some of the intermediaries from the existing marketing channels. But after the quantification of various services rendered by all the intermediaries, it became clear that except for the village dealer, the profits of all other intermediaries were justifiable under the prevailing marketing conditions. The producer got the lowest net price in sales to the village dealers which was mainly due to the dilution of competition at the village level. This intermediary could however, be made efficient by rendering the competition at village level more effective.

K.S. Gill and S.S. Johl, 'MARKETING OF GRAM IN THE PUNJAB (INDIA) 1971 - Department of Economic and Sociology, Punjab Agricultural University, Ludhiana. (11)

Gill and Johl (1971) in their study on marketing of gram in the Punjab (India) found that agencies engaged in assembling the produce of gram were producer, village dealer, village shopkeeper and others which counted for 88.5, 7.0, 2.0 and 1.9 percent respectively. Different modes of transport were tractor trolly 43.3 percent, bullock cart 30.3 percent, camel pack 15 percent, truck 9 percent and camel cart 2.4 percent. They further stated that production and arrival showed an upward movement from the year 1952 to 1968. In marketing pattern, highest arrival index was obtained during May 270.05, June 149.49, April 137.03 and July 119.39. While price indices for these months were the lowest i.e., 92.59, 93.5, 96.46 and 93.78 respectively. They added that on the other hand price indices from September to March ranged between 100.96 and 107.89, whereas arrival indices for these months were lowest and ranged from 46.48 to 67.56. The major portion of cultivator's produce was thus received in the market when prices were at their lowest. They concluded that 61 percent of gram was used for home consumption at the farm for cattle feed, seed, and payment in kind. Rest 39 percent was marketed, out of which 6 percent was purchased by the consumers who consumed gram as whole, 60 percent was processed into dal, 12 percent into bason, 21 percent for feeding to cattle and wastage accounted for 1 percent. Margins retained by intermediaries for lean period were invariably higher than those in peak period. The retailer's share during peak season was 6.8 percent of consumer's price and during lean period 104. percent.

Producer's share in consumer's Rupees decreased as more of processing was involved. For gram whole, dal and beason the producer's share was 86.5, 79.8 and 74.8 percent respectively.

Abdul Rashid - THE MARKETING OF WHEAT IN WEST PAKISTAN, (1971) University of Agriculture, Faisalabad. (2)

This study covered domestic and international aspects of wheat marketing and production trends. It observed that the outcome of deficiencies in the marketing system was a substantial increase in the marketing margins without commensurate benefit to producers and consumers. The disorderly market conditions resulted in disconcerting fluctuations in farm incomes which consequently affected the marketable surplus.

The report concluded that in order to cope with the present and potential problems in wheat trade, all policies viz., price, marketing and structural policies - for wheat and other foodgrain need be coordinated and changed in line with the international situation. This would give rise to a system which would be sufficiently flexible to absorb the internal and external shocks together with ameliorating the condition of producer, consumers, trade and State at large.

F.A.O. (1970) (10) The Food and Agriculture Organization in a monthly bulletin (1970) pointed out that attack on the free enterprise competitive marketing system centres on a group of people known as middle-men. The negative qualities attributed to the term were now such that it was almost synonymous with the anti-social activities. The most important accusation against the middle-men was that they paid the farmer a price lower than the real value of the produce, but blame was far from universal fact. As the competition among the traders was almost a normal feature of the marketing of agricultural products, only a few middle-men actually had the power to pay the farmers at low price at even village level.

Abdul Rashid -- ECONOMIC ASPECTS OF DISTRIBUTIVE MARGINS (1970) University of Agriculture, Faisalabad (1).

In this exercise a detailed analysis of the marketing margins was attempted and the inefficiencies in various marketing functions measured. It was noted that existing inefficiencies in Pakistan were largely due to functional inadequacies and to a lesser extent due to institutional analogies. Profit element was the function of a large number of intermediaries in the marketing process. The retail margins in almost all the commodities represented significant proportion of the consumer prices.

## AN OVERVIEW

The extensive literature reviewed in the present section has brought out the basic features of the structure and functioning of the agricultural marketing system. These features include:

- Marketable Surplus

- Marketing Margins

- Marketing Channels

- Roles of Private Traders and Government agencies.
- Storage
- Institutional Regulatory Framework

Estimates of marketable surplus have been presented based on analysis of data collected under different conditions, during different periods for various crops. It has,however, been generally observed that the size of the marketable surpls was positively correlated with the size of the farm. The influence of the size of the marketable surplus on the marketing behaviour has also been brought out in a few cases. It has been observed that a larger marketable surplus with its lower unit marketing costs encouraged a farmer to extend his search for a better price.

Estimates of marketing margins have been analysed in almost all the reports and their levels analysed for evaluation of efficiency status. It has generally been observed that scope exists for narrowing down the spread between the producer and consumer prices or for increasing producers share without affecting consumers prices. It has been pointed out that the outcome of deficiencies in the marketing system was a substantial increase in the marketing margins without commensurate benefit to producers and consumers.

The shares of various marketing channels have been analysed for various crops. There was however conflicting evidence about the level of prices obtained at various levels. A number of studies found that the gross and net prices received for wheat in villages were lower than those obtained in markets. Another study, carried out in a different area, however, showed that although farmers got better prices in the market place than the ones offered by village dealers, yet the receipts net of marketing margins were lower in the former case.

The roles of the private traders and of government agencies in the marketing of wheat have been analysed. The predominant role of the public sector through procurement operations, regulation of transport and milling activities and regulation of market supplies of wheat and flour has ben duly highlighted and it has been recommended that while the scope of private traders activities needs to be widened, the government must continue to operate effectively and more selectively.

The storage facilities at various levels were reviewed in some of the reports and were generally found to be in-efficient and of low quality. The government regulatory framework for agricultural marketing has also been examined in a number of studies and recommendations made for its improvement. These include upgrading and strengthening the activities of the provincial departments, establishing new markets and more effective supervision over market operations by the Market Committees.

## CHAPTER III

## 3. MARKET SYSTEM OF WHEAT

### 3.1 DISTRICT AND VILLAGE SAMPLE CHARACTERISTICS

Selection of districts for wheat survey was done purposely to represent major producing areas for this crop. The basis of selection was the average annual area under wheat for the three years period ending 1985-86. A total of five wheat growing districts were selected; 3 in the Punjab and one each of Sindh and North West Frontier Province. In the Punjab, two sample districts were selected to represent canal irrigation conditions; one of these in the central part of the province and the other in the south, while the third sample district represented northern barani areas. The Sindh sample district represented irrigated conditions while the sample district of NWFP represented barani-cum-irrigation conditions.

The districts selected and surveyed in accordance with the above criteria were:

| | |
|---|---|
| Punjab | Jhang |
| | Multan |
| | Attock/Chakwal |
| Sindh | Nawabshah |
| NWFP | Bannu |

In each of the above districts, three villages were selected.

The average population, average cultivated area, average distance from the nearest town, railway station and the regulated market and the percentage share of wheat in the total cultivated area for the sample villages of each district are shown in Table 3.1.

The average population per village was 3810. Except for the Jhang sample villages which had an average population of 1467 persons, the averages for the other districts were higher, ranging between 3833 and 4833 persons per village. The average cultivated area per head of population was 0.92 acres for the sample villages of the Punjab province as against averages of 0.57 acre and 1.26 acres for the sample villages of Sind and NWFP provinces. For the sample as a whole the corresponding ratio was 0.94 acre per person.

Wheat was the predominant crop grown in the sample villages accounting for 57 percent of the cultivated area for the sample as a whole. The ratio was 63 percent for the sample villages of Punjab as against 53 percent for Sind and 43 percent for NWFP sample villages. The local market actors, village shopkeepers and beoparis were reported only from the Punjab sample villages where their average per village was one each.

## 3.2 GROWERS SAMPLE CHARACTERISTICS

### Sample Size and Distribution by Farm Size

The growers sample consisted of 306 households, distributed among the five sample districts almost equally. The classification of holdings by farm size and the average composition of the household for the sample districts of each province are shown in Table 3.2

TABLE 3.1

AVERAGE POPULATION, CULTIVATED AREA, DISTANCES AND SHARE OF WHEAT ACREAGE FOR SAMPLE VILLAGES

CROP: WHEAT

| District | No. of Villages | Average Village Population (No.) | Average Cultivated Area/Village (Acres | Average Distance in Kilo Meters From | | | | | Total cultivated area | Wheat Crop Area (Acre) | %age of Wheat Area to Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Nearest Town | Railway Station | Procurement Centre Food | Procurement Centre Passco | Regulated Market | | | |
| Jhang | 3 | 1467 | 1280 | 10 | 23 | 3 | 20 | 26 | 3840 | 3125 | 81 |
| Multan | 3 | 4167 | 2875 | 11 | 10 | 17 | 9 | 22 | 8625 | 4700 | 54 |
| Attock/Chakwal | 3 | 4833 | 5500 | 17 | 43 | — | 8 | 5 | 16500 | 10500 | 64 |
| Sub-Total | 9 | 3489 | 3218 | 13 | 25 | 7 | 12 | 18 | 28965 | 18325 | 63 |
| Nawabshah | 3 | 3833 | 2167 | 7 | 3 | 2 | 1 | — | 6500 | 3450 | 53 |
| Bannu/Chakwal | 3 | 4750 | 6000 | 16 | 34 | 1 | 14 | 4 | 18000 | 8500 | 47 |
| Total | 15 | 3810 | 3564 | 12 | 23 | 5 | 10 | 11 | 53465 | 30275 | 57 |

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TABLE 3.2

CLASSIFICATION OF SAMPLE HOLDINGS BY FARM SIZES AND AVERAGE HOUSEHOLD COMPOSITION FOR EACH PROVINCE

CROP: WHEAT

| Province | Farm Size | Sample Size | | Household Composition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Above 10 Years | | | Children | | | Total | | |
| | | Number | % to Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Punjab | Small | 64 | 21 | 2.89 | 2.81 | 5.70 | 1.72 | 1.53 | 3.25 | 4.61 | 4.34 | 8.95 |
| | Medium | 56 | 18 | 3.27 | 3.16 | 6.43 | 1.82 | 1.64 | 3.46 | 5.09 | 4.80 | 9.88 |
| | Large | 62 | 20 | 3.13 | 2.85 | 5.98 | 1.34 | 1.34 | 2.68 | 4.47 | 4.19 | 8.66 |
| | Total | 182 | 59 | 3.09 | 2.93 | 6.02 | 1.62 | 1.50 | 3.12 | 4.71 | 4.43 | 9.14 |
| Sind | Small | 22 | 7 | 3.50 | 3.41 | 6.91 | 2.77 | 2.23 | 5.00 | 6.27 | 5.64 | 11.91 |
| | Medium | 26 | 8 | 3.54 | 3.31 | 6.85 | 1.73 | 1.65 | 3.38 | 5.27 | 4.96 | 10.23 |
| | Large | 12 | 4 | 3.33 | 3.42 | 6.75 | 3.08 | 1.92 | 5.00 | 6.41 | 5.34 | 11.75 |
| | Total | 60 | 19 | 3.48 | 3.37 | 6.85 | 2.38 | 1.92 | 4.30 | 5.86 | 5.29 | 11.15 |
| N.W.F.P | Small | 27 | 9 | 3.04 | 2.67 | 5.71 | 2.30 | 1.26 | 3.56 | 5.34 | 3.93 | 9.27 |
| | Medium | 27 | 9 | 3.59 | 3.37 | 6.96 | 2.30 | 1.70 | 4.00 | 5.89 | 5.07 | 10.96 |
| | Large | 10 | 3 | 2.70 | 3.30 | 6.00 | 2.10 | 1.80 | 3.90 | 4.80 | 5.10 | 9.90 |
| | Total | 64 | 21 | 3.22 | 3.06 | 6.28 | 2.27 | 1.53 | 3.80 | 5.49 | 4.59 | 10.08 |
| Pakistan | Small | 113 | 37 | 3.04 | 2.89 | 5.93 | 2.06 | 1.60 | 3.66 | 5.10 | 4.49 | 9.59 |
| | Medium | 109 | 36 | 3.41 | 3.25 | 6.66 | 1.92 | 1.66 | 3.58 | 5.33 | 4.91 | 10.24 |
| | Large | 84 | 27 | 3.11 | 2.99 | 6.10 | 1.68 | 1.48 | 3.16 | 4.79 | 4.47 | 9.26 |
| | Total | 306 | 100 | 3.19 | 3.05 | 6.24 | 1.91 | 1.59 | 3.50 | 5.10 | 4.64 | 9.74 |

The shares of the small, medium and large size farms in the total sample were 37, 36 and 27 percents respectively. The average size of the sample household was 9.73 persons of whom 3.49 were children upto 10 years of age. The corresponding data for each sample district is included in Table III-1 of the Statistical Appendix.

## Area Under Wheat and Average Yield

The size of average holding and shares of area under wheat in the total cultivated area for different sized holdings for provincial samples are shown in Table 3.3. The corresponding data for each sample district is given in Table III-2 of the Statistical Appendix.

The average size of the operational holdings of the sample growers was 33.02 acres. The averages for the small, medium and large farms were 10.07, 22.75 and 74.92 acres respectively. It appears that for the sample as a whole, almost one-half of the total area was under wheat. The classification of the sample by different size units shows that the percentage share under wheat tends to decline with increase in the size of the holdings. Thus the ratio was 65.67 per cent for the small farms declining to 55.42 percent for the medium and 40.40 percent for the large farms. Similar trends were observed for each provincial sample.

The negative correlation between the farm size and the share of wheat in the cropped area is also reported by the survey of Wheat Marketing Activity in Pakistan (1987) (17) and by the Punjab Wheat Disposal Survey (1981) (25).

## TABLE 3.3

### AVERAGE SIZE OF AREA UNDER WHEAT FOR SAMPLE GROWERS AND AVERAGE YIELDS

CROP: WHEAT ( Acres )

| Province | Farm Size | Average Cultivated Area | Average Area under Wheat | Percentage of Area under Wheat to Total | Average Yield ( 40 Kg. per Acre |
|---|---|---|---|---|---|
| Punjab | Small | 10.44 | 7.41 | 71.01 | 16.10 |
| | Medium | 23.19 | 13.53 | 58.34 | 15.25 |
| | Large | 78.56 | 32.57 | 41.46 | 16.32 |
| | Total | 37.57 | 17.87 | 47.55 | 16.10 |
| Sind | Small | 10.41 | 5.39 | 51.75 | 23.91 |
| | Medium | 23.92 | 12.81 | 53.54 | 21.65 |
| | Large | 61.21 | 25.53 | 42.21 | 18.69 |
| | Total | 26.43 | 12.69 | 48.03 | 20.80 |
| N.W.F.P | Small | 9.17 | 5.88 | 64.14 | 13.83 |
| | Medium | 20.90 | 10.61 | 50.78 | 10.66 |
| | Large | 62.78 | 18.88 | 30.07 | 13.42 |
| | Total | 22.49 | 9.91 | 44.04 | 12.27 |
| PAKISTAN | Small | 10.13 | 6.65 | 65.67 | 11.44 |
| | Medium | 22.80 | 12.63 | 55.42 | 15.85 |
| | Large | 74.21 | 29.98 | 40.40 | 16.55 |
| | Total | 32.23 | 15.19 | 47.12 | 16.42 |

The survey results show that the average yields tend to decline with the increase in the size of holdings. This was generally true for the sample as a whole as well as for each provincial sample. This would appear to suggest that the smaller farms were cultivated more intensively.

Among the various provinces, the average yield was the highest at 20.80 maunds per acre for the sample district of Sind as against 16.20 maunds and 12.27 maunds for the sample districts of Punjab and NWFP provinces. A reference to the district data, included in the Statistical Appendix, would show that the two irrigated sample districts of the Punjab had an average of 20.04 and 20.27 maunds per acre as against 7.25 maunds recorded by the only barani sample district.

Uses of Wheat

The percentage shares of different uses of the total output of wheat by different size sample growers for each province are shown in Table 3.4 while corresponding data for each sample district is included in Table III-3 of the Statistical Appendix.

The major uses identified during the survey were domestic consumption, payments in kind and seed while the balance quantities were marketed.

Domestic consumption of wheat was the single most important use of wheat for the non-marketed quantities. It accounted for 27 percent of the total output for the sample as a whole.

TABLE 3.4

PERCENTAGE SHARES OF DIFFERENT USES OF WHEAT IN THE TOTAL OUTPUT FOR SAMPLE GROWERS OF DIFFERENT SIZES OF EACH PROVINCE

CROP: WHEAT ( PERCENTAGE)

| Province | Farm Size | Domestic Consumption | Payment in Kind | Kept for Seed | Marketed | Total |
|---|---|---|---|---|---|---|
| Punjab | Small | 41 | 17 | 6 | 36 | 100 |
| | Medium | 33 | 21 | 6 | 40 | 100 |
| | Large | 19 | 22 | 5 | 54 | 100 |
| | Total | 26 | 21 | 5 | 48 | 100 |
| Sind | Small | 42 | 12 | 5 | 41 | 100 |
| | Medium | 27 | 20 | 6 | 47 | 100 |
| | Large | 20 | 17 | 11 | 52 | 100 |
| | Total | 27 | 17 | 8 | 48 | 100 |
| N.W.F.P. | Small | 46 | 25 | 6 | 23 | 100 |
| | Medium | 52 | 16 | 8 | 24 | 100 |
| | Large | 36 | 33 | 4 | 27 | 100 |
| | Total | 45 | 24 | 6 | 25 | 100 |
| Pakistan | Small | 42 | 17 | 6 | 35 | 100 |
| | Medium | 34 | 20 | 6 | 40 | 100 |
| | Large | 20 | 22 | 6 | 52 | 100 |
| | Total | 27 | 21 | 6 | 46 | 100 |

The ratio of total output used for domestic consumption tend to vary inversely with the size of the farm. This trend was observed for all the provincial samples. For the sample as a whole, shares of domestic consumption in the total were 42, 34 and 20 percents for the small, medium and large sample growers.

The absolute quantities kept for domestic consumption by the larger farms were higher because of their greater total outputs. The analysis thus shows positive correlation between per capita domestic consumption and the size of the farms. This is shown in Table 3.5 for the provincial sample growers and in Table III-4 in the Statistical Appendix for the district sample growers.

It appears that the quantities kept for domestic consumption per person by the large sample growers were 2.19 times those of the small sample growers. Similar trends were observed for all the provincial samples, the corresponding ratios for Punjab, Sind and NWFP being 2.14, 1.82 and 2.25 respectively.

The per capita quantity kept for domestic consumption for the growers sample as a whole is calculated at 7.13 maunds for the year. When compared with the other available estimates of actual per capita consumption, the above estimate appears to be on the high side.

## TABLE 3.5

## CONSUMPTION OF WHEAT PER CAPITA PER ANNUM BY PROVINCE

CROP: WHEAT

| | Farm Size | Domestic Consumption (40 Kg.) | Average House Hold Size (Nos.) | Per Capita Consumption per Annum (40 Kg.) |
|---|---|---|---|---|
| Punjab | Small | 49.97 | 8.95 | 5.59 |
| | Medium | 68.59 | 9.88 | 6.94 |
| | Large | 103.69 | 8.66 | 11.97 |
| | Total | 74.01 | 9.14 | 8.10 |
| Sind | Small | 53.82 | 11.91 | 4.52 |
| | Medium | 74.23 | 10.23 | 7.26 |
| | Large | 97.08 | 11.75 | 8.26 |
| | Total | 71.32 | 11.15 | 6.40 |
| N.W.F.P. | Small | 37.57 | 9.27 | 4.05 |
| | Medium | 59.00 | 10.96 | 5.38 |
| | Large | 90.25 | 9.90 | 9.12 |
| | Total | 54.84 | 10.08 | 5.44 |
| Pakistan | Small | 47.77 | 9.59 | 4.98 |
| | Medium | 67.56 | 10.24 | 6.60 |
| | Large | 101.15 | 9.26 | 10.92 |
| | Total | 69.47 | 9.74 | 7.13 |

The average monthly consumption of wheat and wheat flour reported by Household Income and Expenditure Survey[1] (1985-86) was 11.88 kg. for the rural areas. The consumer survey carried out in sample areas as a part of the present assignment has yielded an average monthly per capita consumption of 11.22 kg. These two estimate give yearly average consumption of 3.48 and 3.37 maunds respectively.

The following factors explain the higher average estimated for the growers survey:

The estimates of the Household Income and Expenditure Survey (HIES) and of the present consumer survey relate to 'ACTUAL' consumption. The estimate of the growers survey, however relate to quantity kept for domestic consumption. It is usual practice that growers, other things being equal, generally retain larger quantities than actually required for consumption and sell the excess quantities subsequently during later parts of the year.

- The estimate of HIES relates to entire rural population, both growers and non-growers. The estimates thus relate to distinct groups.

- The average consumption for the sample growers has been calculated on the basis of their actual family members. In rural areas, casual laboures engaged during different seasons are also served with food for which provision is made while retaining quantities for domestic consumption.

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Federal Bureau of Statistics, Household Income and Expenditure Survey, 1985-86.

Payments in kind is the second important use of wheat. This comprises of a composite group of persons/entities to whom different quantities are given for services rendered or for other obligations. Payments are made in kind to pay part of the wages of permanent, seasonal or other workers. Traditionally, village artisans, carpenters, blacksmiths and others are also paid in kind at the harvest time. Payments in kind are also made for charitable and other miscellaneous purposes.

It appears that the ratio of payments in kind are directly correlated with the size of the holdings. This appears realistic as the major components of payments in kind are related to the size of the farms. The smaller farmers, because of the lower outputs tend to make the best use of family labour for several operations in preference to hiring outside workers.

In a study on 'Farm Products Storage and Storage Losses' conducted by the Punjab Economic Research Institute in 1978, the shares of total produce kept for domestic consumption for different size farms in the Punjab were reported as follows:

| | Percentage |
|---|---|
| Upto 12.5 acres | 39.94 |
| 12-5 to 25 acres | 28.05 |
| Above 25 acres | 13.17 |
| All farms | 20.16 |

The present survey shows similar trends, though the ratios are consistently lower for all the groups.

The proportion of wheat retained for seed is almost equal for all sized farms in all the sample areas.

The proportion of total wheat production kept for own consumption reported by Cornelisse and Naqvi (2) were 39, 44 and 35 percents for the Punjab, Sind and NWFP respectively. The shares of payments in kind to labour and miscellaneous uses were reported by them at 18, 16 and 28 percents for the three provinces respectively.

## 3.3 MARKETED SURPLUS

The shares of the total produce marketed by the sample growers classified by farm sizes are also shown in Table 3.4.

The ratio of marketed surplus to total production varies directly with the size of the farms. Thus for the sample as a whole 46 percent of the output was marketed. The corresponding ratios for the small, medium and large farmers were 35, 40 and 52 percents respectively. Similar trends were noticed in the case of each of the provincial samples. The relatively larger share of domestic consumption for the small farms accounts for their lower ratios of marketed surplus.

Among the three provinces, the ratios of marketed surplus were the least at 25 percent for the NWFP sample. In the case of Punjab, the ratio was 51 percent for the sample districts representing irrigated tract as against only 38 percent for the rain fed area.

The marked surplus ratios reported by Cornelisse and Naqvi (17) were 43, 40 and 37 percents for Punjab and Sind and NWFP. These are quite consistent with the present survey results.

The report of the Planning and Development Division (20) estimates the marketed surplus at 28, 60 and 78 percents for the small, medium and large farms respectively and at 67 percent for the total farms. Their estimates are significantly higher except for the small farm as compared to the present study.

## 3.4 SEASONAL SPREAD OF MARKETING OPERATIONS

Percentage classification of quantities sold by months of sale for different size sample growers of each province are shown in Table 3.6 while corresponding data for each sample district is included in Table III-5 of the Statistical Appendix.

Wheat harvesting generally starts in April and almost the entire quantities are sold by the growers within the following three months. This is true for the sample districts of all the provinces except for that of NWFP. In Sindh also though harvesting starts earlier than in other provinces, greater part of the produce is sold in later months. It is reported that in the sample area, the growers start the preparation of land for sowing of cotton immediately after harvesting of wheat and marketing of wheat is delayed on this account.

The results also show that, generally, the larger growers tend to sell greater proportion in later months. Taking the sample as a whole, 87 percent of the marketed surplus was sold during the three months of April to June while 11 percent was sold in July. Only 2 percent of the total sales were reported during other months of the year.

TABLE 3.6

PERCENTAGE CLASSIFICATION OF TOTAL WHEAT SOLD BY MONTH BY SAMPLE GROWERS OF DIFFERENT SIZES AND AVERAGE MONTHLY SALE PRICE FOR EACH PROVINCE

CROP: WHEAT

| Province | Farm Size | PERCENTAGE QUANTITY SOLD IN DIFFERENT MONTHS | | | | | | | | | AVERAGE PRICES RECEIVED ( PER 40 KG.) | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Feb. | Apl | May | June | July | Aug: | Sept: | Oct: | Nov: | Feb. | Apl. | May | June | July | Aug: | Sept. | Oct. | Nov. | |
| Punjab | Small | 7 | 5 | 37 | 42 | 9 | | | | | 85.00 | 78.69 | 78.99 | 79.77 | 82.00 | | | | | 80.00 |
| | Medium | | | 59 | 36 | 5 | | | | | - | | 77.47 | 79.32 | 80.39 | | | | | 78.29 |
| | Large | | 5 | 68 | 12 | 15 | | | | | - | 78.00 | 78.71 | 78.48 | 81.03 | | | | | 79.00 |
| | Total | 1 | 4 | 63 | 20 | 12 | | | | | 85.00 | 78.10 | 78.52 | 79.06 | 81.06 | | | | | 79.98 |
| Sind | Small | | | 14 | 86 | | | | | | | | 82.00 | 81.84 | | | | | | 81.86 |
| | Medium | | | 4 | 88 | 8 | | | | | | | 82.00 | 81.22 | 82.00 | | | | | 81.31 |
| | Large | | | 10 | 79 | 11 | | | | | | | 82.00 | 81.88 | 82.00 | | | | | 81.90 |
| | Total | | | 8 | 84 | 8 | | | | | | | 82.00 | 81.56 | 82.00 | | | | | 81.64 |
| N.W.F.P. | Small | | 2 | 27 | 22 | 9 | | | 19 | 21 | | 80.00 | 79.55 | 82.97 | 83.33 | | | 77.60 | 81.72 | 80.74 |
| | Medium | | | 47 | 25 | | 7 | 5 | | 16 | | | 80.66 | 83.09 | | 79.32 | 72.00 | | 82.22 | 81.03 |
| | Large | | | 57 | 20 | 12 | 11 | | | | | | 85.31 | 96.54 | 70.00 | 90.50 | | | | 86.08 |
| | Total | | 1 | 46 | 22 | 7 | 6 | 2 | 5 | 11 | | 80.00 | 82.61 | 87.39 | 74.53 | 86.16 | 72.00 | 77.60 | 82.07 | 8[illegible].80 |
| Pakistan | Small | 4 | 3 | 30 | 52 | 7 | | | 2 | 2 | 85.00 | 78.80 | 79.42 | 80.83 | 82.20 | | | 77.60 | 81.72 | 80.54 |
| | Medium | | | 36 | 55 | 6 | 1 | | | 1 | | | 78.01 | 80.28 | 81.28 | 79.32 | 72.00 | | 82.41 | 79.68 |
| | Large | | 4 | 60 | 22 | 14 | | | | | | 78.00 | 78.99 | 80.70 | 80.82 | 90.50 | | | | 79.62 |
| | Total | 1 | 3 | 50 | 34 | 11 | | | | 1 | 85.00 | 78.13 | 78.84 | 80.70 | 80.98 | 86.16 | 72.00 | 77.60 | 82.07 | 79.56 |

Taking the sample as a whole the weighted average sale price obtained by the farmers was Rs. 79.56 per maund as against the official support price of Rs. 82.50 per maund. In respect of various provincial samples the weighted average prices realized were Rs. 79.98, Rs. 81.64 and Rs. 82.80 per maund for Punjab, Sindh and NWFP respectively.

The seasonal variation in prices show upward trend with the advance of the season. This is generally true for all cases except for the sample medium growers of NWFP. In this case, the produce was damaged by pests during storage and has thus to be sold at lower prices.

## 3.5 STORAGE FACILITIES

The following types of storages were used for storing wheat:

- Pacca rooms
- Pacca bharolas
- Drums/boxes
- Kacha rooms
- Kacha bharolas

Classifying the first three types as of standard quality and the remaining two as 'sub-standard', 60 percent of the storage facilities of the sample growers of the Punjab and 44 percent of Sind provinces were of standard type. In the case of NWFP, however, the share of standard facilities was found to be only 25 percent of the total storage facilities for the sample growers.

The average storage capacity was 260 maunds for the sample growers as a whole. The average storage capacity was directly correlated with the size of the farm. These were adequate for the storage of wheat, as the quantities retained for domestic consumption and seed formed 32 percent of the capacity for the total sample. Wheat is generally stored in bags though use of metal boxes and drums was also getting popular specially in the Punjab.

The average storage capacity, its adequacy status for the retained quantities of wheat and the share of standard types in total storage facilities for the sample growers of each province are shown in Table 3.7. The corresponding data for each sample district are included in Table III-6.

## 3.6 STORAGE LOSSES AT GROWERS LEVEL

Storage losses at the growers level have been estimated on the basis of quantites stored by them for domestic consumption and for use as seed and are shown in Table 3.7. It appears that for the sample as a whole, 1.08 percent of the quantity stored was lost during storage. The range of storage losses was between 0.80 percent for the medium sample growers of Sind to 1.53 percent for the large sample growers of NWFP.

A study undertaken by the Punjab Economic Research Institute in 1978 for the Punjab reports that 2.3 percent of wheat was completely damaged during storage at the farm level.

Chaudhri (1980) carried out detailed studies of losses at different stages. He estimated wheat losses at the farm level at 1.4 percent.

## 3.7 MARKETING FUNCTIONARIES FOR WHEAT

The definition and functions of various market actors are given below :

- Village Shopkeepers

  A village shopkeeper is a person who buys and sells agricultural produce and general items of grocery in

TABLE 3.7

AVERAGE STORAGE CAPACITY CLASSIFIED BY TYPE FOR SAMPLE GROWERS OF EACH PROVINCE AND AVERAGE STORAGE LOSSES - WHEAT

( 40 K.g.) CROP: WHEAT

| Province | Farm Size | Average Storage Capacity | % of storage Capacity used for Wheat | % Share of Standard Storage to total Storage. | Average Storage Losses( %age) |
|---|---|---|---|---|---|
| Punjab | Small | 79 | 72 | 29 | 0.81 |
| | Medium | 108 | 75 | 54 | 1.11 |
| | Large | 264 | 49 | 72 | 1.20 |
| | Total | 151 | 59 | 60 | 1.08 |
| Sind | Small | 568 | 11 | 14 | 0.92 |
| | Medium | 936 | 10 | 32 | 0.80 |
| | Large | 875 | 17 | 91 | 1.09 |
| | Total | 786 | 12 | 44 | 0.95 |
| NWFP | Small | 62 | 68 | 8 | 1.30 |
| | Medium | 96 | 71 | 28 | 1.22 |
| | Large | 85 | 118 | 52 | 1.53 |
| | Total | 80 | 78 | 25 | 1.39 |
| Pakistan | Small | 174 | 31 | 17 | 0.94 |
| | Medium | 279 | 29 | 36 | 1.03 |
| | Large | 347 | 37 | 80 | 1.18 |
| | Total | 260 | 32 | 48 | 1.08 |

the village. The main functions performed by him include the following :

- Purchase of local produce on cash payment.
- Receive produce as payment of the groceries supplied to farmers in the pre-harvest season.
- Sale of produce to beoparis.
- Transportation of produce to the nearest wholesale market.
- Sale of produce to commission agents.
- Participation in the formation of local price levels.

- <u>Village Beopari</u>

  He is an itinerant trader engaged in the purchase of agricultural produce in the villages. He generally specialises in dealing with particular crops and engages in purchase and sales of these crops during the harvesting seasons. His principal functions include the following :

  - Assembling of the local marketable produce, mostly of small farmers.
  - Transportation of the produce in larger lots to the nearest wholesale markets.
  - Sale of assembled produce to the market dealers.

- <u>Pacca Arhati</u>

  He is the person who himself purchases and sells agricultural produce on his own account. He maintains a regular shop which may be owned by him or rented from others. He usually have some arrangements for storing produce and also deals with agricultural inputs. He generally has a regular clientele who sell their produce to him and also obtain their input requirements from him. He may also advance money to his regular customers who have to sell their produce to him, sometimes at lower than market prices. He may also allow agricultural input supplies to growers on credit, adjusting the loan at the time of sale of their produce to him. His functions thus include the following :

- Assume ownership of the produce offered to him for sale.
- Participate in the formation of price levels at the wholesale market through his marketing operations
- Arrange for storage providing time utilities.
- Assemble the produce in desired lots for the next marketing stage.
- Transport the produce to the buyers
- Finance the marketing operations of his regular customers.
- Supply input requirements on cash or credit.

- <u>Katcha Arhati</u>

A Katcha Arhati is a market functionary who does not assume ownership of the produce but acts as a mediator between the sellers and buyers and facilitates the transfer of ownership between them on mutually agreed terms. His services are remunerated generally by the sellers through the payment of commission which is fixed as a percentage of the sale proceeds. He maintains premises where sellers of produce bring their commodities for sale and entrust the same to his charge. The buyers also visit or approach him. His main functions thus include the following :

- Act as intermediary between sellers and buyers
- Help the two parties in arriving at an agreed price for the same transaction.
- Recover the price of the commodity sold through him from the buyer and pay the proceeds to the seller after deducting his commission.

- <u>Pacca/Katcha Arhati</u>

  He is a person who combines the functions of both pacca and katcha Arhatis.

- <u>Wholesaler</u>

  A wholesaler is a market functionary who purhcases the commodity from other dealers, stores it for longer period and distributes it more regularly to the final users. His activities generally resemble those of 'Pacca Arhati' except for the larger scale of his operations and for the longer periods for storage. His main functions thus include the following :

  - Holding and storing of the produce to meet seasonal requirements till the next harvest.
  - Transshipment of produce to different areas/regions to meet spatial requirements.
  - Contribute to the seasonal and spatial price variations of a commodity.
  - Enlargement and reduction of marketing lots to meet seasonal and spatial requirements.
  - Facilitate regular supply of the produce throughout the year.

- Official Institutional Buyers

A number of government departments and other public sector agencies are engaged in the marketing operations of various agricultural commodities as a part of the implementation mechanism of official agricultural price support policy. In the case of wheat, the Provincial Food Departments and the Federal Public Sector Agency, Pakistan Agricultural Storage and Services Corporation Limited (PASSCO) have set up procurement centres in major producing areas. These centres perform the function of procuring wheat at prices fixed by the Government.

- Processors

Processor is a functionary in the marketing chain who helps in the transformation of the commodity in a form in which it is finally consumed. He imparts form utility to the commodity. He generally maintains regular sources of supply for the commodity and has links with the wholesalers in different areas for distribution of the output. In the case of wheat, a major part of the commodity is obtained from the Food Department for milling. Purchases are also made from the open market.

- Retailer

He is the final link between the grower and the consumer. He usually serves a limited locality and deals with a large number of grocery items. He obtains his supplies from the wholesalers at regular intervals and has limited storage capacity. He plays an important role in the formation and movement of retail prices paid by the consumers.

The relative shares of the first stage market actors in the total sales of the sample growers of each province, classified by the size of farms, are shown in Table 3.8 on the next page, while the corresponding data for each sample district are included in Table III-7 of the Statistical Appendix.

TABLE 3.8

MARKETING CHANNELS FOR SAMPLE GROWERS OF EACH PROVINCE

( %AGE ) CROP: WHEAT

| Province | Farm Size | Type of Actor: Local Sales | Shopkeeper | Village Beopari | Pacca Arhati | Katcha Arhati | Katcha/Pacca Arhtti | Food Deptt | Total |
|---|---|---|---|---|---|---|---|---|---|
| Punjab | Small | 27 | | 47 | – | 26 | | – | 100 |
| | Medium | 21 | | 55 | – | 23 | | 1 | 100 |
| | Large | 14 | | 45 | 11 | 12 | | 18 | 100 |
| | Total | 17 | | 47 | 8 | 15 | | 13 | 100 |
| Sind | Small | – | | – | | – | 59 | 41 | 100 |
| | Medium | – | 3 | – | | – | 39 | 58 | 100 |
| | Large | – | – | 10 | | – | 8 | 82 | 100 |
| | Total | – | 1 | 5 | | – | 28 | 66 | 100 |
| NWFP | Small | 39 | 1 | 3 | | 57 | | | 100 |
| | Medium | 55 | – | – | | 45 | | | 100 |
| | Large | 3 | 17 | – | | 80 | | | 100 |
| | Total | 32 | 6 | 1 | | 61 | | | 100 |
| Pakistan | Small | 21 | – | 30 | | 23 | 15 | 11 | 100 |
| | Medium | 19 | 1 | 23 | | 18 | 15 | 25 | 100 |
| | Large | 12 | 1 | 37 | 9 | 12 | 1 | 28 | 100 |
| | Total | 14 | 1 | 33 | 6 | 15 | 6 | 25 | 100 |

It appear that for the sample as a whole, the important actors, in order of importance and their relative shares in the total sales were village beopari 33 percent, Food Department 25 percent, katcha arhati 15 percent and local sales 14 percent. Important variation from the above picture noticed for different sized holdings were the significant higher ratio for local sales in the case of small and medium growers and greater sales to Food Department by the large growers. Marked variation in the marketing pattern were also noticed for different provincial samples. In the case of NWFP, where official procurement arrangements do not exist, katcha arhatis and local sales together accounted for 93 percent of the total sales. In Sind, sales to the official procurement agency was the most important channel with a share of 66 percent of the total sales. The large sample farmers sold as much as 82 percent of the market surplus to this agency.

In the case of Punjab, the village beopari was the predominant market actor accounting for almost one-half of the total sales of the small and medium sample growers. Local sales were also fairly common especially with the small sized sample growers.

A reference to Table III-7 of the Statistical Appendix would show significant variations in farmer's sales patterns as between irrigated and rain-fed sample districts. It appears that while in the irrigated areas, the major sales channels were village beoparis and the government procurement agencies, 99 percent of the sales in the sample rain-fed district were to others in the local villages. It may be pointed out that near draught conditions prevailed in the rain-fed area during the 1987-88 rabi season, adversely affecting the wheat crop and almost all the available market surplus was generally disposed of within the villages.

According to the Punjab Wheat Disposal Survey (25), the percentages shares of different agencies in the total sales by farmes classified by sizes were as follows:

| | Farm Size | | | Average |
|---|---|---|---|---|
| | Small 0-12.5 Acre | Medium 12.5-25 Acre | Large Over 25 Acre | |
| Village | 72.77 | 66.65 | 46.79 | 53.18 |
| Market Commission Agent | 7.20 | 19.20 | 10.20 | 11.83 |
| Procurement Centre | 17.88 | 13.38 | 37.70 | 30.88 |
| Cooperative Society | 2.25 | 0.82 | 5.29 | 4.11 |

The relative shares of different market actors as estimated by Cornelisses (2) are shown on the next page.

| Wheat Buyers | Shares for Farm Size | | | | | Average for all farms |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | |
| Other Farms | 0.0 | 29.4 | 8.4 | 7.4 | 1.8 | 4.7 |
| Village Shopkeepers | 19.5 | 5.2 | 4.1 | 3.4 | 0.9 | 2.2 |
| Beoparis | 61.0 | 39.7 | 57.4 | 52.0 | 14.5 | 30.9 |
| Commission Agents | 0.0 | 1.7 | 8.9 | 6.0 | 28.4 | 19.4 |
| Procurment Centres | 19.5 | 24.3 | 20.9 | 30.7 | 54.4 | 42.6 |

## 3.8 MARKETING COSTS OF GROWERS

The major components of the marketing costs borne by the growers include the following:

- Preparation, transportation and octroi charges.

- Commission payable to katcha and pacca arhatis.

- Other market charges

  These include payments to palledars (who load and unload the produce), weighmen and changar (who clean the plot where the produce is heaped).

- Cost of deductions

  These deducations are made by the arhatis on various pretexts.

The grower's marketing costs also vary with the type of market actor to whom he sells his produce. In the case of sales to village shopkeepers, village beoapris or to other persons in the village, he does not incur any of the above costs, though the price obtained by him depends on general market conditions and their relative bargaining positions.

The average marketing costs of the growers for sales to different market agents for different size sample holdings of each province are shown in Table 3.9. The corresponding data for each sample district are given in Tables III-8 of the Statistical Appendix.

TABLE 3.9

CLASSIFICATION OF MARKETING COSTS OF GROWERS FOR SALES TO DIFFERENT FUNCTIONARIES AND THE FARM GATE PRICES FOR EACH PROVINCE

WHEAT

| Province | Farm Size | PACCA ARHATI Average Marketing Price | PACCA ARHATI Marketing Cost | %AGE OF MARKETING PRICE 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price | KATCHA ARHATI Average Marketing Price | KATCHA ARHATI Marketing Cost | %AGE OF MARKETING COST 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Punjab | Small | — | — | — | — | — | — | — | — | — | — | 80.43 | 1.55 | — | — | — | 71 | 29 | — | 100 | 73.88 |
| | Medium | — | — | — | — | — | — | — | — | — | — | 80.08 | 3.18 | — | — | — | 31 | 32 | 37 | 100 | 76.90 |
| | Large | 77.00 | 3.69 | 16 | 38 | — | 32 | 8 | 6 | 100 | 73.31 | 78.67 | 4.70 | — | — | — | 20 | 23 | 57 | 100 | 73.97 |
| | Total | 77.00 | 3.69 | 16 | 38 | | 33 | 8 | 6 | 100 | 73.31 | 79.33 | 3.75 | — | — | — | 26 | 26 | 48 | 100 | 73.58 |
| Sind | Small | — | — | — | — | — | — | — | — | — | — | — | — | — | | — | — | — | — | — | — |
| | Medium | — | — | — | — | — | — | — | — | — | | — | — | — | — | | — | — | — | — | — |
| | Large | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| | Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| NWFP | Small | — | — | — | — | — | — | — | — | — | — | 80.92 | 6.73 | — | 31 | — | 43 | 23 | 3 | 100 | 74.19 |
| | Medium | — | — | — | — | — | — | — | — | — | — | 81.77 | 6.00 | — | 33 | — | 38 | 23 | 6 | 100 | 75.77 |
| | Large | — | — | — | — | — | — | — | — | — | — | 88.86 | 7.24 | — | 38 | — | 35 | 17 | 10 | 100 | 81.62 |
| | Total | — | — | — | — | — | — | — | — | — | — | 86.21 | 6.95 | — | 36 | — | 37 | 18 | 9 | 100 | 79.26 |
| Pakistan | Small | — | — | — | — | — | — | — | — | — | — | 80.51 | 3.18 | | 16 | | 56 | 26 | 2 | 100 | 77.33 |
| | Medium | — | — | — | — | — | — | — | — | — | — | 80.37 | 3.79 | | 9 | | 32 | 25 | 34 | 100 | 76.59 |
| | Large | 77.00 | 3.69 | 16 | 38 | — | 32 | 8 | 6 | 100 | 73.33 | 80.78 | 4.03 | | 14 | | 27 | 26 | 33 | 100 | 76.75 |
| | Total | 77.00 | 3.69 | 16 | 38 | — | 32 | 8 | 6 | 100 | 73.32 | 80.44 | 3.95 | | 10 | | 31 | 26 | 33 | 100 | 76.49 |

1. Preparation Charges 2. Transportation Charges 3. Octroi 4. Commission 5. Paladari, Weighmen & Changer 6. Cost of Deduction 7. Total

TABLE 3.9 (Contd.)

| Province | Farm Size | KATCHA/PACCA ARHATI: Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE: 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price | FOOD DEPARTMENT: Average Marketing Price | Marketing Cost | %AGE OF MARKETING COST: 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Punjab | Small | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | 83.00 | 3.00 | – | 67 | – | – | 33 | – | 100 | 80.00 |
| | Large | – | – | – | – | – | – | – | – | – | – | 82.00 | 3.10 | – | 19 | – | – | – | 81 | 100 | 78.90 |
| | Total | – | – | – | – | – | – | – | – | – | – | 82.00 | 3.08 | – | 21 | – | – | – | 79 | 100 | 78.9 |
| Sind | Small | 81.77 | 5.03 | | 37 | 9 | 54 | | | 100 | 76.74 | 82.00 | 2.88 | 45 | 41 | 14 | – | – | – | 100 | 79.12 |
| | Medium | 81.93 | 5.19 | | 40 | 10 | 50 | | | 100 | 76.64 | 82.00 | 2.86 | 45 | 41 | 14 | – | – | – | 100 | 79.14 |
| | Large | 80.94 | 4.71 | | 39 | 9 | 52 | | | 100 | 76.23 | 82.00 | 1.51 | | 74 | 26 | – | – | – | 100 | 80.49 |
| | Total | 81.52 | 5.06 | | 39 | 9 | 52 | | | 100 | 76.45 | 82.00 | 2.10 | 27 | 54 | 19 | – | – | – | 100 | 79.90 |
| NWFP | Small | – | – | – | – | – | – | – | – | – | – | – | – | | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | | – | – | – | | – | – | – |
| | Total | – | – | – | – | – | – | – | – | – | – | – | – | – | | – | – | – | – | – | – |
| Pakistan | Small | 81.77 | 5.03 | | 37 | 9 | 54 | – | – | 100 | 76.74 | 82.00 | 2.88 | 45 | 41 | 14 | – | – | – | 100 | 79.12 |
| | Medium | 81.93 | 5.19 | | 40 | 10 | 50 | – | – | 100 | 76.64 | 82.00 | 2.89 | 36 | 46 | 11 | – | 7 | – | 100 | 79.30 |
| | Large | 80.94 | 4.71 | | 39 | 9 | 52 | – | – | 100 | 76.23 | 82.00 | 2.79 | | 25 | 3 | – | – | 72 | 100 | 79.21 |
| | Total | 81.52 | 5.06 | | 39 | 9 | 52 | – | – | 100 | 76.45 | 82.00 | 2.83 | 13 | 31 | 6 | – | 2 | 45 | 100 | 79.21 |

1. Preparation Charges 2. Transportation Charges 3. Octroi 4. Commission 5. Paladari, Weighmen & Changer 6. Cost of Deduction 7. Total

The average marketing costs, for the sample as a whole, were Rs. 3.69 per maund for sales to pacca arhatis and Rs. 3.95 per maund for katcha arhati. Average costs for sales to Food Department were however lower at Rs. 2,83 per maund. These marketing costs formed 5.03, 5.16 and 3.57 percents of the net farm gate prices obtained by them for sale to these three market actors.

The major components of the marketing costs were other market charges for the katcha and pacca arhatis and 'deductions' for sales to the Food Department.

## 3.9 FARM GATE PRICES

Farm gate prices have been estimated by deducting marketing costs of growers from the sale prices realized by them.

Table 3.10 on the next page shows the average farm gate pries for sample growers of each province. It

appears that the average farm gate prices were the highest for sales made to the Food Department followed by sales to village shopkeeper and village beoparis. The prices paid by katcha and pacca arhatis were higher than those paid by village market actors. However, after deduction of market charges, the net farm gate prices for sales to arhatis were lower than in the case of local market actors.

The average farm gate prices of Rs. 73.13 per maund realized for sales to pacca arhatis were 8.2 percent lower

TABLE 3.10

AVERAGE FARM GATE PRICE FOR SALES THROUGH DIFFERENT CHANNELS OF WHEAT CROPS

| Province | Farm Size | Local Sales | | | Village Shopkeeper | | | Village Beopari | | | Pacca Arhati | | | Katcha Arhati | | | Katcha/Pacca Arhati | | | Food Department | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| PUNJAB | Small | 81.23 | - | 81.23 | - | - | - | 77.98 | - | 77.98 | - | - | - | 80.43 | 1.55 | 78.88 | - | - | - | - | - | - |
| | Medium | 80.16 | - | 80.16 | - | - | - | 74.32 | - | 74.32 | - | - | - | 80.08 | 3.18 | 76.90 | - | - | - | 83.00 | 3.00 | 80.00 |
| | Large | 80.11 | - | 80.11 | - | - | - | 76.18 | - | 76.18 | 77.00 | 3.69 | 73.31 | 78.67 | 4.70 | 73.97 | - | - | - | 82.00 | 3.10 | 78.90 |
| | Total | 80.41 | - | 80.41 | - | - | - | 76.56 | - | 76.56 | 77.00 | 3.69 | 73.31 | 79.33 | 3.75 | 75.58 | - | - | - | 82.00 | 3.08 | 78.92 |
| SIND | Small | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 81.77 | 5.03 | 76.74 | 82.00 | 2.88 | 79.12 |
| | Medium | - | - | - | 78.00 | - | 78.00 | - | - | - | - | - | - | - | - | - | 81.83 | 5.19 | 76.64 | 82.00 | 2.86 | 79.14 |
| | Large | - | - | - | - | - | - | 77.00 | - | 77.00 | - | - | - | - | - | - | 80.94 | 4.71 | 76.23 | 82.00 | 1.51 | 80.49 |
| | Total | - | - | - | 78.00 | - | 78.00 | 77.00 | - | 77.00 | - | - | - | - | - | - | 81.52 | 5.06 | 76.46 | 82.00 | 2.10 | 79.90 |
| NWFP | Small | 79.90 | - | 79.90 | 84.00 | - | 84.00 | 88.00 | - | 88.00 | - | - | - | 80.92 | 6.73 | 74.19 | - | - | - | - | - | - |
| | Medium | 80.38 | - | 80.38 | - | - | - | - | - | - | - | - | - | 81.77 | 6.00 | 75.19 | - | - | - | - | - | - |
| | Large | 80.00 | - | 80.00 | 74.40 | - | 74.40 | - | - | - | - | - | - | 88.86 | 7.24 | 81.62 | - | - | - | - | - | - |
| | Total | 80.13 | - | 80.13 | 75.14 | - | 75.14 | 88.00 | - | 88.00 | - | - | - | 86.21 | 6.95 | 79.26 | - | - | - | - | - | - |
| PAKISTAN | Small | 80.75 | - | 80.75 | 84.00 | - | 84.00 | 80.43 | - | 80.43 | - | - | - | 80.51 | 3.18 | 77.33 | 81.77 | 5.03 | 76.74 | 82.00 | 2.88 | 79.12 |
| | Medium | 80.25 | - | 80.25 | 78.00 | - | 78.00 | 74.32 | - | 74.32 | - | - | - | 80.37 | 3.79 | 76.58 | 81.73 | 5.19 | 76.64 | 82.19 | 2.89 | 79.30 |
| | Large | 80.09 | - | 80.09 | 74.40 | - | 74.40 | 76.76 | - | 76.76 | 77.00 | 3.69 | 73.31 | 80.78 | 4.03 | 76.75 | 80.94 | 4.71 | 76.23 | 82.00 | 2.79 | 79.21 |
| | Total | 80.32 | - | 80.32 | 77.17 | - | 77.17 | 77.19 | - | 77.19 | 77.00 | 3.69 | 73.31 | 80.44 | 3.95 | 76.49 | 81.52 | 5.06 | 76.46 | 82.00 | 2.83 | 79.21 |

1 = Sale price
2 = Marketing costs
3 = Farm gate price

from the average farm gate prices of Rs. 79.81 realized for sales to the Food Department.

## 3.10 RELATION OF FARM GATE PRICES TO SUPPORT PRICES

Table 3.11 on the next page shows variations between the average farm gate prices realized by the sample growers and the support prices. It appears that the farm gate prices have been lower than the support prices, irrespective of the market actor to whom sales were made. The difference between the support prices and the farm gate prices were the least for local sales and sales to the procurement centres. For sales to katcha/pacca arhatis, the farm gate prices were lower by about 7 percent as compared to the support prices.

## 3.11 TRANSPORTATION MODES AND COSTS

The modes of transport used by the sample growers were tractor trolleys, trucks, bullock carts, horse drawn carts and pack animals.

Percentage classification of quantities transported by different modes for sample growers of different farm sizes for each province is given in Table 3.12. It appears that for the sample as a whole, tractor/trolley was the most imprtant mode accounting for the transport of 55 percent of the quantity transported by the sample growers. The other modes in order of importance were bullock/camel carts 25%; pack animals 10%, trucks 7% and horse drawn carts 3%. The ranking in terms of importance of various modes were similar forall the provinces except NWFP where trucks were

TABLE 3.11

PERCENTAGE VARIATION OF FARM GATE PRICES FROM PROCUREMENT PRICES CLASSIFIED BY MARKET CHANNELS BY PROVINCE

CROP: WHEAT

| District | Farm Size | Type of Actors | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Local Sales | Village Shopkeeper | Village Beopari | Pacca Arhati | Katcha Arhati | Katcha/Pacca Arhati | Food Department |
| Punjab | Small | - 1.53 | - | - 5.47 | - | - 4.38 | - | - |
| | Medium | - 2.83 | - | - 9.91 | - | - 6.78 | - | - 3.03 |
| | Large | - 2.89 | - | - 7.66 | - 7.84 | - 10.33 | - | - 3.36 |
| | Total | - 2.53 | - | - 7.20 | - 7.84 | - 8.38 | - | - 3.34 |
| Sind | Small | - | - | - | - | - | - 6.98 | - 4.10 |
| | Medium | - | - 5.45 | - | - | - | - 7.10 | - 4.07 |
| | Large | - | - | - 6.67 | - | - | - 7.60 | - 2.44 |
| | Total | - | - 5.45 | - 6.67 | - | - | - 7.32 | - 3.15 |
| NWFP | Small | - 3.15 | + 1.82 | + 6.66 | - | - 10.07 | - | - |
| | Medium | - 2.56 | - | - | - | - 8.15 | - | - |
| | Large | - 3.03 | - 9.81 | - | - | - 10.06 | - | - |
| | Total | - 2.87 | - 8.92 | + 6.66 | - | - 3.92 | - | - |
| Pakistan. | Small | - 2.12 | + 1.82 | - 2.50 | - | - 6.26 | - 6.95 | - 4.10 |
| | Medium | - 2.72 | - 5.45 | - 9.91 | - | - 7.17 | -7.10 | - 3.88 |
| | Large | - 2.92 | - 9.81 | - 6.95 | - 7.84 | - 6.96 | - 7.60 | - 3.99 |
| | Total | - 2.64 | - 6.46 | - 6.43 | - 7.84 | - 7.28 | - 7.32 | - 3.99 |

TABLE 3.12

PERCENTAGE CLASSIFICATION OF QUANTITIES TRANSPORTED BY DIFFERENT MODE FOR SAMPLE GROWERS OF DIFFERENT FARM SIZE FOR EACH PROVINCE

| | Farm Size | Tractor/Trolley | | Truck | | Bullocks/ Camel Carts | | Horse Drawn Carts | | Pack Animal | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. |
| Punjab | Small | - | - | - | - | 88 | 43 | - | - | 12 | 57 | 100 | 100 |
| | Medium | - | - | 22 | 11 | 45 | 42 | 11 | 17 | 22 | 30 | 100 | 100 |
| | Large | 66 | 68 | - | - | 17 | 29 | - | - | 17 | 3 | 100 | 100 |
| | Total | 17 | 50 | 9 | 2 | 52 | 33 | 5 | 3 | 17 | 12 | 100 | 100 |
| Sind | Small | 14 | 49 | - | - | 86 | 51 | - | - | - | - | 100 | 100 |
| | Medium | 29 | 37 | 4 | 26 | 67 | 37 | - | - | - | - | 100 | 100 |
| | Large | 64 | 80 | - | - | 36 | 20 | - | - | - | - | 100 | 100 |
| | Total | 30 | 60 | 2 | 10 | 68 | 30 | - | - | - | - | 100 | 100 |
| NWFP | Small | 6 | 31 | 27 | 24 | - | - | 40 | 24 | 27 | 21 | 100 | 100 |
| | Medium | - | - | 62 | 34 | - | - | 15 | 9 | 23 | 57 | 100 | 100 |
| | Large | - | - | 100 | 100 | - | - | - | - | - | - | 100 | 100 |
| | Total | 3 | 12 | 53 | 46 | - | - | 24 | 13 | 20 | 29 | 100 | 100 |
| Pakistan | Small | 9 | 26 | 9 | 12 | 58 | 33 | 13 | 11 | 11 | 18 | 100 | 100 |
| | Medium | 15 | 35 | 24 | 9 | 42 | 34 | 7 | 6 | 11 | 16 | 100 | 100 |
| | Large | 48 | 70 | 26 | 6 | 22 | 19 | - | - | 4 | 5 | 100 | 100 |
| | Total | 19 | 55 | 18 | 7 | 45 | 25 | 8 | 3 | 10 | 10 | 100 | 100 |

the most important mode carrying 46% of the quantities followed by 29% for pack animals, 13% for horse drawn carts and only 12% for tractor/trolley.

Different size farms also showed distinct trends. For samll size farms, bullock/camel carts were the important modes followed by tractor/trolleys and pack animals. For medium sized farms, tractor/trolleys and bullock/camel carts were equally important, each carrying about one third of the produce. In the case of the large size farms, however, tractor/trolley was the predominant mode carrying 70 percent of the sample produce.

The percentage classification of quantities transported by different modes for each sample district is given in Table III-9 of the Statistical Appendix.

The average costs of transport per maund per kilometer by these modes are given in Table 3.13.

It appears that tractor trolleys were the cheapest mode in the Punjab with an average cost of Re. 0.04 per maund per km. In the case of the Sindh sample, however, the trucks were the cheapest mode, with an average cost of Re. 0.17 per maund per km.

Better network of metalled roads and greater proportion of owned tractor/trolleys in the Punjab account for its lower average cost as compared to that of the other provinces.

The average transport costs for each sample district are shown in Table III-10 of the Statistical Appendix.

TABLE 3.13

AVERAGE TRANSPORT COST OF DIFFERENT MODES FOR SAMPLE GROWERS OF DIFFERENT FARM SIZES FOR EACH PROVINCE

CROP: WHEAT (Rs. 40 Kg./Km.)

| | Farm Size | Tractor/ Trolly | Truck | Bullocks/ Camel Cart | Horse drawn Cart | Pack Animal |
|---|---|---|---|---|---|---|
| Punjab | Small | - | - | 0.15 | | 0.01 |
| | Medium | - | 0.21 | 0.12 | 0.13 | 0.12 |
| | Large | 0.04 | - | 0.20 | - | 0.20 |
| | Total | 0.04 | 0.21 | 0.15 | 0.13 | 0.13 |
| Sind | Small | 0.20 | - | 0.17 | | |
| | Medium | 0.17 | 0.17 | 0.20 | | |
| | Large | 0.14 | - | 0.21 | | |
| | Total | 0.15 | 0.17 | 0.18 | | |
| N.W.F.P | Small | 0.17 | 0.20 | - | 0.16 | 0.25 |
| | Medium | - | 0.17 | - | 0.17 | 0.25 |
| | Large | - | 0.33 | - | - | - |
| | Total | 0.17 | 0.20 | - | 0.16 | 0.25 |
| Pakistan | Small | 0.17 | 0.20 | 0.17 | 0.16 | 0.16 |
| | Medium | 0.17 | 0.15 | 0.16 | 0.15 | 0.17 |
| | Large | 0.08 | 0.23 | 0.19 | - | 0.20 |
| | Total | 0.10 | 0.19 | 0.17 | 0.15 | 0.17 |

## 3.12 SECOND STAGE MARKET ACTORS

The major second stage market actors are village beoparis, katcha arhatis and pacca arhatis, Summary characteristics of these actors are included in Table 3.14. There exists a complex trading system where each of these actors trade among themselves as well as sell to outside agencies like Provincial Food Department, Pakistan Agricultural Storage and Supplies Corporation and the flour mills. The scale of their operations depend on several factors including local demand and supply of the commodities, their trade practices, credit facilities provided to farmers and the number of market actors operating in the area. These factors also influence the level of prices prevailing at any point of time.

The basic approach used in the present study was to follow the specific commodity lots through various stages between the farm gate and the retail store. At the level of the second and subsequent stages of market actors, however, due to the 'bulking' of individual consignments the identity of a specific lot was lost and the prices quoted related to all the lots purchased during the reference period. At these stages, therefore, a range of prices was reported by the respondents. This range was however quite small, the difference between the upper and lower limits being not more than 7-10 percents.

The classification of sales of second stage market actors by the agencies to whom these are sold is given in Table 3.15. It appears that a significant part of the sales were made to other actors in the same markets.

TABLE 3.1.4

SUMMARY OF CHARACTERISTICS OF DIFFERENT TYPE OF MARKET ACTOR BY DISTRICT

WHEAT

| DISTRICT | Pacca Arhati | | | | | | | Katcha Arhati | | | | | | | Village Beopari | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quantity Traded | Purchases/ inflow | Sales outflow | Av.Pur-chase Lot | Av.Sale Lot | Purchase Price Rs/40Kg | Sale Price Rs/40Kg | Quantity Traded | Purchases inflow | Sales/out-flow | Purchase Lot | Sale Lot | Purchase Price | Sale Price | Quantity Traded | Purchases inflow | Sales/ outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price |
| Jhang | 26250 | Farmers | Food Deptt. | 255 | 2019 | 77.00 | 82.00 to 84.00 | 6250 | Farmer | Food Deptt. | 625 | 1563 | 79.33 | 82.00 | 54350 | Farmer Beopari | Food Deptt. | 624 | 1499 | 76.56 | 82.00 |
| Multan | 210490 | Farmers, Bepari | Local Food Deptt, Pro-cessor | 310 | 2084 | 77.00 | 82.00 to 84.00 | - | - | - | - | - | - | - | 74500 | Farmers | Food Deptt. | 2191 | 2483 | 76.56 | 82.00 |
| Punjab | 236740 | Farmers, Beopari | Local Food Deptt. Pro-cessor | 303 | 2077 | 77.00 | 82.00 to 84.00 | 6250 | Farmer | Food Deptt. | 625 | 1563 | 79.33 | 82.00 | 128850 | Farmer Beopari | Food Deptt. | 1352 | 2056 | 76.56 | 82.00 |
| Nawabshah | 7475 | Farmers | Pro-cessor | 187 | 7475 | 81.52 | 85.00 | - | - | - | - | - | - | - | - | - | + | - | - | - | - |
| Bannu | - | - | - | - | - | - | - | 2500 | Farmers | Local Sale, Flour Mills | 250 | 2500 | 86.21 | 93.00 | - | - | + | - | - | - | - |
| Pakistan | 244215 | Farmers, Beopari | Local Food Deptt. Pro-cessor | 297 | 2124 | 77.00 to 81.52 | 82.00 to 85.00 | 8750 | Farmer | Food Deptt. Local Sale Processor | 438 | 1750 | 79.33 to 86.21 | 82.00 to 93.00 | 128850 | Farmer Beopari | Food Deptt. | 1352 | 2056 | 76.56 | 82.00 |

+ Village beoparis of sample growers of Nawabshah and Sind, accounting for 5 and 1 percent of sample growers sales, were not traceable.

TABLE 3.15

PERCENTAGE SHARE OF WHEAT SOLD TO DIFFERENT ACTORS BY SECOND STAGE SELLERS

WHEAT

| Province | Sellers | To Whom Sold | | | |
|---|---|---|---|---|---|
| | | Local Sale | Food Department | Flour Mills | Total |
| Punjab | Beopari | – | 100 | – | 100 |
| | Katcha Arhati | – | 100 | – | 100 |
| | Pacca Arhati | 42 | 18 | 40 | 100 |
| Sind | Pacca Arhati | – | — | 100 | 100 |
| N.W.F.P | Katcha Arhati | 40 | – | 60 | 100 |
| Pakistan | Beopari | – | 100 | – | 100 |
| | Katcha Arhati | 14 | 86 | – | 100 |
| | Pacca Arhati | 42 | 10 | 48 | 100 |

## 3.13. OPERATING AND MARKETING COSTS OF SECOND STAGE MARKET ACTORS

The average operating and marketing costs of village beoparis, katcha arhatis and pacca arhatis, both in absolute and relative terms are shown in Table 3.16.

The average costs of the sample intermediaries ranged between Re. 0.22 per 40 kg. for village beoparis to Re. 0.55 per 40 kg. for pacca arhatis. In this respect no clear trend was observed and the average cost depends on local practices and relative turnovers which showed great variations.

Detailed breakdown of operating costs, basis of calculation of storage costs, transportation costs and costs of losses are included in Table III-11 to III-15 of the Statistical Appendix.

## 3.14 WHEAT PROCESSORS

A total of 20 flour milling units were surveyed of which 9 were modern flour mills and 11 chakkis. The chakkis carry out wheat milling operations for their customers, along with a number of other activities related to the processing of other crops. These units do not maintain any record showing the relative shares of various processing activities , nor any accounts for their total operations. Accordingly, the cost structure of the processing operation has been based on the analysis of the data relating to the modern units. Estimates of the average fixed assets, share of wheat milled on different accounts and recovery ratios of the two types of units are included in Table III-16 of the Statistical Appendix. The average

TABLE 3.16

COST COMPONENTS OF SECOND STAGE MARKET INTERMEDIARIES

WHEAT

| | | Rs./40 Kg. | | | | | | | (Percentages) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Operating cost | Storage Cost | Losses | Transport Cost | Credit Cost | Other | Total | Operating Cost | Storage Cost | Losses | Transport Cost | Credit Cost | Other | Total |
| Beopari | Punjab | 0.18 | - | 0.01 | 0.03 | - | - | 0.22 | 82 | | 4 | 14 | - | - | 100 |
| | Sind | | | | | | | | | | | | | | |
| | NWFP | | | | | | | | | | | | | | |
| | Pakistan | 0.18 | - | 0.01 | 0.03 | | | 0.22 | 82 | | 4 | 14 | - | - | 100 |
| Katcha Arhati | Punjab | 1.16 | 0.10 | - | - | - | 0.06 | 1.34 | 87 | 7 | - | - | - | 6 | 100 |
| | Sind | | | | | | | | | | | | | | 100 |
| | NWFP | 1.19 | 0.19 | - | - | 0.09 | 0.18 | 1.65 | 72 | 12 | - | - | 5 | 11 | 100 |
| | Pakistan | 1.17 | 0.13 | - | - | 0.05 | 0.14 | 1.49 | 79 | 8 | - | - | 3 | 10 | 100 |
| Pacca Arhati | Punjab | 0.32 | 0.02 | 0.03 | 0.04 | 0.04 | 0.04 | 0.49 | 66 | 4 | 6 | 8 | 8 | 8 | 100 |
| | Sind | 0.77 | 0.03 | 0.02 | 0.06 | | 0.04 | 0.92 | 84 | 3 | 2 | 7 | - | 4 | 100 |
| | NWFP | - | - | | | | | | | | | | | | |
| | Pakistan | 0.34 | 0.02 | 0.03 | 0.04 | 0.03 | 0.04 | 0.50 | 68 | 4 | 6 | 8 | 6 | 8 | 100 |

processing costs of the sample units are included in Table 3.17 on the next page. It appears that the average processing costs per 40 kg varied between Rs. 4.02 for sample units of NWFP to Rs. 5.05 for Sindh. On the whole ixed costs constituted about 15% of the total cost while he rest was direct cost. In the group of direct costs, lectricity was the major component for the Punjab and NWFP nits.

TABLE 3.17

AVERAGE PROCESSING COST FOR SAMPLE UNITS — WHEAT

Rs./40 Kg.

| | DIRECT COST | | | | | | | FIXED COST | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Salary & Wages | Contract Labour | Electricity | Telephone | Repair & Maintenance | Other Misc. | Total | Salaries and Allowances | Administrative | Rent & Tax | Misc. Cost | Total | Financial Cost | Depreciation | Transport Cost | Storage Cost | Other Cost | Total |
| Punjab | 0.34 | 0.08 | 2.25 | 0.17 | 0.26 | 0.10 | 3.20 | 0.14 | 0.33 | 0.09 | 0.18 | 0.74 | 0.01 | 0.24 | 0.73 | – | – | 4.92 |
| Sind | 1.27 | – | 0.66 | 0.29 | 0.10 | 1.28 | 3.60 | – | 0.72 | 0.02 | – | 0.74 | – | 0.27 | 0.36 | 0.05 | – | [illegible] |
| N.W.F.P. | 0.60 | 0.41 | 1.05 | 0.03 | 0.31 | 0.69 | 3.12 | – | 0.37 | 0.12 | 0.31 | 0.80 | – | 0.10 | – | – | – | [illegible] |
| Pakistan | 0.46 | 0.14 | 1.89 | 0.15 | 0.26 | 0.31 | 3.21 | 0.10 | 0.37 | 0.09 | 0.19 | 0.75 | – | 0.21 | 0.55 | 0.01 | – | 4.73 |

## 3.15 WHOLESALERS AND RETAILERS

The cost structure of wholesale and retail dealers is analysed in Table 3.18. Operating and transport costs are the major components. Transport costs are however more significant. The operating costs include labour, shop rent, electricity, telephone taxes and other miscellaneous costs. Detailed breakdown of the operating costs for the sample wholesalers and retailers is included in Table III-17 of the Statistical Appendix.

TABLE 3.18

AVERAGE COSTS OF SAMPLE WHOLESALERS AND RETAILERS

Rs./40 Kg.

| PROVINCE | WHOLESALERS | | | | RETAILERS | | | |
|---|---|---|---|---|---|---|---|---|
| | Operating Cost | Transport Cost | Total | Transport Cost as % Total | Operating Cost | Transport Cost | Total | Transport Cost as % Total |
| Punjab | 0.70 | 1.67 | 2.37 | 70 | 0.50 | 1.80 | 2.30 | 78 |
| Sind | 0.48 | 2.03 | 2.51 | 81 | 1.33 | - | 1.33 | - |
| NWFP | 0.50 | 3.63 | 4.13 | 88 | 1.60 | - | 1.60 | - |
| Pakistan | 0.53 | 2.39 | 2.92 | 82 | 0.97 | 0.90 | 1.87 | 48 |

## 3.16 MARKETING CHANNELS AND THEIR COSTS

Eight major marketing channels, identified on the basis of the present survey, are shown below:

Punjab

I. Farmer --- Village Beopari --- Food Department --- Processor --- Wholesaler --- Retailer.

II. Farmer --- Katcha Arhati --- Food Department --- Processor --- Wholesaler --- Retailer

III. Farmer --- Pacca Arhati --- Food Department --- Processor --- Wholesaler --- Retailer

IV. Farmer --- Pacca Arhati --- Processor --- Wholesaler --- Retailer.

V. Farmer --- Food Department --- Processor --- Wholesaler --- Retailer.

Sind

VI. Farmer --- Pacca Arhati --- Processor --- Wholesaler --- Retailer.

VII. Farmer --- Food Department --- Processor --- Wholesaler --- Retailer.

NWFP

VIII. Farmer --- Katcha Arhati --- Processor --- Wholesaler --- Retailer.

Percentage shares of farmgate prices, and of marketing margins in the retail prices for each of the above marketing channels are given in Table 3.19. The actual amounts are shown in Table III-18 of the Statistical Appendix.

The marketing margin is defined as the retail value of the finished product and by product less the equivalent farm gate value. All the prices used for calculating margins are based on survey results.

It appears that the farmer's share in the final retail price has ranged between 62.46 percent for channel III to 67.24 percent for marketing channel V in the Punjab. For Sindh the ratios were 64.77 and 67.69 percents for the two marketing channels as compared to 67.74 for the one channel of NWFP.

The percentage price spread between the grower and the consumer has been analysed in terms of the following elements of marketing performance.

- Average farmers share in consumer rupee

- Distribution of gross margin among various intermediaries/stages

- Share of net margin in the gross margin in each stage.

The above data are included in Table 3.20 for each of the Provincial samples as well as for the total sample.

TABLE 3.19

PERCENTAGE SHARES OF FARMGATE PRICES AND OF MARKETING MARGINS IN THE CONSUMER PRICES FOR DIFFERENT MARKET CHANNELS

%age of Consumer Prices - Wheat

| | MARKET CHANNEL | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Punjab | | | | | Sind | | NWFP |
| | I | II | III | IV | V | VI | VII | VIII |
| A. Farm Gate | 65.23 | 64.39 | 62.46 | 62.46 | 67.24 | 64.77 | 67.69 | 67.74 |
| Farmer Cost | - | 3.20 | 3.14 | 3.14 | 2.62 | 4.29 | 1.78 | 5.94 |
| B. Beopari | | | | | | | | |
| - Gross Margin | 4.63 | - | - | - | - | - | - | - |
| - Cost | 0.19 | - | - | - | - | - | - | - |
| - Net Margin | 4.45 | - | - | - | - | - | - | - |
| C. Katcha Arhati | | | | | | | | |
| - Gross Margin | - | 2.27 | - | - | - | - | - | 5.80 |
| - Cost | - | 1.14 | - | - | - | - | - | 2.26 |
| - Net Margin | - | 1.13 | - | - | - | - | - | 3.54 |
| D. Pacca Arhati | | | | | | | | |
| - Gross Margin | - | - | 4.26 | 5.97 | - | 2.95 | - | - |
| - Cost | - | - | 0.42 | 0.42 | - | 0.78 | - | - |
| - Net Margin | - | - | 3.84 | 5.55 | - | 2.17 | - | - |
| E. Food Department | | | | | | | | |
| - Gross Margin | - | - | - | - | - | - | - | - |
| - Cost | - | - | - | - | - | - | - | - |
| - Net Margin | - | - | - | - | - | - | - | - |
| F. Processors | | | | | | | | |
| - Gross Margin | 9.24 | 9.24 | 9.24 | 7.53 | 9.24 | 12.97 | 15.51 | 4.18 |
| - Cost | 1.73 | 1.73 | 1.73 | 1.73 | 1.73 | 0.45 | 0.45 | 2.54 |
| - Net Margin | 7.51 | 7.51 | 7.51 | 5.80 | 7.51 | 12.52 | 15.06 | 1.64 |
| G. Wholesaler | | | | | | | | |
| - Gross Margin | 9.62 | 9.62 | 9.62 | 9.62 | 9.62 | 7.17 | 7.17 | 9.56 |
| - Cost | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.13 | 2.13 | 3.53 |
| - Net Margin | 7.60 | 7.60 | 7.60 | 7.60 | 7.60 | 5.04 | 5.04 | 6.03 |
| H. Retailer | | | | | | | | |
| - Gross Margin | 11.28 | 11.28 | 11.28 | 11.28 | 11.28 | 7.85 | 7.85 | 6.78 |
| - Cost | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.13 | 1.13 | 1.37 |
| - Net Margin | 9.32 | 9.32 | 9.32 | 9.32 | 9.32 | 6.72 | 6.72 | 5.41 |
| TOTAL: | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE 3.20

AVERAGE PERCENTAGE SHARES OF FARMGATE PRICES AND MARKETING MARGINS, SHARES OF VARIOUS ACTORS IN GROSS MARGINS AND RATIO OF NET MARGIN TO GROSS MARGIN

WHEAT

| | Punjab | | | | | Sind | | | | | NWFP | | | | | Total | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | |
| | | Amount (Rs.) | % | Amount (Rs.) | Ratio to Gross Margin | | Amount | % | Amount (Rs.) | Ratio to Gross Margin | | Amount (Rs.) | % | Amount (Rs.) | Ratio to Gross Margin | | Amount (Rs.) | % | Amount (Rs.) | Ratio to Gross Margin |
| Farm Gate | 61.93 | – | – | – | – | 66.07 | – | – | – | – | 67.74 | – | – | – | – | 66.09 | – | – | – | – |
| Farmer cost | 2.94 | – | – | – | – | 2.03 | – | – | – | – | 5.94 | – | – | – | – | 2.81 | – | – | – | – |
| Dealers | 4.04 | 4.74 | 12.00 | 4.32 | 91.14 | 2.13 | 2.52 | 6.69 | 1.60 | 63.49 | 5.80 | 6.79 | 22.56 | 5.14 | 75.70 | 3.61 | 4.24 | 11.60 | 3.21 | 75.71 |
| Processors | 8.69 | 10.20 | 25.84 | 8.17 | 80.09 | 14.75 | 17.41 | 46.23 | 16.88 | 96.96 | 4.18 | 4.89 | 15.78 | 1.92 | 39.26 | 9.85 | 11.58 | 31.67 | 9.57 | 82.64 |
| Wholesalers | 9.62 | 11.29 | 28.61 | 8.92 | 79.00 | 7.17 | 8.46 | 22.46 | 5.95 | 70.33 | 9.56 | 11.18 | 36.08 | 7.05 | 63.06 | 8.70 | 10.23 | 27.98 | 7.31 | 71.45 |
| Retailers | 11.28 | 13.24 | 33.55 | 10.94 | 83.00 | 7.85 | 9.27 | 24.62 | 7.94 | 85.54 | 6.78 | 7.93 | 25.59 | 6.33 | 79.82 | 8.94 | 10.51 | 28.75 | 8.64 | 82.21 |
| Total: | 100.00 | 39.47 | 100.00 | 32.35 | 81.96 | 100.00 | 37.66 | 100.00 | 32.37 | 85.95 | 100.00 | 30.79 | 100.00 | 20.44 | 66.39 | 100.00 | 36.56 | 100.00 | 28.73 | 78.59 |

It appears that on the whole, the farmgate prices have constituted 66.09 percent of the consumer rupee, the remaining 33.91 percent being gross margin of the intermediaries who provide services for time, place and form utilities. Among the various intermediaries, the processor gets the maximum share of the gross margin followed by retailers and wholesalers.

The net margins form a very high proportion of gross margins, varying between 71.45 percent for wholesaler to 82.64 percent for processors. The high ratios of net margins to gross margins indicate the scope for reducing the gross margins in the overall price structure. These high rates do not necessarily mean high profitability of these ventures. On the basis of the accounting principles, profitably rates depend on total sales revenue which in turn also depends on capital turnover during a year. Attempts were made to obtain data about the value of the total annual turnover for the sample intermediaries. In view of the highly sensitive nature of the data, the response was highly suspect and representative overall profitability ratios could not be estimated.

The Planning and Development Division Study (19) estimated the share of grower farmgate price in the consumer rupee at 74.71 percent. The ratios of gross margins of wholesalers and retailers and the share of net margins in the gross margins were estimated as follows:

| | Gross Margin % | Ratio of Net Margin to Gross Margin % |
|---|---|---|
| Wholesaler | 8.29 | 54 |
| Retailer | 11.60 | 76 |

## 3.17 SCHEMATIC DIAGRAMS OF MARKET FLOWS

a) Schematic diagrams for market flows showing market channels for each province and for the sample as a whole are given on pages 127 to 130.

b) Diagrams showing geographical flow for one major producing district for each province are given on pages 131 to 133.

Figure-3.1

SCHEMATIC DIAGRAMS SHOWING MARKETING CHANNELS

WHEAT

PUNJAB

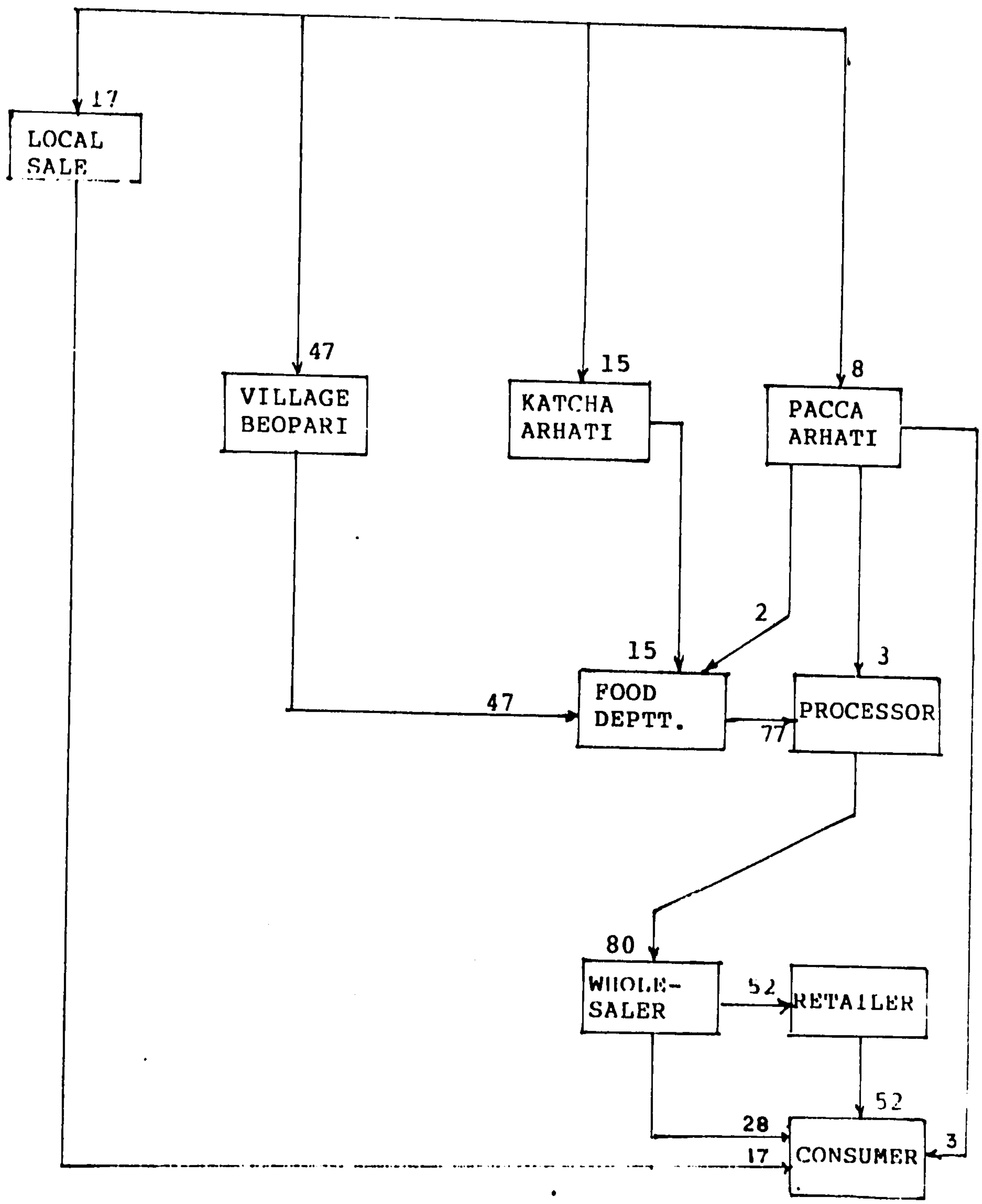


Figure-3.2

SCHEMATIC DIAGRAMS SHOWING MARKETING CHANNELS

Wheat

Sind

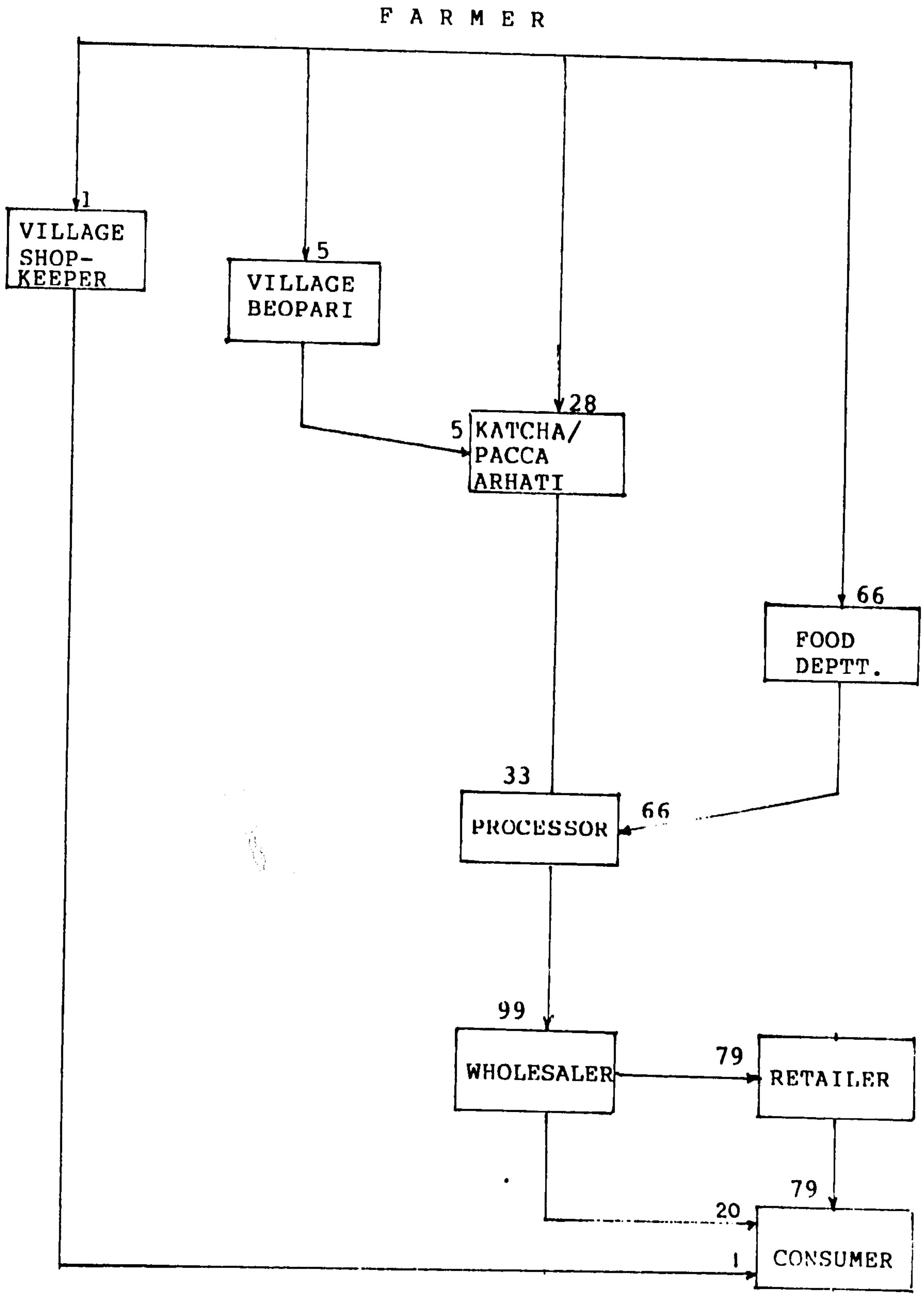


Figure- 3.3

SCHEMATIC DIAGRAMS SHOWING CHANNELS

Wheat

(NWFP)

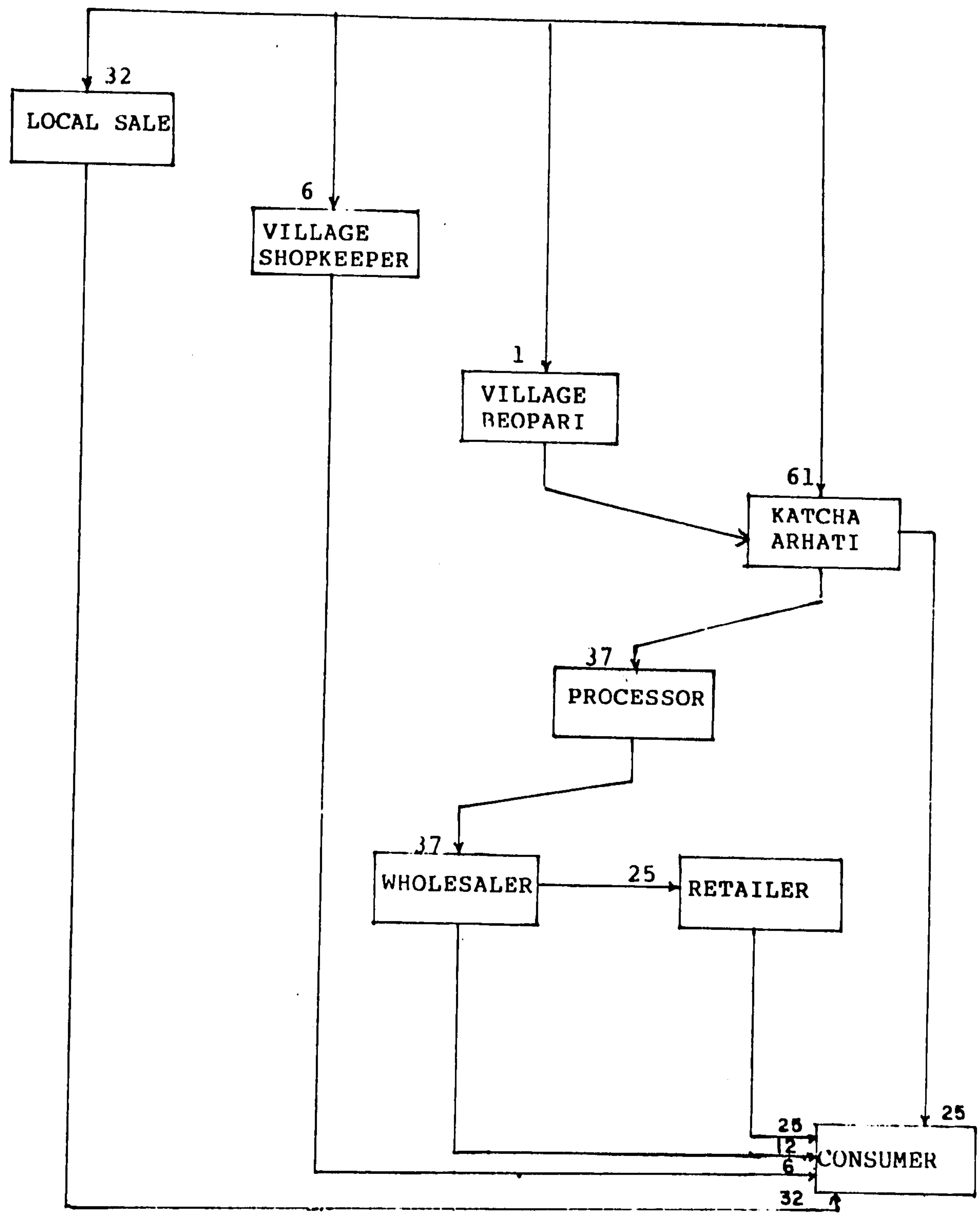
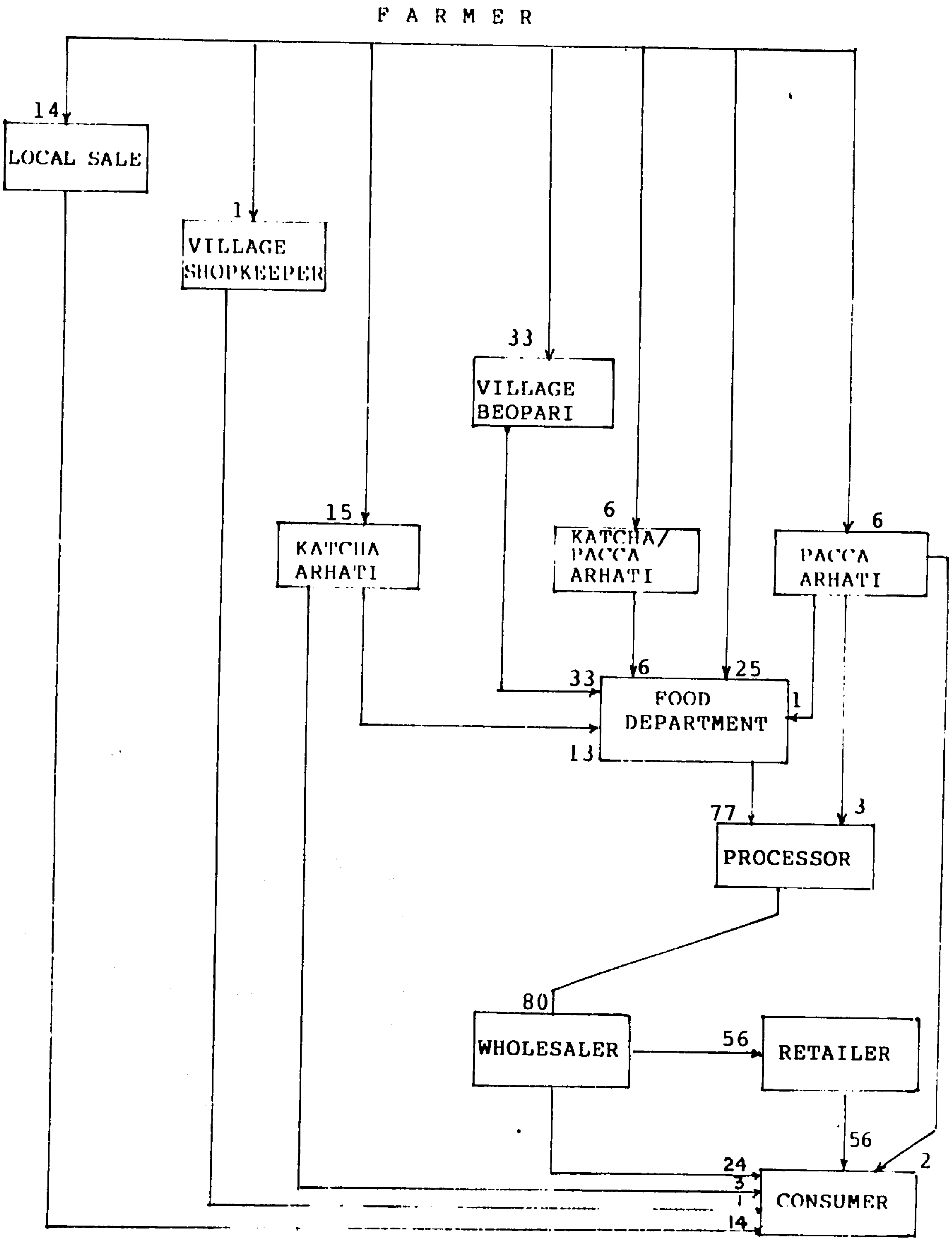


Figure-3.4

SCHEMATIC DIAGRAMS SHOWING CHANNELS

Wheat (Pakistan)



## DIAGRAM SHOWING GEOGRAPHICAL FLOW

### Wheat (Jhang)

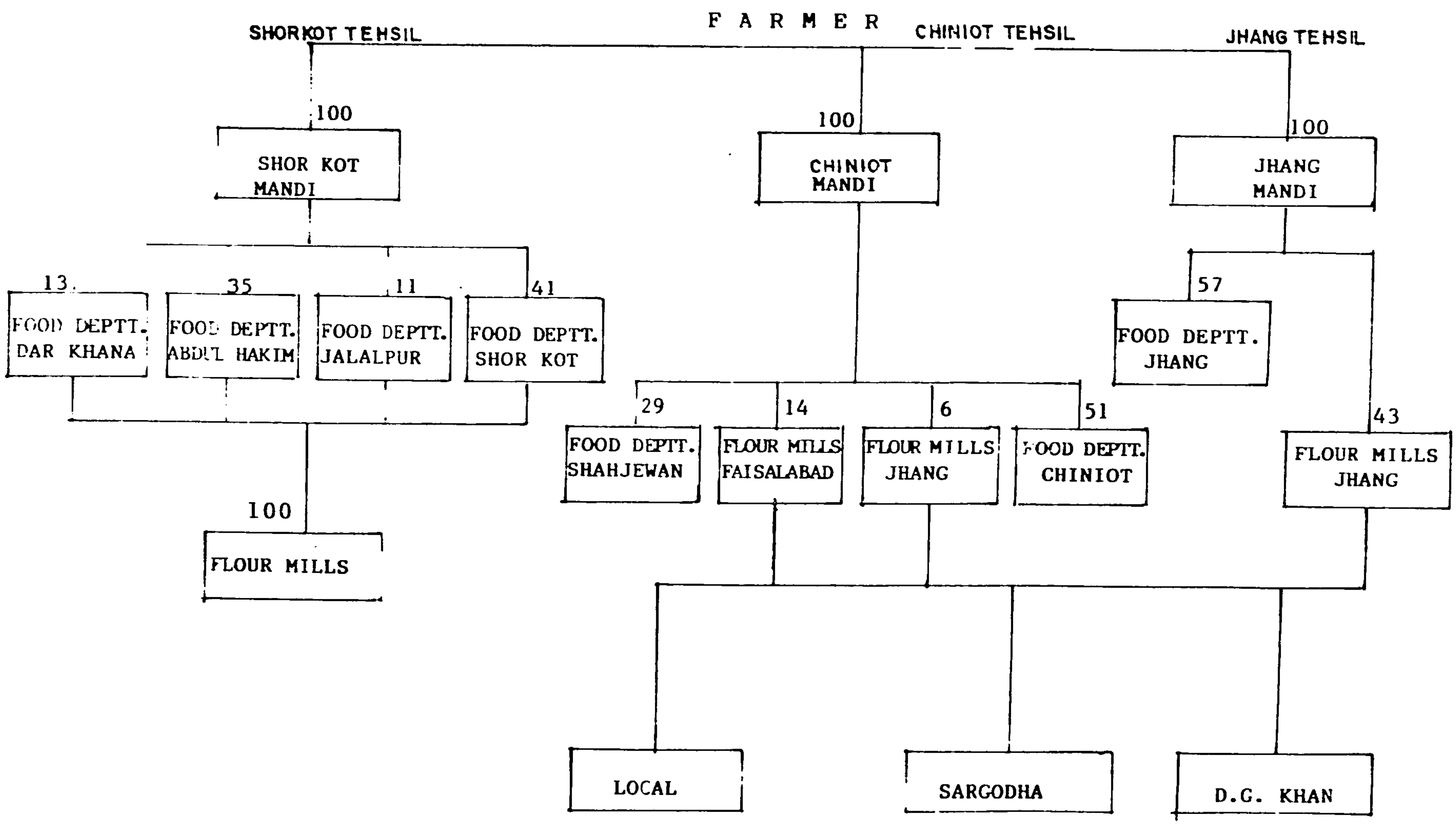



Figure-3.5

DIAGRAM SHOWING GEOGRAPHICAL FLOW

Wheat (Nawabshah)

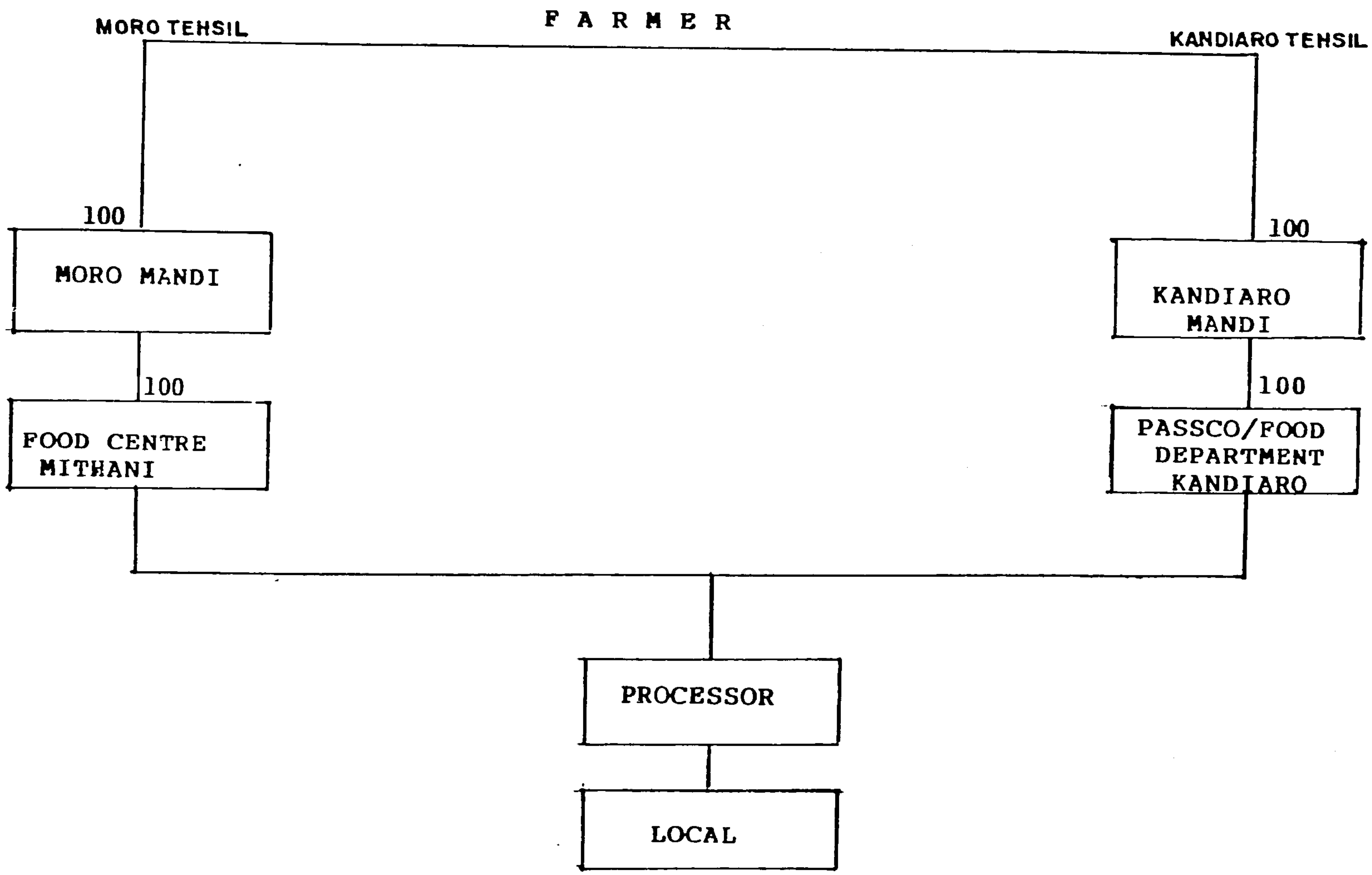



Figure-3.6

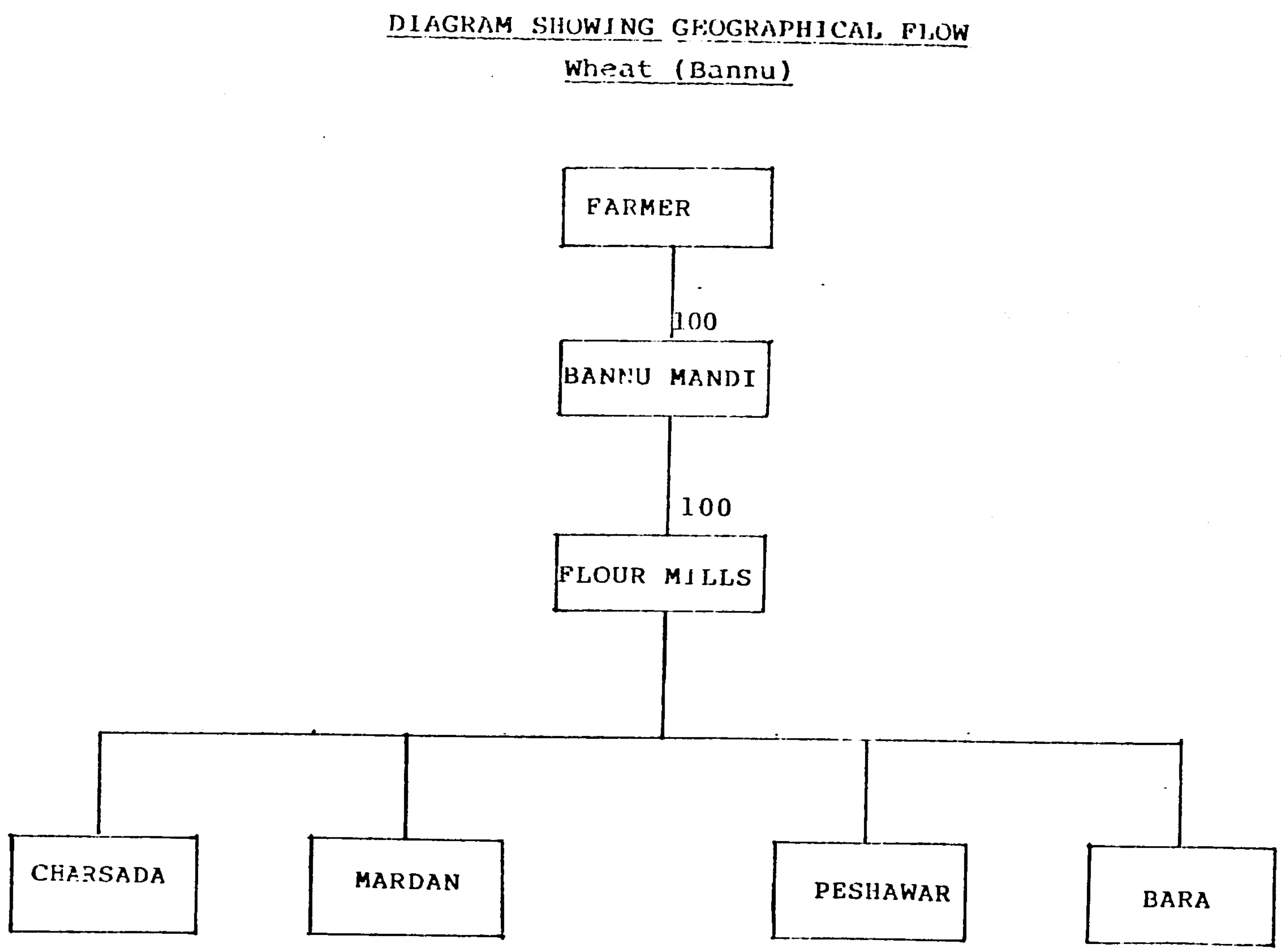


DIAGRAM SHOWING GEOGRAPHICAL FLOW
Wheat (Bannu)
FARMER
100
BANNU MANDI
100
FLOUR MILLS
CHARSADA
MARDAN
PESHAWAR
BARA

Figure-3.7

## 3.18 SHARES OF MARKETING SERVICES IN GROSS MARGINS

Percentage shares of costs of various marketing services in the gross margins for various marketing channels and their average are shown in Table 3.21. The actual amounts are shown in Table III. 20 of the Statistical Appendix.

It appears that five of the eight channels include Provincial Food Department and their gross margins range between Rs. 61.15 to Rs. 67.07 per 40 kg. The government allows a subsidy of Rs. 23.01 per 40 kg reducing the gross margins to Rs. 38.45 to Rs. 44.06 per kg. The gross margins of the other three channels, not involving any subsidy range beteen Rs. 37.74 to Rs. 44.06 per 40 kg.

Relative shares of various marketing services show that 56.49 percent of the gross margin is accounted for by net margins or profits. Transport and packaging absorb 12.00% and 7.08% of the total. The average share of 9.22% for credit cost is mainly due to the financing of procurement operations by the Food Department through the banking sector.

TABLE 3.21

PERCENTAGE SHARES OF MARKETING SERVICES IN GROSS MARGIN -- WHEAT

(PERCENTAGE)

| | MARKETING CHANNELS | | | | | | | | Average |
|---|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII | VIII | |
| Labour | 2.52 | 3.06 | 2.34 | 1.91 | 2.36 | 3.95 | 2.76 | 3.55 | 2.81 |
| Storage | 1.24 | 1.37 | 1.20 | 0.04 | 1.29 | 0.07 | 1.29 | 0.50 | 0.88 |
| Transport | 11.22 | 11.03 | 12.79 | 11.14 | 12.67 | 9.76 | 11.17 | 16.24 | 12.00 |
| packing | 10.55 | 10.39 | 11.08 | 1.59 | 10.95 | 0.22 | 11.94 | - | 7.08 |
| Rent | 0.60 | 1.53 | 0.67 | 1.02 | 0.59 | 1.01 | 0.68 | 3.50 | 1.20 |
| Taxes | 0.60 | 0.59 | 0.57 | 0.14 | 0.62 | 1.42 | 1.39 | 0.27 | 0.70 |
| Credit Cost | 14.62 | 14.40 | 13.97 | 0.09 | 15.18 | - | 15.26 | 0.24 | 9.22 |
| Processing Cost | 3.18 | 3.13 | 3.03 | 4.61 | 3.30 | 1.27 | 0.67 | 7.87 | 3.40 |
| Net Margin | 53.10 | 46.30 | 49.47 | 75.31 | 46.65 | 75.11 | 51.79 | 54.16 | 56.49 |
| Miscellaneous | 2.37 | 8.23 | 4.88 | 4.15 | 6.39 | 7.19 | 2.85 | 13.67 | 6.22 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Subsidy | 36.05 | 35.51 | 34.31 | - | 37.44 | - | 37.63 | - | 22.62 |
| Net Total | 63.95 | 64.49 | 65.69 | 100.00 | 62.56 | 100.00 | 62.37 | 100.00 | 77.38 |

## 3.19 BY-PRODUCTS

The other products obtained with wheat flour at the processing stage, are 'Maida' and 'Suji' while the by-products are bran and refractions.

The marketing channels for 'maida' and 'suji' for the sample processing units were the same as those for wheat flour. It was reported that the wholesalers who obtained flour from the units also purchased maida and suji from the mills.

The average unit sale prices of maida and suji for the sample processing units are given in the following.

TABLE 3.22

AVERAGE UNIT SALE PRICES OF MAIDA AND SUJI
FOR THE SAMPLE PROCESSING UNITS

Rs./Kg.

| | Maida | Suji |
|---|---|---|
| Punjab | 3.15 | 2.90 |
| Sind | 3.07 | 2.89 |

The NWFP sample unit did not extract any maida or suji during processing.

Bran obtained as a by-product is used mainly by the animal feed industry. Refractions are partly used in the feed industry and partly are disposed of as a waste product. The feed producing units located in the vicinity of the sample units had regular arrangements for their purchase since long distance transport is not economical because of low price and light weight. The average unit sale prices for the sample units are given in the following table.

TABLE 3.23
AVERAGE UNIT SALE PRICES OF BRAN AND REFRACTIONS FOR THE SAMPLE PROCESSING UNITS

Rs./Kg.

| | Bran | Refractions |
|---|---|---|
| Punjab | 43.90 | 20.00 |
| Sind | 47.74 | - |
| NWFP | 44.80 | - |

# CHAPTER IV

## MARKETING SYSTEM OF RICE

### 4.1 DISTRICT AND VILLAGE SAMPLE CHARACTERISTICS

The village sample for the survey of the marketing system of rice consisted of 12 villages spread over 4 districts of which 2 were located in the Punjab and 2 in Sind. The Punjab districts, Gujranwala and Sialkot represented the major basmati producing area, though irri rice was also important in the former district. In Sind, Larkana and Jacobabad were selected as the major irri rice producing areas.

The average population, average cultivated area, the average distance from the nearest town, railway station and the regulated market and the percentage share of rice in the total cultivated area for the sample villages of each district are shown in Table 4.1

The average population per village was 1379. The average for the Punjab sample villages was almost twice that of the Sind sample villages. The average cultivated area per head of population was 0.43 acres for the entire sample. The ratios were 0.46 acre and 0.37 acre for the Punjab and Sind sample villages respectively.

Rice was the predominant crop grown in the sample villages accounting for more than three-fourth of the total cultivated area.

The local market actors, shopkeepers and beoparis were reported only from the Punjab sample villages where their average number per village was 4 each.

TABLE 4.1

AVERAGE POPULATION, CULTIVATED AREA DISTANCES AND SHARE OF RICE ACREAGE FOR SAMPLE VILLAGES

CROP: RICE

| District | No. of Village | Average Village Population (No.) | Average Cultivated Area/Village (Acres) | Average Distance in Kilo Meters From | | | | | %age Share of Rice in Total | Average Number of | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Nearest Town | Railway Station | Procurement Centre Food | Procurement Centre Passco | Regulated Market | | Village Shopkeepers | Village Beoparis |
| SIALKOT | 3 | 2017 | 633 | 9 | 9 | 3 | 7 | 10 | 79 | 4 | 5 |
| GUJRANWALA | 3 | 1633 | 1063 | 4 | 12 | | 4 | 7 | 77 | 3 | 3 |
| SUB-TOTAL | 6 | 1825 | 848 | 7 | 11 | 2 | 5 | 9 | 78 | 4 | 4 |
| LARKANA | 3 | 633 | 250 | 5 | 7 | | 14 | 3 | 84 | - | - |
| JACOBABAD | 3 | 1233 | 442 | 10 | 6 | 6 | 3 | 3 | 75 | - | - |
| SUB-TOTAL | 6 | 933 | 346 | 7 | 7 | 4 | 9 | 3 | 79 | - | - |
| TOTAL | 12 | 1379 | 597 | 7 | 9 | 3 | 7 | 6 | 78 | 2 | 2 |

## 4.2 GROWERS SAMPLE CHARACTERISTICS

### Sample Size and Distribution by Farm Size:

The growers sample consisted of 301 households distributed almost equally among the four sample districts. The classification of holdings by farm sizes and the average composition of the household for the sample districts of each province and for the sample as a whole are shown in Table 4.2.

The shares of the small, medium and large size farms in the total sample were 77, 15 and 8 per cents respectively. The average size of the sample household was 8.58 persons of whom 3.48 were children of upto 10 years of age.

The corresponding data for each sample district is included in Table IV-1 of the Statistical Appendix.

The classification of the sample growers by the variety of rice grown is shown in Table 4.3. It appears that in the Punjab 121 of the sample growers cultivated only basmati rice whereas 27 grew basmati as well irri rice. Only 2 holdings recorded exclusive irri production. All the 151 sample farms of the Sind province grew irri rice.

### Area Under Rice and Average Yield:

Rice occupies an important place in the cropping scheme of the sample growers. A review of Table 4.4, showing percentage share of area under rice by different size holdings, indicates that more than two thirds of the sample area in the Punjab was under basmati rice, the

TABLE 4.2

CLASSIFICATION OF SAMPLE HOLDINGS BY FARM SIZES AND AVERAGE HOUSEHOLD COMPOSITION FOR SAMPLE DISTRICTS OF EACH PROVINCE

CROP: RICE

| Province | Farm Size | Sample Size | | Household Composition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Above 10 Years | | | Children | | | Total | | |
| | | Number | % to Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Punjab | Small | 93 | 31 | 3.05 | 2.54 | 5.59 | 1.51 | 1.62 | 3.13 | 4.56 | 4.16 | 8.72 |
| | Medium | 35 | 12 | 2.94 | 2.94 | 5.89 | 1.86 | 1.63 | 3.49 | 4.80 | 4.57 | 9.37 |
| | Large | 22 | 7 | 3.45 | 2.91 | 6.36 | 1.68 | 1.32 | 3.00 | 5.13 | 4.23 | 9.36 |
| | Sub-Total | 150 | 50 | 3.09 | 2.69 | 5.78 | 1.61 | 1.58 | 3.19 | 4.70 | 4.27 | 8.97 |
| Sind | Small | 140 | 47 | 1.88 | 2.44 | 4.32 | 1.66 | 2.05 | 3.71 | 3.54 | 4.49 | 8.03 |
| | Medium | 10 | 3 | 2.20 | 3.50 | 5.70 | 1.70 | 2.70 | 4.40 | 3.90 | 6.20 | 10.10 |
| | Large | 1 | -- | 3.00 | 2.00 | 5.00 | 4.00 | 2.00 | 6.00 | 7.00 | 4.00 | 11.00 |
| | Sub-Total | 151 | 50 | 1.91 | 2.51 | 4.42 | 1.68 | 2.09 | 3.77 | 3.59 | 4.60 | 8.19 |
| Pakistan | Small | 232 | 77 | 2.35 | 2.48 | 4.83 | 1.60 | 1.88 | 3.48 | 3.95 | 4.36 | 8.31 |
| | Medium | 45 | 15 | 2.78 | 3.07 | 5.85 | 1.82 | 1.87 | 3.69 | 4.60 | 4.94 | 9.54 |
| | Large | 23 | 8 | 3.43 | 2.87 | 6.30 | 1.78 | 1.35 | 3.13 | 5.21 | 4.22 | 9.43 |
| | Total | 301 | 100 | 2.50 | 2.60 | 5.10 | 1.64 | 1.84 | 3.48 | 4.14 | 4.44 | 8.58 |

TABLE 4.3

CLASSIFICATION OF SAMPLE BY THE VARIETY OF RICE GROWN

CROP: RICE

| District | Number of Sample Farmers Growers | | | |
|---|---|---|---|---|
| | Basmati | Irri | Irri + Basmati | Total |
| Sialkot | 75 | - | - | 75 |
| Gujranwala | 46 | 2 | 27 | 75 |
| Sub-Total | 121 | 2 | 27 | 150 |
| Larkana | - | 75 | - | 75 |
| Jacobabad | - | 76 | - | 76 |
| Sub-Total | - | 150 | - | 150 |
| Total | 121 | 153 | 27 | 301 |

TABLE 4.4

PERCENTAGE SHARE OF AREA UNDER RICE, CLASSIFIED BY VARIETIES IN THE TOTAL AREA OF DIFFERENT SIZE SAMPLE HOLDINGS OF EACH PROVINCE

CROP: RICE

| Province | Farm Size | Percentage of Total Cultivated Area Under | | | Avgerage Yield (40 Kg/Acre) | |
|---|---|---|---|---|---|---|
| | | Basmati | Irri | Total Rice | Basmati | Irri |
| Punjab | Small | 66.08 | 1.77 | 67.85 | 18.06 | 27.82 |
| | Medium | 68.24 | 7.41 | 75.65 | 15.62 | 24.81 |
| | Large | 67.99 | 20.46 | 88.45 | 14.45 | 30.54 |
| | Total | 67.59 | 11.64 | 79.23 | 15.74 | 29.30 |
| Sind | Small | - | 98.31 | 98.31 | - | 32.98 |
| | Medium | - | 93.87 | 93.87 | - | 26.08 |
| | Large | - | 100.00 | 100.00 | - | 35.00 |
| | Total | - | 97.58 | 97.58 | - | 31.82 |
| Pakistan | Small | 30.34 | 54.07 | 84.41 | 18.06 | 32.82 |
| | Medium | 54.97 | 24.21 | 79.18 | 15.62 | 25.76 |
| | Large | 66.11 | 22.72 | 88.83 | 14.45 | 31.10 |
| | Total | 47.51 | 35.73 | 83.24 | 15.74 | 31.27 |

different size holdings recording only marginal differences in this respect. In the case of the Sind sample, however, almost the entire holdings of all sizes were devoted to the cultivation of irri rice.

The shares of rice acreage to the total for the sample growers of each district are shown in Table IV-2 of the Statistical Appendix.

The yields of irri rice were higher for the Sind sample growers for all holding groups as compared to the Punjab. The average yield of the total sample was 31.27 maunds for irri rice as compared to 15.74 maunds for basmati. For basmati growers, the average yields were inversely correlated with the size of the farms indicating that smaller farms were cultivated more intensively.

Uses of Output:

The percentage shares of different uses of the total output of rice, classified by varieties, for different size sample growers of each province are shown in Table 4.5. It appears that domestic consumption and payment in kind are the two major elements which influence the share of the total output which is sold in the market. Traditionally, the village artisans i.e. carpenters, black smith and others are paid in kind at the harvest time. It was noted during the field survey that for threshing also, payments are made partly in cash and partly in kind. These payments in kind have also been added to the traditional payment to arrive at the total payments in kind.

TABLE 4.5

PERCENTAGE SHARES OF DIFFERENT USES OF THE TOTAL OUTPUT
OF RICE BY VARIETIES OF SAMPLE GROWERS OF DIFFERENT SIZES OF ECH PROVINCE

CROP: RICE (PERCENTAGE)

| Province | Farm Size | Basmati | | | | | Irri | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Domestic Consumption | Payment in kind | Kept for Seed | Marketed | Total | Domestic Consumption | Payment in kind | Kept for Seed | Marketed | Total |
| Punjab | Small | 17 | 16 | 2 | 65 | 100 | 11 | 7 | 3 | 79 | 100 |
| | Medium | 11 | 14 | 1 | 74 | 100 | 3 | 2 | 3 | 92 | 100 |
| | Large | 7 | 11 | 1 | 81 | 100 | 1 | 3 | 2 | 94 | 100 |
| | Total | 11 | 13 | 2 | 74 | 100 | 2 | 3 | 2 | 93 | 100 |
| Sind | Small | - | - | - | - | | 23 | 23 | 2 | 52 | 100 |
| | Medium | - | - | - | - | - | 28 | 22 | 3 | 47 | 100 |
| | Large | - | - | - | - | - | 9 | 25 | 1 | 65 | 100 |
| | Total | - | - | - | - | - | 23 | 23 | 2 | 52 | 100 |
| Pakistan | Small | 17 | 16 | 2 | 65 | 100 | 23 | 23 | 2 | 52 | 100 |
| | Medium | 11 | 14 | 1 | 74 | 100 | 22 | 17 | 3 | 58 | 100 |
| | Large | 7 | 11 | 1 | 81 | 100 | 2 | 6 | 2 | 90 | 100 |
| | Total | 11 | 13 | 2 | 74 | 100 | 18 | 19 | 2 | 61 | 100 |

The share of the above two uses of the total output varies inversely with the size of the holding. Thus for the small sample holdings of upto 12.5 acres, domestic consumption and payments in kind accounted for 33 percent of the total output of basmati rice as against only 24 percent for the large sample holdings of above 25 acres.

Similar trends were observed for the irri producing sample holdings of Sind, though the share of the above two uses was higher at 50 percent for the small holdings, declining to 34 percent for the large sample holdings. Taking the Sind sample as a whole 25 percent of the produce was retained for domestic consumption and seed purposes.

The corresponding ratios for the sample holdings of each sample district are given in Table IV-3 and IV-4 of the Statistical Appendix for basmati and irri rice growers.

The per capita quantity kept for domestic consumption for the growers sample as a whole is calculated at 6.62 maunds for the year for both the varieties of rice (paddy). On the basis of the average conversion factors the above average is equivalent to about 4.37 maunds of rice.

The paddy retained for domestic consumption does not represent the entire consumption of rice by the households. Paddy converted into rice at the modern mills is preferred by a large section of the people and is purchased from the market. Paddy retained at home is usually husked at the local village 'chakkis'. Accordingly it is supplemented by rice obtained from the market. According to the Household Income and Expenditure Survey[1] the average per capita consumption of 'rice and rice flour' for rural areas is

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1. Federal Bureau of Statistics, Household Income and Expenditure Survey, 1985-86, P.

estimated at 1.35 kg. per month. The Consumer Survey, conducted as a part of the present assignment, gives an average per capita consumption of 1.5 kg. per month. These estimates give annual consumption estimates of 16.08 kg. and 18.00 kg. respectively.

In an earlier study, Rajib Ali, (1979) (21) reports that for six districts of Sind, the quantity retained was 14.96 percent of the quantity produced. The number of farmers in that study were 85 rice growers, producing local varieties of rice while the farmers were not classified by the size of holdings.

In a study on "Farm Products Storage and Storage Losses" conducted by the Punjab Economic Research Institute in 1978, the shares of total produce kept for domestic consumption for different size farms in the Punjab were reported as follows:

| | |
|---|---|
| Upto 12.5 acres | 14.97% |
| 12.5 to 25 acres | 10.30% |
| Above 25 acres | 7.06 |
| All Farms | 12.60 |

The results of the present survey for Punjab appear to be quite consistent with the above findings.

## 4.3 MARKETED SURPLUS

The shares of the total produce marketed by the sample growers are also shown in Table 4.5.

It appears that for the sample as a whole, 74 percent of the basmati and 93 percent of the irri rice grown by the sample growers in the Punjab was marketed. The ratio of the marketed surplus varied directly with the size of the farms, increasing from 65 percent in the case of small farms to 81 percent for large farms for basmati. In the case of irri rice, the corresponding ratios were 79 and 93 percents respectively. Similar trends were noticed in the case of irri growers of Sind, the marketed share being 52 percent for the sample growers as against 65 percent of the large growers.

It would be of interest of compare the above ratios with the findings of some of the earlier studies.

Rajab Ali (1979) concluded that quantity marketed in Sind, during the seasons 1977-78, as an average of all the six districts, was 85.04 percent of the quantity produced.

In another study, Planning & Development Division Government of Pakistan (1984), (19) marketable surplus ratios for different categories of farmers were as follows:

| Farm Size (Acres) | Marketable surplus as % of Total Production |
|---|---|
| 0 - 12.5 | 50 |
| 12.5 - 25 | 88 |
| Above 25 | 98 |

In this study, Gujranwala and Sialkot districts were covered in the Punjab and data was collected from 30 rice growers in each district. In Sind, Jacobabad and Badin districts were surveyed and data was collected from 15 rice growers in each district.

Rashid et. at (4) has reported the result of a study for which investigation for rice was limited to Chunian tehsil of Lahore district. It reported the marketables surplus of rice at 83.2% of the total production.

## 4.4 SEASONAL SPREAD OF MARKETING OPERATIONS

The harvesting of paddy starts in October and continues till mid-December, depending upon the variety of rice grown. A major share of the marketed surplus is sold immediately after harvest and almost the entire quantities are disposed of within a period of 3 to 4 months.

The percentage classification of the total quantities sold by the months of sale and the average prices realized during these months for basmati and irri sample growers of each province are given in Table 4.6 and 4.7 on the next pages. The corresponding data for each sample district are given in Table IV-5 and IV-6 of the Statistical Appendix.

TABLE 4.6

PERCENTAGE CLASSIFICTION OF TOTAL BASMATI RICE SOLD BY MONTHS BY SAMPLE GROWERS OF DIFFERENT FARM SIZES AND AVERAGE MONTHLY PRICES REALISED FOR EACH PROVINCE

CROP: RICE

| Province | Farm Size | Percentage of Total Quantity in Sold | | | | | Average Sale Prices | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | October | November | December | January | Total | October | November | December | January | Total |
| Punjab | Small | 5 | 93 | – | 2 | 100 | 113.80 | 141.28 | – | 135.00 | 139.74 |
| | Medium | 7 | 80 | 7 | 6 | 100 | 136.62 | 131.96 | 135.00 | 135.00 | 132.68 |
| | Large | – | 66 | – | 34 | 100 | – | 127.33 | – | 149.45 | 134.73 |
| | Total | 4 | 77 | 2 | 17 | 100 | 127.73 | 133.16 | 135.00 | 147.53 | 135.48 |

TABLE 4.7

PERCENTAGE CLASSIFICATION OF TOTAL IRRI SOLD BY MONTHS BY SAMPLE GROWERS OF DIFFERENT FARM SIZES AND AVERAGE MONTHLY PRICES REALIZED FOR EACH PROVINCE

CROP: RICE

| Province | Farm Size | Percentage of Total Quantity Sold in | | | | | | | | | Average Sale Prices | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Oct. | Nov. | Dec. | Jan. | Feb. | March | April | May | Total | Oct. | Nov. | Dec. | Jan. | Feb. | March | April | May | Total |
| Punjab | Small | 8 | 92 | - | - | - | - | - | - | 100 | 70.00 | 57.32 | - | - | - | - | - | - | 58.32 |
| | Medium | 5 | 95 | - | - | - | - | - | - | 100 | 53.18 | 64.32 | - | - | - | - | - | - | 63.75 |
| | Large | 2 | 98 | - | - | - | - | - | - | 100 | 65.00 | 63.68 | - | - | - | - | - | - | 63.71 |
| | Total | 3 | 97 | - | - | - | - | - | - | 100 | 61.95 | 63.58 | - | - | - | - | - | - | 63.54 |
| Sind | Small | - | - | 34 | 64 | - | 1 | - | 1 | 100 | - | - | 68.28 | 61.45 | - | 65.00 | - | 45.00 | 63.62 |
| | Medium | - | - | 5 | 95 | - | - | - | - | 100 | - | - | 65.00 | 62.29 | - | - | - | - | 62.42 |
| | Large | - | - | - | 100 | - | - | - | - | 100 | - | - | - | 66.00 | - | - | - | - | 66.00 |
| | Total | - | - | 29 | 70 | - | - | - | 1 | 100 | - | - | 68.21 | 61.90 | - | - | - | 45.00 | 63.59 |
| Pakistan | Small | - | 2 | 34 | 63 | - | - | - | 1 | 100 | 70.00 | 57.32 | 68.28 | 61.45 | - | 65.00 | - | 45.00 | 63.52 |
| | Medium | 2 | 36 | 3 | 59 | - | - | - | - | 100 | 53.18 | 64.32 | 65.00 | 62.29 | - | - | - | - | 62.93 |
| | Large | 2 | 88 | - | 10 | - | - | - | - | 100 | 65.00 | 63.68 | - | 66.00 | - | - | - | - | 63.94 |
| | Total | 1 | 32 | 19 | 47 | - | - | - | 1 | 100 | 61.95 | 63.58 | 68.21 | 61.90 | - | - | - | 45.00 | 63.58 |

Reasons for lower prices in January, March, April and May.

In the case of basmati rice, 77 percent of the marketed quantity was sold in October by the sample growers in the Punjab. In this respect, the marketing behaviour of the three sized growers shows distinct trends. The small group with upto 12.5 acres sold as much as 98 percent of the total by the month of November. The large farmers, however, sold only 66 percent of the total during November while selling the remaining 34 percent after two months in January when they were able to realize on the average, 17 percent higher price as compared to their previous sales.

Taking the sample as a whole, the average sale price obtained by the farmers for basmati paddy was Rs. 135.48 per maund as against the official support price of Rs. 130 per maund fixed by the Government.

In the case of irri sample growers in the Punjab, almost the entire quantity was sold during the month of November, while in Sind, the sale operations were spread over November to January. In this three month period, the greatest quantity was sold during January which month shows lower prices, while the average prices were the highest during December.

Taking the sample as a whole, the average sale price obtained by the sample growers for irri rice was Rs. 63.54 per maund for the Punjab and Rs. 63.59 per maund for Sind as against the official support price of Rs. 55 for the year.

## 4.5 STORAGE FACILITIES

The following types of storages were used for paddy.

i) Pacca rooms

ii) Pacca bharolas

iii) Drums/boxes

iv) Kacha rooms

v) Kacha bharolas

Classifying the first three types as of standard quality and the remaining two as 'sub-standard', the storage facilities of the sample growers of the Punjab and Sind provinces show distinct trends. In the case of the Punjab sample growers, 56 to 61 percent of the storage facilities were of standard types, the share being as high as 85 to 91 percent for the large sized farmers. In the case of Sind, however, the share of standard facilities was found to be only 5 percent of the total storage facilities for the sample growers.

The average storage capacity was 66 maunds and 44 maunds for the sample growers of basmati and irri varieties respectively. These were adequate for the storage of paddy, as the quantities retained for domestic consumption and seed formed 32 percent and 79 percent of the capacity for the total sample of basmati and irri growers respectively. Paddy is generally stored in bags both in rooms and bharolas. The use of drums and metal boxes was also getting popular specially in the Punjab, and their share in the total capacity was 3, 5 and 1[illegible] percent for the small, medium and large sample growers respectively.

The average storage capacity, its adequacy status for the retained quantities and the share of standard types in total storage facilities for the sample growers of each province are shown in Table 4.8. The corresponding data for each sample district are included in Table IV-7 and IV-8 of the Statistical Appendix for sample growers of basmati and irri varieties respectively.

## 4.6 STORAGE LOSSES AT GROWERS LEVEL

Storage losses at the growers level have been estimated on the basis of quantities stored by them for domestic consumption and seed and are shown in Table 4.9. It appears that for the sample as a whole, 1.47 percent of the quantity stored was lost during storage for basmati growers. The range of storage losses was between 0.38 percent for the small sample growers of Gujranwala district to 2.62 percent for the small sample growers of Sialkot district.

In the case of the irri rice, losses were reported only from the Punjab sample. The average ratio was however significant at 1.09 percent of the quantity stored. The Sind sample growers keep paddy in husk in the fields where it reportedly remains free from the attack of insect pests.

A study undertaken by the Punjab Economic Research Institute in 1978 for the Punjab reports that 0.65 percent of paddy was lost during storage at the farm level.

Chaudhri (1980) carried out detailed studies on losses at different stages. He estimated paddy losses at the farm level at 1.3 percent.

TABLE 4.8

AVERAGE STORAGE CAPACITY CLASSIFIED BY TYPE FOR SAMPLE GROWERS OF EACH PROVINCE

CROP: RICE (40 kg)

| Province | Farm Size | Basmati | | | Irri | | |
|---|---|---|---|---|---|---|---|
| | | Average Storage Capacity | % of Storage Capacity Used for Rice | % Share of Standard Storage to Total Storage | Average Storage Capacity | % of Storage Capacity Used for Rice | % Share of Standard Storage to Total Storage |
| Punjab | Small | 64 | 25 | 50 | 10 | 108 | – |
| | Medium | 58 | 43 | 45 | 51 | 10 | 22 |
| | Large | 86 | 45 | 85 | 75 | 20 | 91 |
| | Total | 66 | 32 | 56 | 56 | 18 | 61 |
| Sind | Small | – | – | – | 49 | 88 | 6 |
| | Medium | – | – | – | 121 | 102 | – |
| | Large | – | – | – | 100 | 105 | – |
| | Total | – | – | – | 55 | 88 | 5 |
| Pakistan | Small | 64 | 25 | 50 | 48 | 88 | 6 |
| | Medium | 58 | 43 | 45 | 82 | 69 | 9 |
| | Large | 86 | 45 | 85 | 77 | 28 | 82 |
| | Total | 66 | 32 | 56 | 54 | 79 | 13 |

TABLE 4.9

STORAGE LOSSES FOR QUANTITIES RETAINED FOR DOMESTIC CONSUMPTION AND SEED BY SAMPLE GROWERS

CROP: RICE

| District | Farm Size | Percentage Loss | |
|---|---|---|---|
| | | Basmati | Irri |
| Sialkot | Small | 2.62 | - |
| | Medium | 1.43 | - |
| | Large | 0.73 | 5.56 |
| | Total | 1.92 | 3.41 |
| Gujranwala | Small | 0.38 | - |
| | Medium | - | - |
| | Large | 1.85 | - |
| | Total | 0.77 | - |
| Sub-Total | Small | 1.84 | - |
| | Medium | 0.57 | - |
| | Large | 1.50 | 3.29 |
| | Total | 1.47 | 1.09 |
| Larkana | Small | - | - |
| | Medium | - | - |
| | Large | - | - |
| | Total | - | - |
| Jacobabad | Small | - | - |
| | Medium | - | - |
| | Large | - | - |
| | Total | - | - |
| Sub-Total | Small | - | - |
| | Medium | - | - |
| | Large | - | - |
| | Total | - | - |
| Total | Small | - | - |
| | Medium | - | - |
| | Large | - | 1.28 |
| | Total | - | 0.14 |

## 4.7 MARKETING CHANNELS FOR GROWERS

The market actors to whom the sample growers sold their produce included the following:

- Village shopkeepers
- Village sales to other
- Village beopari
- Katcha arhati
- Pacca arhati
- Rice mills

The relative shares of these market actors in the total sales of the sample growers, classified by the size of farms, for basmati and irri varieties are shown in Table 4.10. The corresponding ratios for each sample district are included in Table IV-9 of the Statistical Appendix.

It appears that village beopari was the most important market actor for the sample basmati rice growers, accounting for almost one-third of the total sales. The relative importance of this actor however varied with the size of holdings. In the case of small sized growers, it accounted for as much as 41 percent of the total sales. For the other two groups, however, sales to village beoparis was the second most important outlet, the most important market actors for the medium and large size growers being katcha arhati and rice mills respectively. After village beopari, katcha arhati and rice mills were

TABLE 4.10

MARKETING CHANNELS FOR SAMPLE GROWERS FOR EACH PROVINCE

CROP: RICE (Percentage)

| Province | Farm Gate | Basmati | | | | | | | Irri | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Village Shopkeeper | Village Beopari | Other Village Sales | Pacca Arhati | Katcha Arhati | Rice Mills | Total | Village Shopkeeper | Village Beopari | Other Village Sales | Pacca Arhati | Katcha Arhati | Rice Mills | Total |
| Punjab | Small | 5 | 41 | – | 10 | 19 | 25 | 100 | – | – | – | 50 | 50 | – | 100 |
| | Medium | – | 20 | – | 11 | 51 | 18 | 100 | – | – | – | 20 | 80 | – | 100 |
| | Large | – | 35 | – | 13 | 17 | 35 | 100 | – | 14 | – | 7 | 65 | 14 | 100 |
| | Total | 1 | 32 | – | 12 | 28 | 27 | 100 | – | 12 | – | 11 | 66 | 11 | 100 |
| Sind | Small | – | – | – | – | – | – | – | – | 1 | 3 | 12 | 10 | 74 | 100 |
| | Medium | – | – | – | – | – | – | – | – | – | – | 35 | – | 65 | 100 |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | 100 | 100 |
| | Total | – | – | – | – | – | – | – | – | – | 2 | 14 | 9 | 75 | 100 |
| Pakistan | Small | 5 | 41 | – | 10 | 19 | 25 | 100 | – | 1 | 3 | 18 | 14 | 64 | 100 |
| | Medium | – | 20 | – | 11 | 51 | 18 | 100 | – | – | – | 30 | 30 | 40 | 100 |
| | Large | – | 34 | – | 13 | 17 | 36 | 100 | – | 13 | – | 7 | 58 | 22 | 100 |
| | Total | 1 | 32 | – | 12 | 28 | 27 | 100 | – | 5 | 2 | 16 | 30 | 47 | 100 |

the most important channels accounting for 28 and 27 percents of the total sales respectively.

The marketing operations of the sample irri rice growers of Sind presented an entirely different picture. In this case, direct sales to rice mills was by far the most important channel for the sample growers, accounting for 75 percent of the total sales. In the case of the large sized holdings the entire marketing surplus was sold directly to the rice mills, the ratios for the medium and small growers being 65 and 74 percents respectively. The next important channels for Sind sample growers were pacca and katcha arhatis to whom 14 and 9 percents of the total sales of sample growers were made.

Local village sales to shopkeepers or other were not significant for rice growers, their shares in the total sales being only 1 and 2 percents for basmati and irri sample growers.

The results of the study of the Planning and Development Division (1984) (19), show that out of the total quantity sold by sample growers, 75 percent was sold to rice mills and 8 percent to pacca arhatis; 14 percent through purchase centres, 2 percent to village beoparis and 1 percent to any other person in the village.

According to another study, carried out much earlier (1968-69 to 1969-70) by Rashid, et at. (3) the selected growers sold paddy to various market intermediaries in the following proportions:

| | |
|---|---|
| Village beoparis | 65.6 percent |
| Katcha arhatis | 32.4 percent |

Rice shellers 2.0 percent

## 4.8 MARKETING COSTS OF GROWERS

The major components of the marketing costs borne by the growers include the following:

- Preparation, transportation and octroi charges.

- Commission payable to katcha and pacca arhatis.

- Other market charges.

  These include payments to palladar (who load and unload the produce), weighmen and changar (who clean the plot where the produce is heaped).

- Cost of deduction

  These deductions are made by the arhatis on various pretexts. In the case of paddy, excessive moisture content is one of the main reasons put forward for such deductions.

The grower's marketing costs also vary with the type of market actor to whom he sells his paddy. In the case of sales to village shopkeepers, village beoparis or to other persons in the village, he does not incur any of the above costs, though the price obtained by him depends on general market conditions and their relative bargaining positions.

The average marketing costs of the growers for sales to different market agents for different size sample holdings of each province for basmati and irri varieties are shown in Table 4.11 and 4.12. The corresponding data for each sample district are given in Tables IV-10 and IV-11 of the Statistical Appendix.

It appears that in the case of basmati rice, the average marketing costs of the growers for sales to katcha and pacca arhatis do not show much variations, being Rs. 10.52 per maund for sales to pacca arhati and Rs. 10.24 per maund for sales to katcha arhati. The average costs were however significantly lower for direct sales to rice mills, being almost one-fourth of those of other market actors. The relative shares of different cost components show that 'other market charges' for the pacca arhatis and 'cost of deductions' for the katcha arhatis were the most important for the sample as a whole. In the case of sales to mills, preparation, transport and octroi payments were the only cost items.

In the case of irri rice, the average costs for sales to pacca arhatis varied between Rs. 2.47 per maund for the Sind sample to Rs. 6.49 for the Punjab sample the overall average being Rs. 5.44 per maund. The average costs were about 40 percent higher for sales through katcha arhatis while these were the least for direct sales to the rice mills. Preparation for the market, transportation and octroi was the most important cost component in case of all the market actors. The average marketing costs for sales to pacca/katcha arhatis formed about 8 to 9 percent of the average farm gate prices for both basmati and irri sample growers.

Attempt was made to compare the results of the present study with previous studies/surveys. Although the

TABLE 4.11

CLASSIFICATION OF MARKETING COSTS OF GROWERS FOR SALES TO DIFFERENT FUNCTIONARIES AND THE FARM GATE PRICES

RICE BASMATI

| Province | Farm Size | PACCA ARHATI: Average Marketing Price | PACCA ARHATI: Marketing Cost | %AGE OF MARKETING PRICE: 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price | KATCHA ARHATI: Average Marketing Price | KATCHA ARHATI: Marketing Cost | %AGE OF MARKETING COST: 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Punjab | Small | 135.00 | 5.64 | – | 35 | – | 18 | 36 | 11 | 100 | 129.36 | 134.81 | 12.40 | 10 | 22 | 5 | 25 | 10 | 25 | 100 | 122.41 |
| | Medium | 133.26 | 10.94 | 14 | 21 | 4 | 19 | 12 | 30 | 100 | 122.32 | 130.64 | 9.62 | – | 26 | 5 | 28 | 12 | 29 | 100 | 121.02 |
| | Large | 130.00 | 10.68 | – | 9 | 5 | 24 | 32 | 30 | 100 | 119.32 | 131.75 | 10.64 | – | 16 | 5 | 29 | 12 | 35 | 100 | 121.11 |
| | Total | 132.65 | 10.52 | 6 | 18 | 3 | 19 | 30 | 24 | 100 | 122.13 | 132.40 | 10.24 | 4 | 20 | 5 | 28 | 11 | 34 | 100 | 122.16 |

1. Preparation Charges 2. Transportation Charges 3. Octroi 4. Commission 5. Paladari, Weighmen & Changes 6. Cost of Deduction 7. Total

TABLE 4.11 (Contd.)

CLASSIFICATION OF MARKETING COSTS OF GROWERS FOR SALES TO DIFFERENT FUNCTIONARIES AND THE FARM GATE PRICES

RICE BASMATI

| Province | Farm Size | RICE MILL | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE | | | | | | | Farm Gate Price |
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Punjab | Small | 132.72 | 3.15 | – | 100 | – | – | – | – | 100 | 129.52 |
| | Medium | 134.29 | 2.00 | – | 100 | – | – | – | – | 100 | 132.29 |
| | Large | 148.67 | 2.56 | – | 100 | – | – | – | – | 100 | 146.11 |
| | Total | 144.20 | 2.47 | – | 100 | – | – | – | – | 100 | 141.73 |

**TABLE 4.12**

CLASSIFICATION OF MARKETING COSTS OF GROWERS FOR SALES TO DIFFERENT FUNCTIONARIES AND THE FARM GATE PRICES FOR EACH PROVINCES

RICE IRRI

| Province | Farm Size | PACCA ARHATI | | | | | | | | | | KATCHA ARHATI | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE | | | | | | | Farm Gate Price | Average Marketing Price | Marketing Cost | %AGE OF MARKETING COST | | | | | | | Farm Gate Price |
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Punjab | Small | 61.55 | 6.01 | 22 | 15 | 8 | 29 | – | 26 | 100 | 55.54 | 55.00 | 6.63 | 20 | 30 | 8 | 21 | – | 21 | 100 | 48.37 |
| | Medium | 62.47 | 8.21 | 16 | 25 | 7 | 20 | 12 | 20 | 100 | 54.26 | 64.72 | 8.87 | 15 | 32 | 6 | 18 | 11 | 18 | 100 | 55.85 |
| | Large | 54.95 | 5.58 | – | 18 | 9 | 26 | 15 | 32 | 100 | 49.37 | 64.48 | 7.06 | – | 31 | 8 | 23 | 7 | 31 | 100 | 57.42 |
| | Total | 58.89 | 6.49 | 11 | 20 | 8 | 24 | 10 | 27 | 100 | 52.40 | 63.80 | 7.25 | 3 | 31 | 8 | 22 | 8 | 28 | 100 | 56.55 |
| Sind | Small | 61.27 | 4.00 | – | 28 | 7 | 42 | 11 | 12 | 100 | 57.27 | 56.38 | 7.48 | – | 28 | 6 | 36 | 16 | 14 | 100 | 48.90 |
| | Medium | 65.00 | 4.58 | – | 33 | 6 | 43 | – | 18 | 100 | 60.42 | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | 64.61 | 4.52 | – | 32 | 6 | 43 | 1 | 18 | 100 | 60.09 | 56.38 | 7.48 | – | 28 | 6 | 36 | 16 | 14 | 100 | 48.90 |
| Pakistan | Small | 61.39 | 5.23 | 9 | 24 | 7 | 37 | 7 | 16 | 100 | 56.16 | 55.91 | 7.21 | 6 | 29 | 7 | 31 | 11 | 16 | 100 | 48.70 |
| | Medium | 64.73 | 5.88 | 3 | 26 | 6 | 34 | 15 | 16 | 100 | 58.85 | 64.72 | 8.87 | 15 | 32 | 6 | 18 | 11 | 18 | 100 | 55.85 |
| | Large | 54.95 | 5.58 | – | 18 | 9 | 26 | 15 | 32 | 100 | 49.37 | 64.48 | 7.06 | – | 31 | 8 | 23 | 7 | 31 | 100 | 57.42 |
| | Total | 61.45 | 5.44 | 3 | 25 | 7 | 34 | 14 | 17 | 100 | 56.01 | 63.59 | 7.29 | 3 | 30 | 8 | 23 | 8 | 28 | 100 | 56.30 |

1. Preparation Charges 2. Transportation Charges 3. Octroi 4. Commission 5. Paladari, Weighmen & Changer 6. Cost of Deduction 7. Total

TABLE 4.12 (Contd.)

| Province | Farm Size | RICE MILL | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE | | | | | | | Farm Gate Price |
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Punjab | Small | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – |
| | Large | 55.00 | – | – | – | – | – | – | . | – | 55.00 |
| | Total | 55.00 | – | – | – | – | – | – | – | – | 55.00 |
| Sind | Small | 63.16 | 2.47 | – | 58 | 13 | – | 15 | 14 | 100 | 60.69 |
| | Medium | 59.23 | 2.71 | – | 69 | 12 | – | 15 | 4 | 100 | 56.52 |
| | Large | 66.00 | 3.60 | – | 83 | 9 | – | 8 | – | 100 | 62.40 |
| | Total | 64.69 | 3.35 | – | 80 | 9 | – | 10 | 1 | 100 | 61.34 |
| Pakistan | Small | 63.16 | 2.47 | – | 58 | 13 | – | 15 | 14 | 100 | 60.69 |
| | Medium | 59.23 | 2.71 | – | 69 | 12 | – | 15 | 4 | 100 | 56.52 |
| | Large | 66.00 | 3.60 | – | 83 | 9 | – | 8 | – | 100 | 62.40 |
| | Total | 64.69 | 3.35 | – | 80 | 9 | – | 10 | 1 | 100 | 61.34 |

research design in each case was different, the marketing costs reported therein are of some interest.

Planning and Development Division (19) (1984) reported that the cost of marketing of paddy was Rs. 2.50 per maund or 5.7 percent of the farm gate price of Rs. 45.83 per maund. The cost of marketing for each type of intermediary market actor was not mentioned.

Rashid et. al. (3) in a study carried out in 1968-70, reported the cost of marketing as under:

| Intermediary | Farm Gate Price/Maund (Rs.) | Marketing Cost/Maund (Rs.) | Marketing Cost as % of Farm gate Price |
|---|---|---|---|
| Village Beopari | 16.32 | 0.42 | 2.57 |
| Pacca Arhati | 16.75 | 1.17 | 7.00 |
| Katcha Arhati | 16.82 | 1.17 | 6.93 |
| Rice Mill | 16.95 | 0.36 | 2.12 |

The results of this study also show that cost of selling paddy directly to the mill was the least and formed 2.12 percent of the farm gate price.

TABLE 4.13

AVERAGE FARM GATE PRICES FOR SALES THROUGH DIFFERENT CHANNELS
- BASMATI RICE (RS.PER 40 KG)

CROP: RICE

| Province | Farm Size | Village Shopkeeper | | | Village Beopari | | | Pacca Arhati | | | Katcha Arhati | | | Rice Mill | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sale Price | Marketing Cost | Farm Gate Price | Sale Price | Maketing Cost | Farm Gate Price | Sale Price | Marketing Cost | Farm Gate Price | Sale Price | Marketing Cost | Farm Gate Price | Sale Price | Marketing Cost | Farm Gate Price |
| Punjab | Small | 137.19 | - | 137.19 | 133.38 | - | 133.58 | 135.00 | 5.64 | 129.36 | 134.81 | 12.40 | 122.41 | 132.72 | 3.15 | 129.57 |
| | Medium | - | - | - | 133.48 | - | 133.46 | 133.26 | 10.94 | 122.32 | 130.64 | 9.62 | 121.02 | 134.29 | 2.00 | 132.29 |
| | Large | - | - | - | 136.30 | - | 136.30 | 130.00 | 10.68 | 119.32 | 131.75 | 10.64 | 121.11 | 148.67 | 2.56 | 146.11 |
| | Total | 137.19 | - | 137.19 | 135.34 | - | 135.34 | 132.65 | 10.52 | 122.13 | 132.40 | 10.24 | 122.16 | 144.20 | 2.47 | 141.73 |

TABLE [illegible].14

AVERAGE FARM GATE PRICES FOR SALES THROUGH DIFFERENT CHANNELS - IRRI RICE

CROP: RICE

| Province | Farm Size | Village Beopari | | | Other Village Sales | | | Pacca Arhati | | | Katcha Arhati | | | Rice Mill | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sale Price | Marketing Cost | Farm Gate Price | Sale Price | Maketing Cost | Farm Gate Price | Sale Price | Marketing Cost | Farm Gate Price | Sale Price | Marketing Cost | Farm Gate Price | Sale Price | Marketing Cost | Farm Gate Price |
| Punjab | Small | - | - | - | - | - | - | 61.55 | 6.01 | 55.54 | 55.00 | 6.63 | 48.37 | - | - | - |
| | Medium | - | - | - | - | - | - | 62.47 | 5.21 | 54.26 | 64.72 | 8.87 | 55.85 | - | - | - |
| | Large | 64.00 | - | 64.00 | - | - | - | 54.95 | 5.58 | 49.37 | 64.48 | 7.06 | 57.42 | 55.00 | - | 55.00 |
| | Total | 64.00 | - | 64.00 | - | - | - | 58.59 | 6.49 | 52.40 | 63.80 | 7.25 | 56.55 | 55.00 | - | 55.00 |
| Sind | Small | 60.00 | - | 60.00 | 51.60 | - | 51.60 | 61.27 | 4.00 | 57.27 | 56.38 | 7.48 | 48.90 | 63.16 | 2.47 | 60.69 |
| | Medium | - | - | - | - | - | - | 65.00 | 4.58 | 60.42 | - | - | - | 59.23 | 2.71 | 56.52 |
| | Large | - | - | - | - | - | - | - | - | - | - | - | - | 66.00 | 3.60 | 62.40 |
| | Total | 60.00 | - | 60.00 | 51.60 | - | 51.60 | 64.61 | 4.52 | 60.09 | 56.38 | 7.48 | 48.90 | 64.69 | 3.35 | 61.34 |
| Pakistan | Small | 60.00 | - | 60.00 | 51.60 | - | 51.60 | 61.39 | 5.23 | 56.16 | 55.91 | 7.21 | 48.70 | 63.16 | 2.47 | 60.69 |
| | Medium | - | - | - | - | - | - | 66.73 | 5.88 | 58.85 | 64.72 | 8.87 | 55.85 | 59.23 | 2.71 | 56.52 |
| | Large | 64.00 | - | 64.00 | - | - | - | 54.95 | 5.58 | 49.37 | 64.48 | 7.06 | 57.42 | 66.00 | 3.60 | 62.40 |
| | Total | 63.29 | - | 63.29 | 51.60 | - | 51.60 | 61.45 | 5.44 | 56.01 | 63.59 | 7.29 | 56.30 | 64.69 | 3.35 | 61.34 |

for local sales in village to other to Rs. 63.29 per maund for sales to village beoparis. The support price for irri paddy during the year was Rs. 55 per maund.

## 4.10 RELATION OF FARM GATE PRICES TO SUPPORT PRICES

Table 4.15 showing the variations between the average farm gate prices realized by the sample growers and the support prices is given on the next page. The comparison is only indicative in so far as the grades and various quality characteristics are not taken into account.

It appears that the sample growers were able to obtain prices higher than the support prices for their sales to village shopkeepers, village beoparis and rice mills for basmati paddy. In the case of irri rice, the farm gate prices were generally higher for all sales. It may however be pointed out that relative demand and supply positions influence significantly the local prices at any point of time.

## 4.11 TRANSPORTATION MODES AND COSTS

The modes of transport used by the sample growers were tractor trolleys, horse drawn carts and pack animals in the Punjab. In the case of the Sind sample growers, bullock carts were also used in addition to the tractor trolleys and the horse drawn carts.

Percentage classifications of quantities transported by different modes for sample growers of different farm sizes for basmati and irri varieties are given in Tables 4.16 and 4.17. It appears that for basmati rice, tractor/trolleys were the most important mode accounting

TABLE 4.15

PERCENTAGE VARIATIONS OF AVERAGE FARM GATE PRICES FROM SUPPORT PRICES FOR SALE TO DIFFERENT MARKET ACTORS BY SAMPLE GROWERS

CROP: RICE

| Province | Farm Size | Rice Basmati | | | | | Rice Irri | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Village Shopkeeper | Village Beopari | Pacca Arhati | Katcha Arhati | Rice Mills | Village Shopkeeper | Village Beopari | Pacca Arhati | Katcha Arhati | Rice Mills |
| Punjab | Small | -5.38 | +2.75 | -0.49 | -5.84 | -0.33 | - | - | +0.98 | -12.05 | - |
| | Medium | - | +2.66 | -5.91 | -6.91 | +1.76 | - | - | -1.35 | +1.55 | - |
| | Large | - | +4.85 | -8.22 | -6.84 | +12.39 | +16.36 | - | -10.24 | +4.40 | - |
| | Total | +5.38 | +4.11 | -6.05 | -6.03 | +9.02 | +16.36 | - | -4.73 | +2.82 | -- |
| Sind | Small | | | | | | +9.09 | -6.18 | +4.13 | -11.09 | -10.35 |
| | Medium | | | | | | - | - | +9.85 | - | -2.76 |
| | Large | | | | | | - | - | - | - | 13.46 |
| | Total | | | | | | +9.09 | -6.18 | +9.25 | -11.09 | +11.53 |
| Pakistan | Small | +5.38 | +2.75 | -0.49 | -5.84 | -0.33 | +9.09 | -6.18 | +2.11 | -11.45 | +10.35 |
| | Medium | - | +2.66 | -5.91 | -6.91 | +1.76 | - | - | +7.00 | +1.55 | +2.76 |
| | Large | - | +4.85 | -8.22 | -6.84 | +12.39 | +16.36 | - | -10.24 | +4.40 | +13.45 |
| | Total | +5.38 | +4.11 | -6.05 | -6.03 | +9.02 | +15.07 | -6.18 | +1.84 | +2.36 | +11.34 |

TABLE 4.16

PERCENTAGE CLASSIFICATION OF QUANTITIES TRANSPORTED BY DIFFERENT MODE FOR SAMPLE GROWERS OF DIFFERENT FARM SIZE FOR EACH PROVINCE

RICE BASMATI

| | Farm Size | Tractor/Trolley | | Truck | | Bullocks/ Camel Carts | | Horse Drawn Carts | | Pack Animal | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. |
| Punjab | Small | 38 | 58 | – | – | – | – | 62 | 42 | – | – | 100 | [illegible] |
| | Medium | 56 | 34 | – | – | – | – | 41 | 21 | 3 | 45 | 100 | [illegible] |
| | Large | 94 | 61 | – | – | – | – | 6 | 39 | – | – | 100 | [illegible] |
| | Total | 53 | 50 | – | – | – | – | 46 | 32 | 1 | 18 | 100 | [illegible] |

## TABLE 4.17

PERCENTAGE CLASSIFICATION OF QUANTITIES TRANSPORTED BY DIFFERENT MODE FOR SAMPLE GROWERS OF DIFFERENT FARM SIZE FOR EACH PROVINCE

Rice Irri

| | Farm Size | Tractor/ Trolley | | Truck | | Bullocks/ Camel Carts | | Horse Drawn Carts | | Pack Animal | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. |
| Punjab | Small | – | – | – | – | – | – | 100 | 100 | – | – | 100 | 100 |
| | Medium | 31 | 54 | – | – | – | – | 69 | 46 | – | – | 100 | 100 |
| | Large | 91 | 86 | – | – | – | – | 9 | 14 | – | – | 100 | 100 |
| | Total | 50 | 64 | – | – | – | – | 50 | 36 | – | – | 100 | 100 |
| Sind | Small | 94 | 60 | – | – | 1 | 9 | 5 | 31 | – | – | 100 | 100 |
| | Medium | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| | Large | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| | Total | 94 | 94 | – | – | 1 | 2 | 5 | 4 | – | – | 100 | 100 |
| Pakistan | Small | 91 | 59 | – | – | 1 | 9 | 8 | 32 | – | – | 100 | 100 |
| | Medium | 61 | 66 | – | – | – | – | 39 | 34 | – | – | 100 | 100 |
| | Large | 92 | 73 | – | – | – | – | 8 | 27 | – | – | 100 | 100 |
| | Total | 87 | 69 | – | – | – | 1 | 13 | 30 | – | – | 100 | 100 |

for the transportation of one half of the produce of the sample growers. The other modes were horse drawn carts 32% and pack animal 18%.

In the case of irri rice, too, tractro/trolley were the most important and their share in the total was higher at 69%. Horse drawn carts accounted for 30% of the total. The relative positions were almost similar for sample growers of Punjab and Sindh.

Different size farms showed distinct trends. For small size farms, relative shares of horse drawn carts were higher as compared to the large sized farms.

The percentage classification of quantities transported by different modes for each sample district for basmati and irri rice are given in Table IV-12 and IV-13 of the Statistical Appendix.

The average cost of transport per maund per kilometer by these modes are given in Table 4.18.

It appears that tractor trolleys were the cheapest mode in the Punjab with an average cost of Rs. 0.20 per maund per km. In the case of the Sindh sample, however, the bullock carts were the cheapest mode, with an average cost of Rs. 0.13 per maund per km.

The average transport cost for the each sample district for the basmati and irri varieties are shown in Table IV-14 of the Statistical Appendix.

TABLE 4.18

AVERAGE TRANSPORT COST OF DIFFERENT MODES FOR SAMPLE GROWERS OF DIFFERENT FARM SIZES FOR EACH PROVINCE

CROP: RICE Rs.per 40 Kg. per km.

| Province | Farm Size | Basmati | | | Irri | | |
|---|---|---|---|---|---|---|---|
| | | Tractor Trolley | Horse Drawn Cart | Pack Animal | Tractor Trolley | Bullock/ Camel Cart | Horse Drawn Cart |
| Punjab | Small | 0.21 | 0.28 | – | – | – | 0.15 |
| | Medium | 0.21 | 0.49 | 0.40 | 0.18 | – | 0.61 |
| | Large | 0.20 | 0.33 | – | 0.20 | – | 0.33 |
| | Total | 0.20 | 0.38 | 0.40 | 0.19 | – | 0.41 |
| Sind | Small | | | | 0.24 | 0.13 | 0.20 |
| | Medium | | | | 0.30 | – | – |
| | Large | | | | 0.60 | | – |
| | Total | | | | 0.30 | 0.13 | 0.20 |
| Pakistan | Small | 0.21 | 0.28 | – | 0.24 | 0.13 | 0.19 |
| | Medium | 0.21 | 0.49 | 0.40 | 0.24 | – | 0.61 |
| | Large | 0.20 | 0.33 | – | 0.28 | – | 0.33 |
| | Total | 0.20 | 0.38 | 0.40 | 0.25 | 0.13 | 0.33 |

## 4.12 SECOND STAGE MARKET ACTORS

Summary characteristics of the second stage actors; village beoparis, katcha arhatis and pacca arhatis, are included in Table 4.19 for basmati rice and in Table 4.20 for irri rice.

These actors trade among themselves, though the largest share of their sales had been to rice mills. The scale of operations as indicated by the sizes of purchase and sale lots, has been the least for the village beopari.

The shares of sales to different agencies by these actors are shown in Table 4.21. It appears that in the case of basmati rice, 16 percent of the sales take place within the second stage actors whereas for irri rice, sales to mills account for almost the entire quantity.

## TABLE 4.19

## SUMMARY CHARACTERISTICS OF SECOND STAGE MARKET ACTORS BY SAMPLE DISTRICTS

RICE BASMATI

**Pacca Arhati**

| District | Quantity Traded | Purchases/ inflow | Sales outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price |
|---|---|---|---|---|---|---|---|
| Sialkot | 14703 | Farmer, Beopari | Rice Mill Pacca Arhati | 272 | 2451 | 132.65 to 144.12 | 146.11 |
| Gujranwala | 7031 | Farmers, Beopari Commission Agent | Rice Mill Pacca Arhati | 167 | 2129 | 132.65 to 144.12 | 146.11 |
| Punjab | 21734 | Farmer, Beopari & Commission Agent | Rice Mill Pacca Arhati | 179 | 2337 | 132.65 to 144.12 | 146.11 |

**Katcha Arhati**

| District | Quantity Traded | Purchases inflow | Sales outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price |
|---|---|---|---|---|---|---|---|
| Sialkot | 73750 | Farmer | Rice Mill Pacca Arhati | 410 | 1993 | 132.40 to 141.69 | 142.12 |
| Gujranwala | 26548 | Farmer | Pacca Arhati | 330 | 2563 | 132.40 to 141.69 | 142.12 |
| Punjab | 100298 | Farmer | Rice Mill Pacca Arhati | 385 | 2121 | 132.40 to 141.69 | 142.12 |

**Beopari**

| District | Quantity Traded | Purchases inflow | Sales outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price |
|---|---|---|---|---|---|---|---|
| Sialkot | 1900 | Farmer Beopari | Rice Mill Pacca Arhati | 48 | 317 | 135.34 | 141.69 |
| Gujranwala | 6500 | Farmer | Pacca Arhati | 65 | 813 | 135.34 | 141.69 |
| Punjab | 8400 | Farmer Beopari | Rice Mill Pacca Arhati | 60 | 600 | 135.34 | 141.69 |

TABLE 4.20

SUMMARY CHARACTERISTICS OF SECOND STAGE MARKET ACTORS BY SAMPLE DISTRICTS

RICE IRRI

| | Pacca Arhati | | | | | | | Katcha Arhati | | | | | | | Beopari | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quantity Traded | Purchases/ inflow | Sales outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price | Quantity Traded | Purchases inflow | Sales outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price | Quantity Traded | Purchases inflow | Sales outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price |
| Gujranwala | 3650 | Farmer | Pacca Arhati Rice Mill | 365 | 1217 | 58.89 to 69.18 | 75.00 | 19546 | Farmer | Pacca Arhati | 109 | 825 | 63.80 | 69.18 | 163 | Farmer | Pacca Arhati | 163 | 163 | 64.00 | 70.00 |
| Larkana | 197000 | Farmer | Rice Mill | 1603 | 6850 | 61.45 | 67.76 | - | - | - | - | - | - | - | - | - | + | - | - | - | - |
| Jacobabad | 88333 | Farmer | Rice Mill | 1667 | 3533 | 61.45 | 67.76 | 40000 | Farmer | Rice Mill | 1212 | 2353 | 63.59 | 66.00 | - | - | + | - | - | - | - |
| Sind | 285333 | Farmer | Rice Mill | 1622 | 5308 | 61.45 | 67.76 | 40000 | Farmer | Rice Mill | 1212 | 2353 | 63.59 | 66.00 | - | - | + | - | - | - | - |
| Pakistan | 288983 | Farmer | Rice Mill | 1554 | 5091 | 58.59 to 69.18 | 67.76 to 75.00 | 59546 | Farmer | Pacca Arhati Rice Mill | 280 | 1463 | 63.59 to 63.80 | 66.00 to 69.18 | 163 | Farmer | Pacca Arhati | 163 | 163 | 64.00 | 70.00 |

+ Village Beoparis of Sample Growers of Larkana and Jacobabad, Accounting for one percent of Sample Growers Sales were not Traceable

TABLE 4.21

PERCENTAGE OF RICE SOLD TO DIFFERENT ACTORS BY SECOND STAGE SELLERS

| Province | Seller | To Whom Sold | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Rice Basmati | | | | Rice Irri | | |
| | | Katcha Arhati | Pacca Arhati | Rice Mills | Total | Pacca Arhati | Rice Mills | Total |
| Punjab | Beopari | – | 75 | 25 | 100 | 100 | – | 100 |
| | Katcha Arhati | – | 17 | 83 | 100 | 100 | – | 100 |
| | Pacca Arhati | – | 16 | 84 | 100 | 30 | 70 | 100 |
| Sind | Katcha Arhati | – | – | – | – | – | 100 | 100 |
| | Pacca Arhati | – | – | – | – | – | 100 | 100 |
| Pakistan | Beopari | – | 75 | 25 | 100 | 100 | – | 100 |
| | Katcha Arhati | – | 17 | 83 | 100 | 32 | 68 | 100 |
| | Pacca Arhati | – | 16 | 84 | 100 | 1 | 99 | 100 |

## 4.13 OPERATION AND MARKETING COSTS OF SECOND STAGE MARKET ACTORS

The classification of the average costs of village beoparis, katcha arhatis and pacca arhatis by major components for basmati and irri samples are given in Table 4.22 and 4.23 respectively. Operating cost constitute the major element of cost. Among the marketing costs, transport costs are more important for the village beoparis while losses account for 3 to 6 percent of the costs for different intermediaries.

Detailed breakdown of operating costs, basis of calculation of storage costs, transportation costs and costs of losses are included in Table IV-15 to VI-18 for basmati rice and IV-19 to IV-22 for irri rice in the Statistical Appendix.

## 4.14 RICE MILLS

A total of 20 rice mills were surveyed of which 8 were modern units and 12 were sellers. All the 8 modern mills were in the public sector, operating as subsidiaries of the Rice Export Corporation of Pakistan.

Estimates of the average fixed assets and recovery ratios of the two types of units are shown in Table IV-23 of the Statistical Appendix. The average cost structure of the sample units is analysed in Table 4.24. The cost has been shown separately for basmati and irri varieties.

TABLE 4.22

COST COMPONENTS OF SECOND STAGE MARKET INTERMEDIRIES

RICE BASMATI

| Type of Actors | Province | Rs./40 Kg. | | | | | | | (Percentages ) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Operating cost | Storage Cost | Losses | Transport Cost | Credit Cost | Other | Total | Operating Cost | Storage Cost | Losses | Transport Cost | Credit Cost | Other | Total |
| Beopari | Punjab | 2.30 | - | 0.05 | 0.25 | - | 0.01 | 2.65 | 87 | - | 3 | 10 | - | - | 100 |
| Katcha Arhati | Punjab | 1.97 | 0.26 | | | 0.15 | 0.16 | 2.54 | 78 | 10 | - | - | 6 | 6 | 100 |
| Pacca Arhati | Punjab | 1.62 | 0.03 | 0.07 | 0.10 | 0.05 | 0.05 | 1.92 | 84 | 2 | 4 | 5 | 3 | 2 | 100 |

TABLE 4.23

COST COMPONENTS OF SECOND STAGE MARKET INTERMEDIFIES

| | | Rs./40 Kg. | | | | | | | RICE IRRI (Percentages) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Operating cost | Storage Cost | Losses | Transport Cost | Credit Cost | Other | Total | Operating Cost | Storage Cost | Losses | Transport Cost | Credit Cost | Other | Total |
| Peopari | Punjab | 1.36 | - | - | 0.50 | - | - | 1.86 | 73 | - | - | 27 | - | - | 100 |
| | Sind | - | | | | | | | | | | | | | |
| | Pakistan | 1.36 | - | | .50 | | | 1.86 | 73 | | | 27 | | | 100 |
| Katcha Arhati | Punjab | 2.23 | 0.10 | - | - | 0.32 | 0.37 | 3.02 | 74 | 3 | - | - | 11 | 12 | 100 |
| | Sind | 0.65 | 0.02 | - | - | - | 0.12 | 0.79 | 82 | 3 | - | - | - | 15 | 100 |
| | Pakistan | 0.75 | 0.03 | - | - | 0.02 | 0.14 | 0.94 | 80 | 3 | - | - | 2 | 15 | 100 |
| Pacca Arhati | Punjab | 2.18 | 0.10 | 0.23 | 0.41 | 0.01 | - | 2.93 | 74 | 3 | 8 | 15 | - | - | 100 |
| | Sind | 0.40 | 0.01 | 0.01 | 0.07 | | | 0.49 | 82 | 2 | 2 | 14 | - | - | 100 |
| | Pakistan | 0.49 | 0.02 | 0.02 | 0.09 | - | - | 0.62 | 79 | 3 | 3 | 15 | - | - | 100 |

TABLE 4.24

AVERAGE PROCESSING COST FOR SAMPLE UNITS

Rs./40 Kg. RICE BASMATI & IRRI

| | DIRECT COST | | | | | | | FIXED COST | | | | | Financial Cost | Depreciation | Transport Cost | Storage Cost | Other Cost | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Salary & wages | Contract Labour | Electricity | Telephone | Repair & Maintenance | Other Misc. | Total | Salaries and Allowances | Administrative | Rent & Tax | Misc. Cost | Total | | | | | | |
| Rice Irri Punjab 1 | 0.65 | 2.03 | 3.24 | 0.01 | 0.26 | 1.42 | 7.61 | 3.20 | 2.38 | 0.48 | 0.74 | 6.80 | 1.66 | 1.32 | 2.66 | 1.09 | 0.35 | 21.49 |
| Rice Basmati 2 | 1.30 | 1.54 | 1.15 | – | 0.47 | 0.26 | 4.72 | 1.39 | 0.38 | 0.52 | 0.24 | 2.53 | – | 0.15 | 1.32 | 0.20 | 0.23 | 9.15 |
| Sind | 1.06 | 1.77 | 1.54 | 0.54 | 2.40 | 0.46 | 7.77 | 0.55 | 1.41 | 0.49 | 0.18 | 2.63 | 1.09 | 0.24 | 0.65 | 0.27 | 0.18 | 12.83 |
| Pakistan | 0.82 | 1.92 | 2.54 | 0.23 | 1.14 | 1.03 | 7.68 | 2.11 | 1.98 | 0.48 | 0.51 | 5.08 | 1.43 | 0.88 | 1.84 | 0.75 | 0.28 | 17.94 |

1 = Processing Cost Rice Basmati

2 = Processing Cost Rice Irri

The rice mills sell their output to Rice Export Corporation and to wholesale dealers in various markets. The relative shares of the sample public and private sector units of Punjab and Sindh are shown below:

TABLE 4.25

PERCENTAGE SHARES OF QUANTITIES SOLD TO RECEP AND WHOLESALERS BY SAMPLE UNITS

| Province | Sector | RECP | Wholesaler | Total |
|---|---|---|---|---|
| Punjab | Private | 60 | 40 | 100 |
| | Public | 87 | 13 | 100 |
| | Total | 84 | 16 | 100 |
| Sindh | Private | 57 | 43 | 100 |
| | Public | 84 | 16 | 100 |
| | Total | 69 | 31 | 100 |
| Pakistan | Private | 57 | 43 | 100 |
| | Public | 86 | 14 | 100 |
| | Total | 75 | 25 | 100 |

## 4.15 WHOLESALERS AND RETAILERS

The average costs of wholesale dealers and retailers are shown in Table 4.26. Operating and transport costs are the major components. Transport costs are however more significant especially for the wholesalers, accounting for about 90% of the total costs.

Detailed breakdown of the operating costs for the sample wholesalers and retailers are included in Table IV-24 and IV-25 on the Statistical Appendix.

## 4.16 MARKETING CHANNELS AND THEIR COSTS

On the basis of the present survey, six major channels for basmati rice and seven major channels for irri rice have been identified as shown below:

Basmati Rice

Punjab:

I. Farmer --- Beopari --- Processor --- Wholesaler --- Retailer.

II. Farmer --- Beopari --- Pacca Arhati --- Processor --- Wholesaler --- Retailer.

III. Farmer --- Katcha Arhati --- Pacca Arhati --- processor --- Wholesaler --- Retailer

TABLE 4.26

AVERAGE COSTS OF SAMPLE WHOLESALERS AND RETAILERS

Rs. /40 Kg.

| Province | WHOLESALERS | | | | RETAILERS | | | |
|---|---|---|---|---|---|---|---|---|
| | Operating Cost | Transport Cost | Total | Transport Cost as % of Total | Operating Cost | Transport Cost | Total | Transport Cost as % of Total |
| Punjab | 0.35 | 3.20 | 3.55 | 90 | 2.59 | 1.07 | 3.66 | 29 |
| Sindh | 0.22 | 3.10 | 3.32 | 93 | 0.81 | 1.81 | 2.62 | 69 |
| Pakistan | 0.28 | 3.15 | 3.43 | 92 | 1.87 | 1.37 | 3.24 | 42 |

IV. Farmer --- Katcha Arhati --- Processor --- Wholesaler --- Retailer

V. Farmer --- Pacca Arhati --- Processor --- Wholesaler --- Retailer.

VI. Farmer --- Processor --- Wholesaler --- Retailer.

Irri Rice

Punjab:

I. Farmer --- Beopari --- Pacca Arhati --- Processor --- Wholesaler --- Retailer.

II. Farmer --- Katcha Arhati --- Pacca Arhati --- Processor --- Wholesaler --- Retailer.

III. Farmer --- Pacca Arhati --- Processor --- Wholesaler --- Retailer.

IV. Farmer --- Processor --- Wholesaler --- Retailer

Sind:

V. Farmer --- Katcha Arhati --- Processor --- Wholesaler--- Retailer.

VI. Farmer --- Pacca Arhati --- Processor --- Wholesaler --- Retailer.

VII. Farmer --- Processor --- Wholesaler --- Retailer.

Percentage shares of farmgate prices and of marketing margins in the retail prices for each of the above marketing channels are given in Table 4.27 for basmati rice and in Table 4.28 for irri rice. The actual amounts are shown in Tables IV-26 and IV-27 of the Statistical Appendix.

It appears that the farmer's shares in the final retail prices have ranged between 49.27 to 57.16 percents for basmati rice and from 42.16 to 51.50 percents for irri rice sample growers respectively. The results show that, generally, the shares of farm gate prices are inversely related to the length of the intermediaries, chain till the consumers. Thus where sales by growers to processor have taken place without the intervention of any intermediary, the farmers were able to get a higher share of the consumer price. It thus shows that integration of the various marketing stages could help in reducing gross marketing margins.

The percentage price spread between the grower and the consumer has been analysed in terms of the following elements of marketing performance.

- average farmers share in consumer rupee.

- distribution of gross margin among various intermediaries/stages.

TABLE 4.27

PERCENTAGE SHARES OF FARM GATE PRICES AND OF MARKETING MARGINS IN THE CONSUMER PRICES FOR DIFFERENT MARKET CHANNELS

RICE BASMATI

| | Market Channels | | | | | |
|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI |
| A. Farm gate | 54.59 | 54.59 | 49.27 | 49.27 | 49.26 | 57.16 |
| Farmer Cost | – | – | 4.13 | 4.13 | 4.24 | 1.00 |
| B. Beopari | | | | | | |
| – Gross Margin | 2.56 | 2.56 | – | – | – | – |
| – Cost | (1.07) | (1.07) | – | – | – | – |
| – Net Margin | 1.49 | 1.49 | – | – | – | – |
| C. Katcha Arhati | | | | | | |
| – Gross Margin | – | – | 3.92 | 3.92 | – | – |
| – Cost | – | – | (1.02) | (1.02) | – | – |
| – Net Margin | – | – | 2.90 | 2.90 | – | – |
| D. Pacca Arhati | | | | | | |
| – Gross Margin | – | 1.78 | 1.61 | – | 5.43 | – |
| – Cost | – | (0.77) | (0.77) | – | (0.77) | – |
| – Net Margin | – | 1.01 | 0.83 | – | 4.66 | – |
| E. Processors | | | | | | |
| – Gross Margin | 15.59 | 14.21 | 14.21 | 15.82 | 14.21 | 14.98 |
| – Cost | (7.58) | (7.58) | (7.58) | (7.58) | (7.58) | (7.58) |
| – Net Marging | 8.41 | 6.63 | 6.63 | 8.24 | 6.63 | 7.40 |
| F. Wholesaler | | | | | | |
| – Gross Margin | 12.45 | 12.45 | 12.45 | 12.45 | 12.45 | 12.45 |
| – Cost | (1.43) | (1.43) | (1.43) | (1.43) | (1.43) | (1.43) |
| – Net Margin | 11.02 | 11.02 | 11.02 | 11.02 | 11.02 | 11.02 |
| G. Retailer | | | | | | |
| – Gross Margin | 14.41 | 14.41 | 14.41 | 14.41 | 14.41 | 14.41 |
| – Cost | (1.48) | (1.48) | (1.48) | (1.48) | (1.48) | (1.48) |
| – Net Margin | 12.93 | 12.93 | 12.93 | 12.93 | 12.93 | 12.93 |
| TOTAL: | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE 4.28

PERCENTAGE SHARES OF FARM GATE PRICES AND OF MARKETING MARGINS IN THE CONSUMER PRICES FOR DIFFERENT MARKET CHANNELS

RICE IRRI

| | PUNJAB | | | | SIND | | |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII |
| A. Farm Gate | 51.50 | 45.50 | 42.16 | 44.25 | 39.68 | 48.76 | 49.78 |
| Farmer Cost | - | 5.84 | 5.23 | - | 6.07 | 3.67 | 2.72 |
| B. Beopari | | | | | | | |
| - Gross Margin | 4.83 | - | - | - | - | - | - |
| - Cost | (1.50) | - | - | - | - | - | - |
| - Net Margin | 3.33 | - | - | - | - | - | - |
| C. Katcha Arhati | | | | | | | |
| - Gross Margin | - | 4.33 | - | - | 7.81 | - | - |
| - Cost | - | 2.43 | - | - | 0.64 | - | - |
| - Net Margin | - | 1.90 | - | - | 7.17 | - | - |
| D. Pacca Arhati | | | | | | | |
| - Gross Margin | 4.02 | 4.68 | 12.96 | - | - | 2.56 | - |
| - Cost | (2.36) | (2.36) | (2.36) | - | - | (0.40) | - |
| - Net Margin | 1.66 | 2.32 | 10.60 | - | - | 2.16 | - |
| E. Processor | | | | | | | |
| - Gross Margin | 8.68 | 8.68 | 8.68 | 24.78 | 12.65 | 11.22 | 13.71 |
| - Cost | (7.11) | (7.11) | (7.11) | (7.11) | (7.17) | (7.17) | (7.17) |
| - Net Margin | 5.59 | 1.57 | 1.57 | 17.67 | 5.48 | 4.05 | 6.54 |
| F. Wholesaler | | | | | | | |
| - Gross Margin | 13.38 | 13.38 | 13.38 | 13.38 | 14.01 | 14.01 | 14.01 |
| - Cost | 2.86 | 2.86 | 2.86 | 2.86 | (2.69) | (2.69) | (2.69) |
| - Net Margin | 10.52 | 10.52 | 10.52 | 10.52 | 11.32 | 11.32 | 11.32 |
| G. Retailer | | | | | | | |
| - Gross Margin | 17.59 | 17.59 | 17.59 | 17.59 | 19.78 | 19.78 | 19.78 |
| - Cost | (2.94) | (2.94) | (2.94) | (2.94) | (2.13) | (2.13) | (2.13) |
| - Net Margin | 14.64 | 14.64 | 14.64 | 14.64 | 17.65 | 17.65 | 17.65 |
| TOTAL: | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

- Share of net margin to gross margin at each stage.

The above data are included in Table 4.29 for each of the provincial samples for basmati and irri rice growers.

The table shows that processor gets the maximum share of the gross margin in the case of basmati rice followed by retailers and wholesalers in that order. In the case of irri rice, however retailers absorbs the maximum share, estimated at 38.75 percent of the total margin, for the sample as a whole. In this case, wholesalers and retailers come next with 28.13 and 24.63 percents of the total gross margin.

The net margins form a very high proportion of gross margins varying for basmati rice from 47.81 percent for processors to 89.73 percent for retailers. In the case of irri rice, these ratios range between 35.21 for processors to 88.42 percents for retailers. The trend thus appears to be consistent for both varieties of rice.

The high ratios of net margins to gross margin indicate elements of inefficiency in the marketing system and also the scope for reducing the gross margins in the overall price structure.

The Planning and Development Division Study (19) estimated the share of grower's farm gate prices in the consumer's rupee at 45.83 percent. The ratios of gross margins of dealers, millers, wholesaler and retailers and the shares of their net margins in the gross margins were estimated as follows:

| | Gross Margin % | Ratio of net margin to gross margin % |
|---|---|---|
| Dealer | 1.11 | 87 |
| Miller | 19.79 | 31 |
| Wholesaler | 14.65 | 57 |
| Retailer | 16.12 | 58 |

TABLE 4.29

AVERAGE PERCENTAGE SHARES OF FARM GATE PRICES AND MARKETING MARGINS, SHARES OF VARIOUS ACTORS IN GROSS MARGINS AND RATIO OF NET MARGINS TO GROSS MARGINS

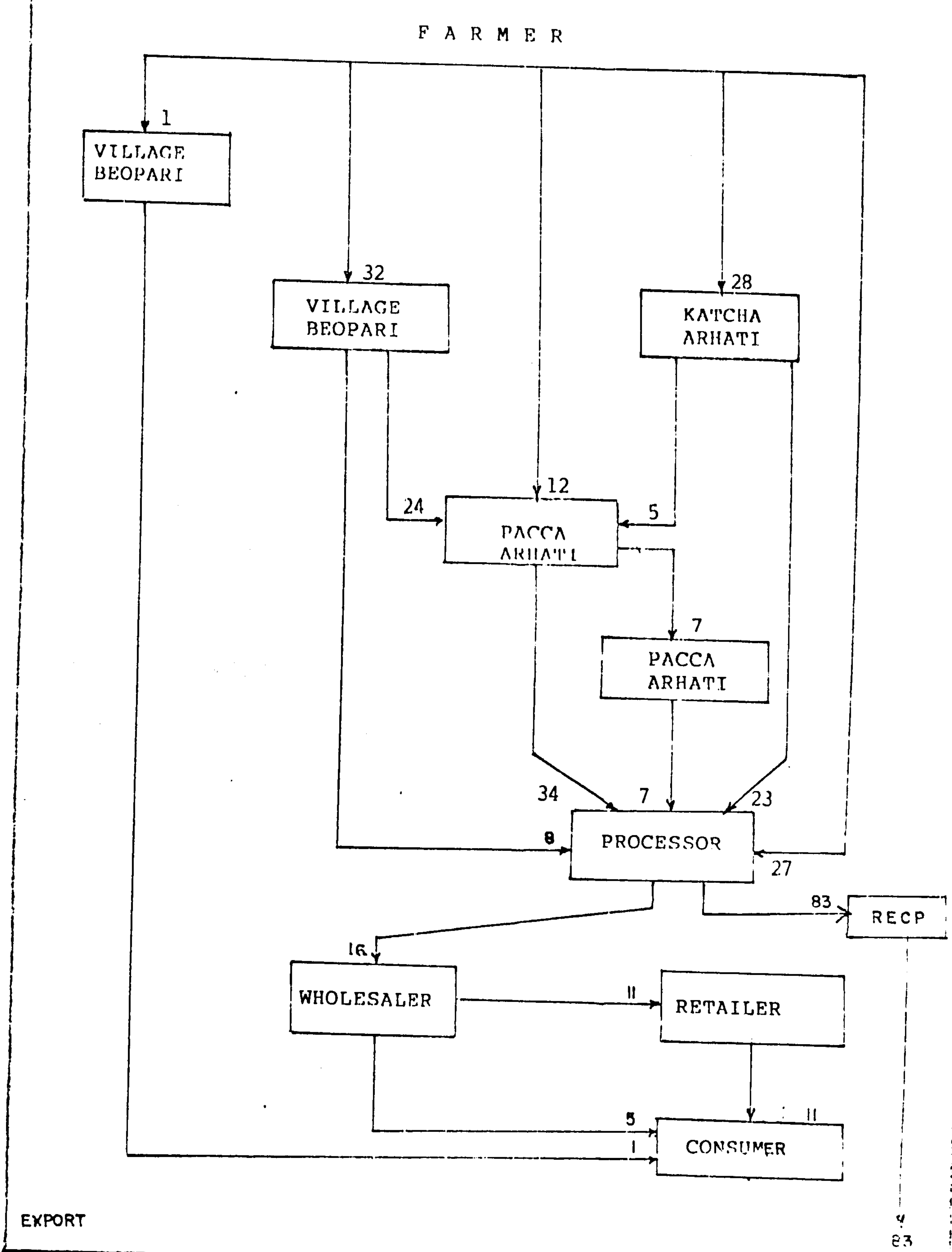
| | Rice Basmati | | | | | Rice Irri | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Punjab | | | | | Punjab | | | | | Sind | | | | | Total | | | | |
| | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | |
| | | Amount (Rs.) | % | Amount (Rs.) | Ratio to Gross Margin | | Amount | % | Amount (Rs.) | Ratio to Gross Margin | | Amount (Rs.) | % | Amount (Rs.) | Ratio to Gross Margin | | Amount (Rs.) | % | Amount (Rs.) | Ratio to Gross Margin |
| Farm Gate | 50.49 | – | – | – | – | 45.72 | – | – | – | – | 47.21 | – | – | – | – | 47.07 | – | – | – | – |
| Farmer Cost | 2.22 | – | – | – | – | 4.43 | – | – | – | – | 3.31 | – | – | – | – | 3.95 | – | – | – | – |
| Dealers | 3.91 | 9.69 | 8.63 | 7.74 | 79.88 | 7.95 | 9.88 | 15.95 | 7.00 | 70.85 | 2.99 | 3.68 | 6.16 | 2.61 | 70.92 | 5.16 | 5.14 | 8.49 | 3.03 | 58.95 |
| Processors | 14.52 | 36.00 | 32.06 | 17.21 | 47.81 | 10.93 | 13.58 | 21.95 | 8.18 | 60.23 | 11.70 | 14.42 | 24.14 | 5.55 | 38.71 | 11.06 | 13.91 | 24.63 | 4.25 | 30.55 |
| Wholesalers | 12.45 | 30.86 | 27.49 | 27.32 | 88.50 | 13.38 | 16.63 | 26.84 | 13.08 | 78.65 | 14.01 | 17.26 | 28.90 | 13.94 | 80.75 | 13.78 | 17.03 | 28.13 | 13.60 | 79.86 |
| Retailers | 14.41 | 35.72 | 31.82 | 32.06 | 89.73 | 17.59 | 21.86 | 35.29 | 18.20 | 83.26 | 19.78 | 24.37 | 40.80 | 21.75 | 89.25 | 18.98 | 23.46 | 38.75 | 20.22 | 86.19 |
| Total | 100.00 | 112.27 | 100.00 | 84.43 | 75.19 | 100.00 | 61.95 | 100.00 | 46.46 | 75.00 | 100.00 | 59.73 | 100.00 | 43.88 | 73.46 | 100.00 | 59.54 | 100.00 | 41.10 | 69.03 |

## 4.17 SCHEMATIC DIAGRAMS OF MARKET FLOWS

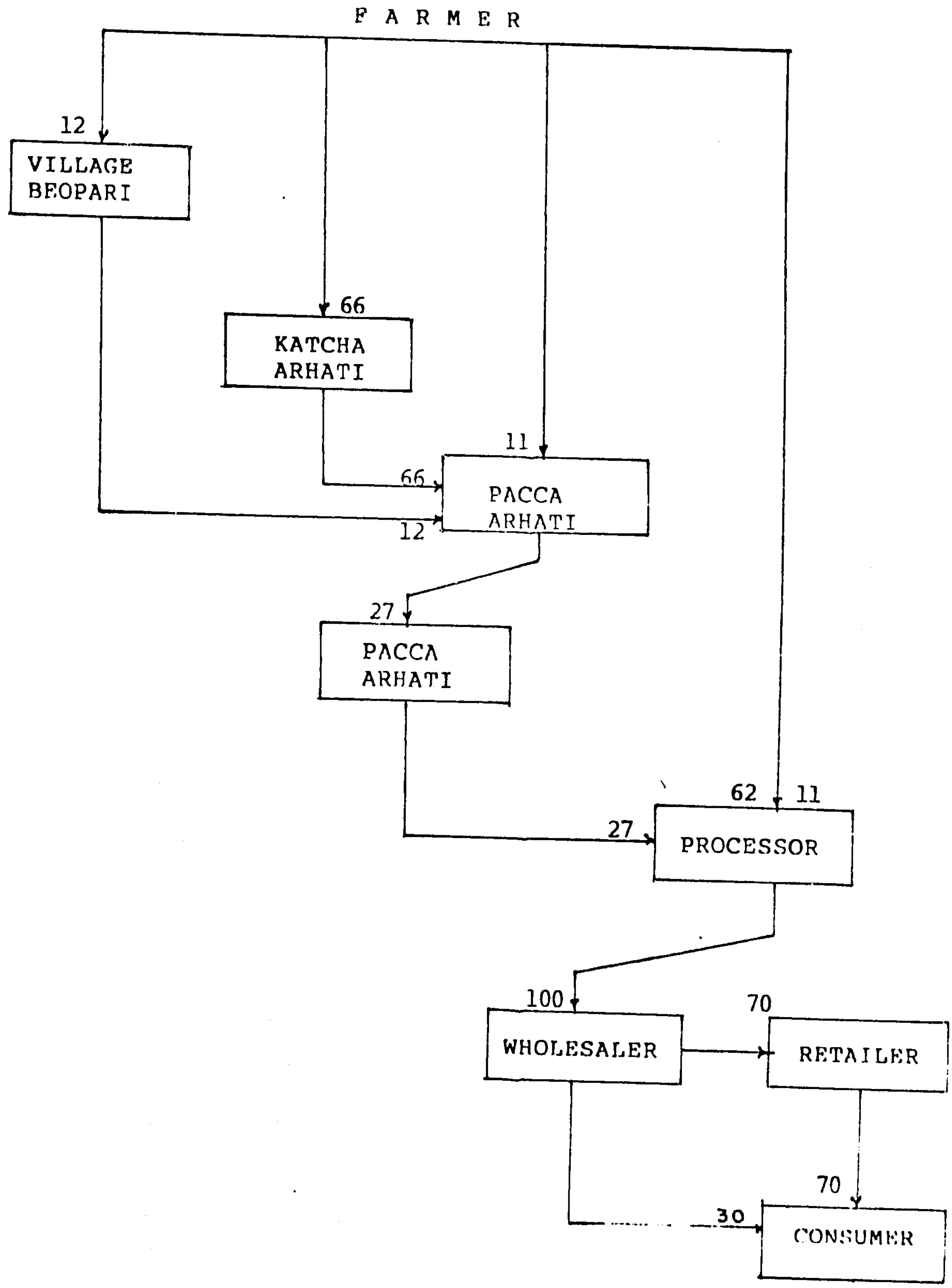
a) Schematic diagrams for market flows showing market channels for each province and for the sample as whole are given on page 195 to 198.

b) Diagrams showing geographical flow for one major producing district for each province are given on page 199 to 200.

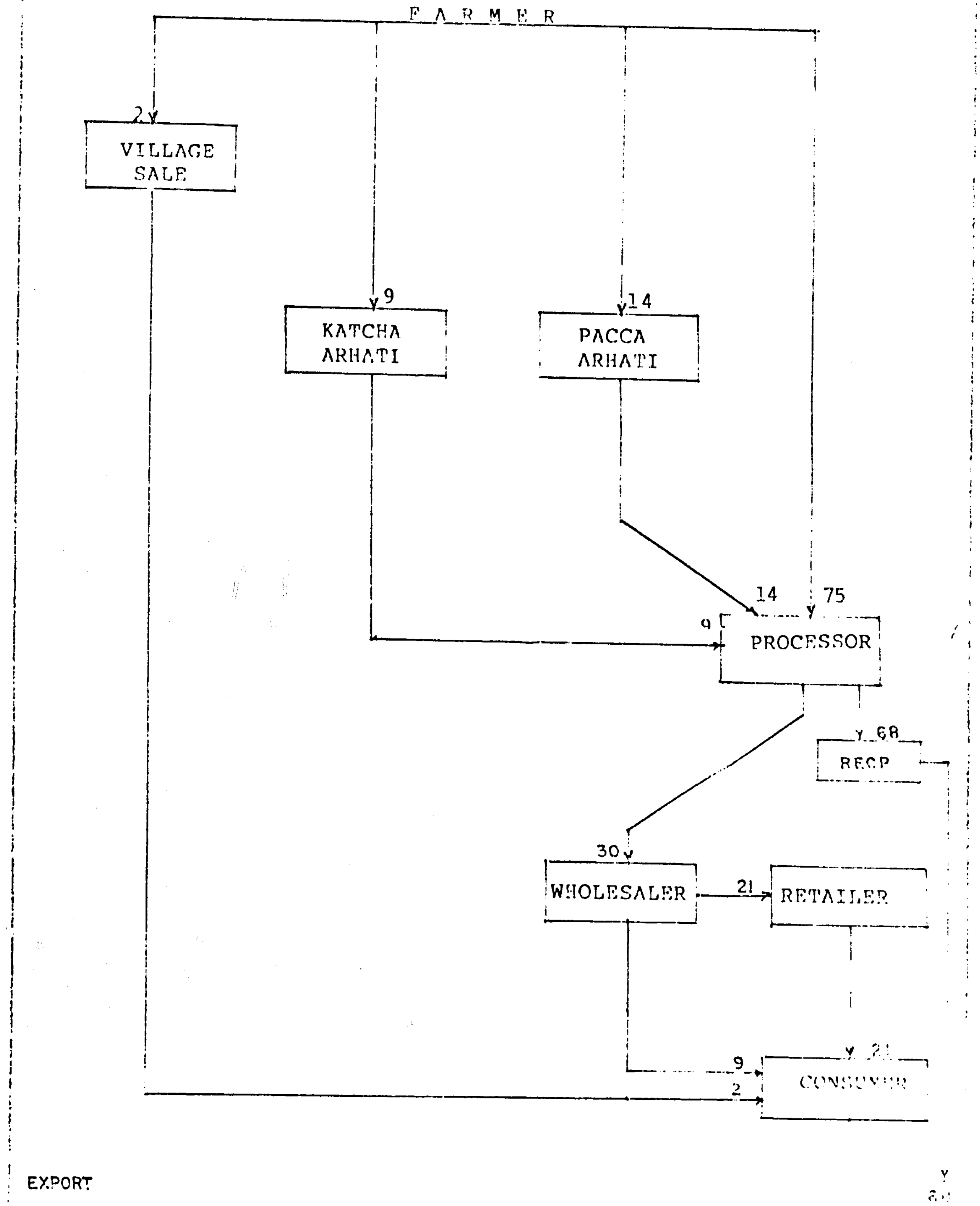
SCHEMATIC DIAGRAM SHOWING MARKETING CHANNELS
RICE BASMATI (PUNJAB)



SCHEMATIC DIAGRAM SHOWING MARKETING CHANNELS
RICE IRRI (PUNJAB)



SCHEMATIC DIAGRAM SHOWING MARKETING CHANNELS
RICE IRRI (SINDH)



SCHEMATIC DIAGRAM SHOWING MARKETING CHANNELS
RICE IRRI (PAKISTAN)

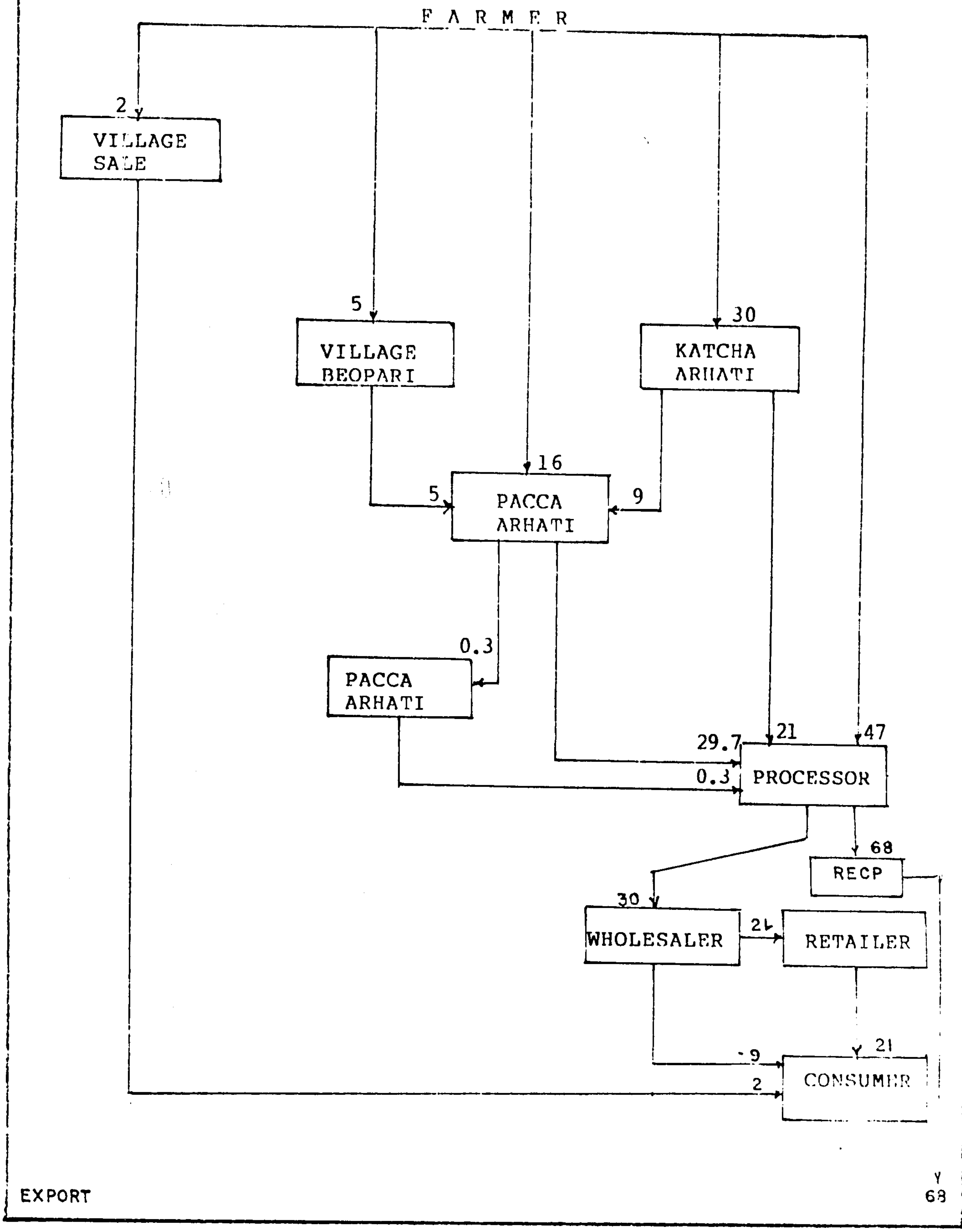


Figure 4.5

DIAGRAM SHOWING GEOGRAPHICAL FLOW
RICE BASMATI (GUJRANWALA)

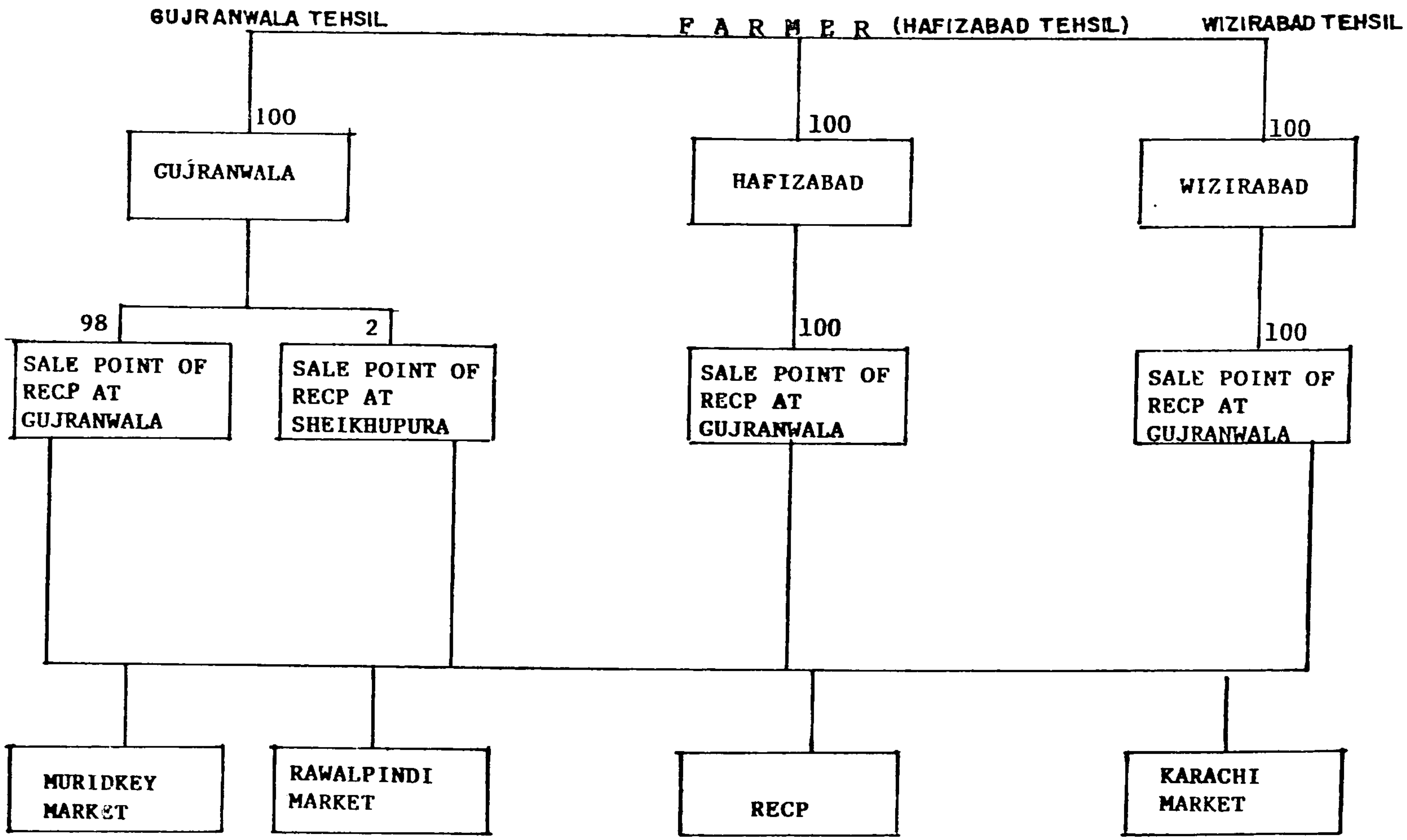
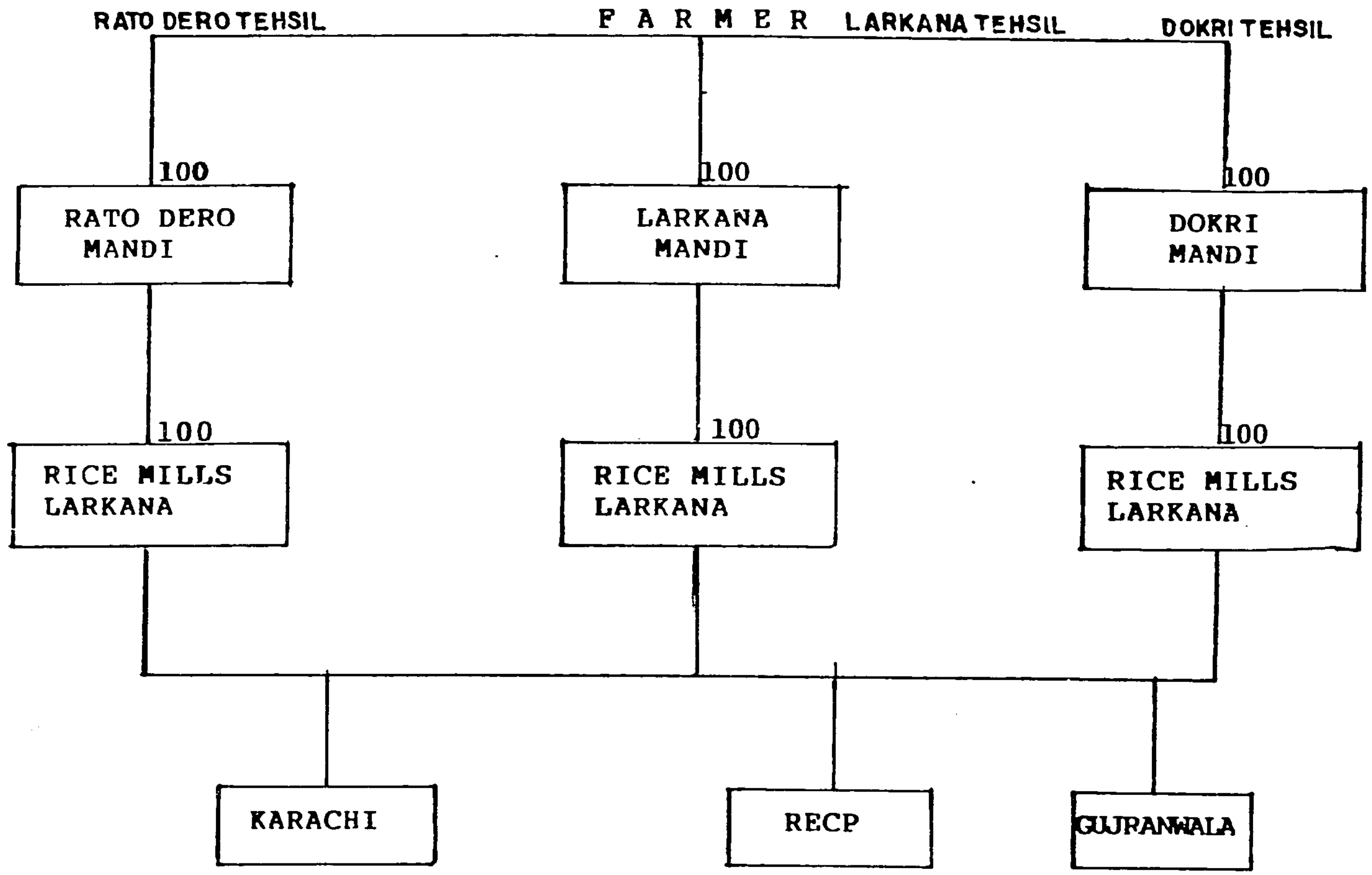


Figure 4.6

DIAGRAM SHOWING GEOGRAPHICAL FLOW
RICE IRRI (LARKANA)



## 4.18 SHARES OF MARKETING SERVICES IN GROSS MARGINS

Percentage shares of costs of various marketing services in the gross margins of rice basmati and rice irri for various marketing channels and their averages are shown in Table 4.30 and 4.31. The actual amounts are included in Table IV.28 and IV.29 of the Statistical Appendix.

Net margins or profits absorb about 70 percent of the gross margins. Processing cost is next important item accounting for 15.98% of the total margin for basmati rice and 10.34% for irri variety. Transport is the third most important cost for both the varieties.

TABLE 4.30

PERCENTAGE SHARES OF MARKETING SERVICES IN GROSS MARGINS
(RICE BASMATI)

(PERCENTAGE)

| | PUNJAB | | | | | | Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | |
| Labour | 2.55 | 3.57 | 2.76 | 1.84 | 1.76 | 1.00 | 2.25 |
| Storage | 0.89 | 0.91 | 1.03 | 0.52 | 0.82 | 0.64 | 0.80 |
| Transport | 4.01 | 4.10 | 5.10 | 5.02 | 4.98 | 6.35 | 4.93 |
| packing | 0.20 | 0.26 | 0.37 | 0.32 | 0.56 | - | 0.28 |
| Rent | 1.22 | 1.58 | 1.77 | 1.45 | 1.20 | 1.05 | 1.38 |
| Taxes | 0.10 | 0.10 | 0.49 | 0.49 | 0.34 | 0.10 | 0.27 |
| Credit Cost | - | 0.04 | 0.16 | 0.12 | 0.04 | - | 0.06 |
| Processing Cost | 16.69 | 16.69 | 14.94 | 14.94 | 14.94 | 17.69 | 15.98 |
| Net Margin | 73.67 | 71.97 | 66.84 | 68.86 | 68.64 | 72.55 | 70.42 |
| Miscellaneous | 0.67 | 0.78 | 6.54 | 6.44 | 6.72 | 0.62 | 3.63 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE 4.31

PERCENTAGE SHARES OF MARKETING SERVICES IN GROSS MARGINS

RICE IRRI

(PERCENTAGE)

| | PUNJAB | | | | SIND | | | Average |
|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII | |
| Labour | 6.06 | 5.75 | 3.19 | 1.53 | 1.46 | 1.44 | 0.96 | 2.91 |
| Storage | 1.00 | 0.89 | 0.83 | - | 0.59 | 0.81 | - | 0.59 |
| Transport | 8.59 | 10.23 | 8.32 | 6.16 | 9.42 | 10.18 | 12.26 | 9.31 |
| packing | 0.90 | 1.12 | 1.74 | - | - | 0.01 | - | 0.54 |
| Rent | 2.52 | 3.17 | 2.11 | 1.60 | 0.48 | 0.43 | 0.33 | 1.52 |
| Taxes | 0.18 | 1.02 | 0.88 | 0.16 | 0.61 | 0.43 | 0.48 | 0.54 |
| Credit Cost | 0.02 | 0.49 | 0.01 | - | - | - | - | 0.07 |
| Processing Cost | 8.96 | 7.97 | 7.51 | 7.80 | 11.89 | 14.00 | 14.28 | 10.34 |
| Net Margin | 70.30 | 61.30 | 68.66 | 81.80 | 68.42 | 67.87 | 70.70 | 69.87 |
| Miscellaneous | 1.47 | 8.06 | 6.75 | 0.95 | 7.13 | 4.83 | 0.99 | 4.31 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

## 4.19 BY-PRODUCTS

The main by-products of rice milling are:

- Husk
- Bran

a) Husk:

About 20 to 22 percent husk are generated relative to the weight of paddy depending on its variety. Presently the major use of husk is in brick making industry where it is used as fuel. The other traditional uses, which are rather uneconomical, include its uses in wall insulation, fuel cakes (mixed in dung), animal feed in mixture with bran and seed beds for rice forming.

Bulk of the husk produced by the sample units was consumed as fuel by small brick kilns located in the vicinity. These kilns purchased husk directly from the rice mills.

The average unit prices of husk for the sample units were Rs. 4.00 per 40 kg. for Punjab and Rs. 1.02 per 40 kg. for Sindh.

b) Rice Bran:

The production of rice barn is estimated at 8 to 9 percent of rice output. Major uses of bran are in poultry feed and oil making. Rice mills sell bran to feed mills and oil makers directly.

The average unit prices of bran for the sample units were Rs. 32.63 per 40 kg. for Punjab and Rs. 41.52 per 40 Kg. for Sindh.

# CHAPTER V

## 5. MARKETING SYSTEM OF PULSES

### 5.1 INTRODUCTION

The marketing system of pulses was studied in respect of the following crops.

- Gram
- Mung
- Mash
- Masoor

The districts selected, the number of villages and the number of sample growers for each selected district, for each of the above crops are shown in Table 5.1

The marketing system of each of the pulse crop is described separately in the following sub-sections.

### 5.2 MARKETING SYSTEM OF GRAM

#### i) Village Sample Characteristics

The average population per village was 3318. The average cultivated area per head of population was 1.07 acres for the entire sample. The ratios were 1.35 and 0.72 and 0.78 acres for the Punjab, NWFP and Sind samples respectively.

TABLE 5.1

SAMPLE DISTRICTS, NUMBER OF VILLAGES AND THE NUMBER OF SAMPLE GROWERS SURVEYED FOR PULSE CROPS

| Crops | Province | District | No. of Villages | No. of Sample Growers |
|---|---|---|---|---|
| Gram | Punjab | Bhakkar | 3 | 30 |
| | | Khushab | 5 | 37 |
| | Sind | Jacobabad | 3 | 30 |
| | NWFP | Bannu | 2 | 20 |
| | Sub-Total | | 13 | 117 |
| Mung | Punjab | D.G. Khan/Leiah | 2 | 24 |
| | Sind | Sanghar/Khairpur | 3 | 24 |
| | NWFP | Swat | 2 | 16 |
| | Sub-Total | | 7 | 64 |
| Mash | Punjab | Sialkot | 3 | 36 |
| | | Rawalpindi | 3 | 42 |
| | Sub-Total | | 6 | 78 |
| Masoor | Punjab | Rawalpindi | 3 | 38 |
| | | Sialkot | 3 | 38 |
| | Sub-Total | | 6 | 76 |
| Total | | | 32 | 335 |

Gram accounted for 20 percent of the cultivated area in the sample villages. (Table 5.2)+

ii) Growers Sample Characteristics

The growers sample consisted of 117 growers. The shares of the small, medium and large size farms in the total sample were 42, 21 and 37 percents respectively. The average size of the sample household was 8.80 persons of whom 3.18 were children of upto 10 years of age. (Table 5.3).

Gram occupied an important place in the cropping scheme of the sample growers. A review of Table 5.4, showing percentage share of area under gram by different size holdings, indicates that about two thirds of the sample area in the Punjab and Sind were under gram. In the case of the NWFP sample 48 percent of the total area was devoted to the cultivation of gram.

The relative shares of area under gram were negatively correlated with the size of the sample holdings for the Punjab and total samples. In the case of NWFP and Sind samples, however, no clear trend was noticed.

The average yields of gram showed considerable variation among various provinces. Being a rain-fed area crop, the yields are influenced significantly by the local physical and seasonal climatic factors. Thus the NWFP sample

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\+ Detailed district wise tables are included in Statistical Appendix.

TABLE 5.2

AVERAGE POPULATION, CULTIVATED AREA AND SHARE OF PULSE CROPS FOR SAMPLE GROWERS

CROP: GRAM

| District | No. of Villages | Average Village Population (No.) | Average Cultivated Area/Village (Acres) | Average Distance in Kilo Meters From: Nearest Town | Railway Station | Procurement Centre Food | Procurement Centre Passco | Regulated Market | %age Area of Gram to Total Area |
|---|---|---|---|---|---|---|---|---|---|
| Bhakkar | 3 | 1933 | 5233 | 17 | 10 | - | 1 | 8 | 20 |
| Khushab | 5 | 3500 | 3140 | 17 | 15 | 27 | 7 | - | 22 |
| Punjab | 8 | 2913 | 3925 | 17 | 13 | 17 | 5 | 3 | 21 |
| NWFP | 2 | 4108 | 2965 | 11 | 10 | - | - | - | 18 |
| Sind | 3 | 3573 | 3007 | 14 | 14 | - | - | - | 17 |
| Pakistan | 13 | 3318 | 3559 | 15 | 12 | 12 | 9 | 12 | 20 |
| | | | | | | | | | |

TABLE 5.3

CLASSIFICATION OF SAMPLE HOLDING BY FARM SIZES AND AVERAGE HOUSEHOLD COMPOSITION FOR SAMPLE PROVINCES

CROP: GRAM

| Province | Farm Size | Sample Size | | Household Composition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Above 10 Years | | | Children | | | Total | | |
| | | Number | % age | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Punjab | Small | 21 | 18 | 2.24 | 2.10 | 4.34 | 0.95 | 0.67 | 1.62 | 3.19 | 2.77 | 5.95 |
| | Medium | 18 | 15 | 2.11 | 2.72 | 4.83 | 1.11 | 1.33 | 2.44 | 3.22 | 4.06 | 7.25 |
| | Large | 28 | 24 | 2.89 | 2.39 | 5.28 | 1.54 | 1.64 | 3.18 | 4.43 | 4.03 | 8.46 |
| | Total | 67 | 57 | 2.48 | 2.39 | 4.87 | 1.24 | 1.25 | 2.49 | 3.72 | 3.64 | 7.35 |
| NWFP | Small | 7 | 6 | 4.86 | 3.86 | 8.72 | 2.71 | 2.57 | 5.28 | 7.57 | 6.43 | 14.00 |
| | Medium | 5 | 4 | 4.80 | 2.60 | 7.90 | 2.60 | 2.00 | 4.60 | 7.40 | 4.60 | 12.00 |
| | Large | 8 | 7 | 4.75 | 4.00 | 8.75 | 2.50 | 1.88 | 4.38 | 7.25 | 5.88 | 13.13 |
| | Total | 20 | 17 | 4.80 | 3.60 | 8.40 | 2.60 | 2.15 | 4.75 | 7.40 | 5.75 | 13.15 |
| Sind | Small | 21 | 18 | 3.14 | 2.24 | 5.38 | 2.29 | 1.24 | 3.53 | 5.43 | 3.48 | 8.91 |
| | Medium | 2 | 2 | 2.50 | 3.00 | 5.50 | 3.00 | 1.00 | 4.00 | 5.50 | 4.00 | 9.50 |
| | Large | 7 | 6 | 3.00 | 2.57 | 5.57 | 2.00 | 1.86 | 3.86 | 5.00 | 4.43 | 9.43 |
| | Total | 30 | 26 | 3.07 | 2.37 | 5.44 | 2.27 | 1.37 | 3.64 | 5.34 | 3.74 | 9.05 |
| Pakistan | Small | 49 | 42 | 3.00 | 2.41 | 5.41 | 1.78 | 1.18 | 2.96 | 4.78 | 3.59 | 8.37 |
| | Medium | 25 | 21 | 2.68 | 2.72 | 5.40 | 1.56 | 1.44 | 3.00 | 4.24 | 4.16 | 8.40 |
| | Large | 43 | 37 | 3.26 | 2.72 | 5.98 | 1.79 | 1.72 | 3.51 | 5.05 | 4.44 | 9.49 |
| | Total | 117 | 100 | 3.03 | 2.57 | 5.62 | 1.74 | 1.44 | 3.18 | 4.77 | 4.03 | 8.80 |

TABLE 5.4

%AGE SHARE OF AREA UNDER GRAM IN THE TOTAL AREA OF DIFFERENT SIZES OF SAMPLE HOLDINGS OF EACH PROVINCE

CROP: GRAM

| Province | Farm Size | %age of Cultivated Area | | Average Yield per acre (40 Kg.) |
|---|---|---|---|---|
| | | Area | % | |
| Punjab | Small | 7.19 | 79 | 2.90 |
| | Medium | 13.19 | 78 | 2.12 |
| | Large | 49.25 | 63 | 2.08 |
| | Total | 26.38 | 65 | 2.16 |
| NWFP | Small | 8.50 | 79 | 6.43 |
| | Medium | 4.65 | 22 | 2.34 |
| | Large | 18.69 | 49 | 7.14 |
| | Total | 11.61 | 48 | 7.19 |
| Sind | Small | 3.67 | 78 | 4.01 |
| | Medium | 12.00 | 86 | 7.21 |
| | Large | 23.36 | 61 | 7.96 |
| | Total | 8.82 | 67 | 6.74 |
| Pakistan | Small | 5.87 | 72 | 3.93 |
| | Medium | 11.39 | 62 | 3.15 |
| | Large | 39.35 | 61 | 3.10 |
| | Total | 19.35 | 62 | 3.21 |

growers showed the highest average yield of 7.19 maunds per acre as against 7.74 maunds for Sind and only 2.16 maunds for the Punjab samples. The level of yields were inversely related with the size of holdings for the Punjab and total samples and directly correlated in the case of Sind sample. No clear trend was found for the NWFP sample.

The percentage shares of different uses of the total output of gram for different size sample growers of each province are shown in Table 5.5. Domestic consumption, payments in kind and seed requirements taken together accounted for 31 percent of the total output for the sample as a whole. This ratio was the highest at 45 percent for the NWFP sample and the least at 7 percent for the Sind sample.

The average per capita quantity kept for domestic consumption comes to 0.26 kg. for the year. The average monthly consumption of gram reported by Household Income and Expenditure Survey[1] (1985-86) was 0.03 kg for the rural areas. The Consumer Survey, carried out as a part of the present assignment, has yielded an average per capita consumption of 0.10 kg. These two estimates give yearly average consumption of 0.36 maunds and 1.20 maunds respectively.

iii) Marketed Surplus

The shares of the total produce marketed by the sample growers are also shown in Table 5.5. For the sample as a whole, 69 percent of the total produce was marketed. The corresponding ratios for the small, medium and large farms were 71, 59 and 70 percents respectively. The ratio did not show any distinct trend as among different sized holdings.

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1. Federal Bureau of Statistics, Household Income and Expenditure Survey, 1985-86,

TABLE 5.5

PERCENTAGE SHARE OF DIFFERENT USES OF THE TOTAL OUTPUT OF GRAM SAMPLE GROWERS OF DIFFERENT SIZES OF EACH PROVINCE

CROP: GRAM

| Province | Farm Size | Domestic Consumption | Payment in Kind | Kept for Seed | Marketed | Total |
|---|---|---|---|---|---|---|
| Punjab | Small | 5 | 15 | 16 | 64 | 100 |
| | Medium | 2 | 18 | 27 | 53 | 100 |
| | Large | 2 | 12 | 19 | 67 | 100 |
| | Total | 2 | 13 | 20 | 65 | 100 |
| NWFP | Small | 9 | 11 | 14 | 66 | 100 |
| | Medium | 25 | 24 | 7 | 44 | 100 |
| | Large | 5 | 32 | 9 | 54 | 100 |
| | Total | 9 | 26 | 10 | 55 | 100 |
| Sind | Small | 4 | – | 9 | 87 | 100 |
| | Medium | 1 | – | 2 | 97 | 100 |
| | Large | 1 | 1 | 5 | 93 | 100 |
| | Total | 2 | – | 5 | 93 | 100 |
| Pakistan | Small | 6 | 10 | 13 | 71 | 100 |
| | Medium | 8 | 16 | 17 | 59 | 100 |
| | Large | 3 | 13 | 14 | 70 | 100 |
| | Total | 4 | 13 | 14 | 69 | 100 |

The Planning and Development Study (19) estimated the marketed surplus at 60 percent for the entire sample, though it also noticed direct correlation of the marketed surplus ratios with the size of holdings.

iv) <u>Seasonal Spread of Marketing Operations</u>

Gram is a rabi (winter) crop, sown in September/October and harvested in April/May. The greater part of the total produce is sold during the harvest season extending from April to June. For the sample as a whole, as much as 82 percent was sold during the period. The corresponding ratios for Sind and Punjab samples were 99 and 84 percents respectively. In the case of NWFP sample however, sales were more evenly distributed. In this case only 47 percent of the output was sold during the harvest season, while 30 percent was sold during the quarter July-September and 23 percent in the following three months of October to December.

The average monthly prices showed considerable variations for each provincial sample. The gram prices were determined by the local conditions of demand and supply and the crop prospects. Taking the sample as a whole, the monthly average prices ranged between Rs. 186.10 to Rs. 344.00 showing a variation of 85 percent during the year. The corresponding ratios for the Punjab, Sind and NWFP sample were 38, 92 and 67 percents respectively.

Taking the sample as a whole, the average price realized by the growers was Rs. 232.82 per maund. The average was the highest at Rs. 256.29 per maund for the NWFP sample and the least at Rs. 223.68 per maund for the Punjab sample. The higher prices for the NWFP sampel were primarily due to more even distribution of sales throughout the year, the off-season sales accounting for a significant part of the total sales. (Table 5.6)

TABLE 5.6

CLASSIFICATION OF TOTAL QUANTITY SOLD BY MONTHS BY SAMPLE GROWERS OF DIFFERENT FARM SIZES AND AVERAGE SALE PRICES FOR EACH PROVINCE

CROP: GRAM

| Province | Farm Size | Percentage of Quantity Sold in | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. | Jan. | Total |
| Punjab | Small | - | 24 | 31 | 26 | 19 | - | - | - | - | - | 100 |
| | Medium | 11 | 56 | 29 | - | 4 | - | - | - | - | - | 100 |
| | Large | - | 32 | 55 | 7 | 6 | - | - | - | - | - | 100 |
| | Total | 1 | 34 | 49 | 9 | 7 | - | - | - | - | - | 100 |
| NWFP | Small | - | - | 18 | 6 | 13 | 55 | 8 | - | - | - | 100 |
| | Medium | - | 3 | 19 | - | - | - | 78 | - | - | - | 100 |
| | Large | 21 | 5 | 38 | - | - | 15 | 1 | 9 | 11 | - | 100 |
| | Total | 13 | 3 | 31 | 2 | 4 | 24 | 11 | 5 | 7 | - | 100 |
| Sind | Small | - | 83 | 16 | - | 1 | - | - | - | - | - | 100 |
| | Medium | - | 95 | - | - | - | - | - | - | - | 5 | 100 |
| | Large | - | 100 | - | - | - | - | - | - | - | - | 100 |
| | Total | - | 97 | 2 | - | - | - | - | - | - | 1 | 100 |
| Pakistan | Small | - | 36 | 22 | 11 | 11 | 17 | 3 | - | - | - | 100 |
| | Medium | 5 | 59 | 18 | - | 2 | - | 15 | - | - | 1 | 100 |
| | Large | 3 | 50 | 35 | 4 | 3 | 2 | - | 1 | 2 | - | 100 |
| | Total | 3 | 48 | 31 | 5 | 4 | 5 | 2 | 1 | 1 | - | 100 |

| Province | Farm Size | Average Sale Price Per (40 Kg.) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. | Jan. | Total |
| Punjab | Small | - | 202.94 | 210.98 | 165.49 | 166.05 | - | - | - | - | - | 189.9[illegible] |
| | Medium | 186.00 | 189.73 | 159.06 | - | 150.00 | - | - | - | - | - | 175.55 |
| | Large | - | 225.34 | 242.59 | 270.64 | 174.34 | - | - | - | - | - | 234.98 |
| | Total | 186.00 | 217.07 | 234.89 | 235.47 | 271.08 | - | - | - | - | - | 240.65 |
| NWFP | Small | - | - | 240.00 | 300.00 | 270.37 | 258.11 | 330.00 | - | - | - | 264.43 |
| | Medium | - | 275.00 | 200.00 | - | - | - | 272.92 | - | - | - | 255.[illegible] |
| | Large | 212.00 | 200.00 | 213.76 | - | - | 360.00 | 336.00 | 344.00 | 264.00 | - | 251.6[illegible] |
| | Total | 212.00 | 206.00 | 217.10 | 300.00 | 270.37 | 297.64 | 287.81 | 344.00 | 264.00 | - | 255.29 |
| Sind | Small | - | 206.71 | 123.06 | - | 103.00 | - | - | - | - | - | 192.44 |
| | Medium | - | 240.00 | - | - | - | - | - | - | - | 108.00 | 232.97 |
| | Large | - | 242.00 | - | - | - | - | - | - | - | - | 242.00 |
| | Total | - | 236.74 | 123.06 | - | 103.00 | - | - | - | - | 108.00 | 232.74 |
| Pakistan | Small | - | 205.83 | 196.48 | 190.90 | 205.36 | 258.11 | 330.00 | - | - | - | 214.37 |
| | Medium | 186.00 | 216.10 | 167.01 | - | 150.00 | - | 272.92 | - | - | - | 210.55 |
| | Large | 212 | 235.74 | 237.56 | 270.64 | 174.34 | 360.00 | 336.00 | 344.00 | 264.00 | - | 240.03 |
| | Total | 207.12 | 229.61 | 226.35 | 239.33 | 186.10 | 297.64 | 287.81 | 344.00 | 264.00 | - | 232.82 |

v) Storage Facilities

The average storage capacity for the sample as a whole was estimated at 274 maunds. The available facilities were considered adequate for storing quantities of gram kept for domestic consumption and for use as seed.

The storage facilities for the Punjab sample consisted mostly of pacca rooms and pacca bharolas while the other two provincial samples used katcha rooms and katcha bharolas for storage purpose.

Storage losses at the farm level were estimated at 1 percent of the quantities stored (Table 5.7).

vi) Marketing Channels for Growers

The provincial samples showed distinct trends in respect of the marketing channels used by the growers for sale of their gram output. In the case of the Punjab, village beopari was the most predominant market actor to whom 92 percent of the marketed surplus was sold by the sample growers. The remaining 8 percent was also sold by them within the villages to the local shopkeepers. In the case of Sind and NWFP sample growers, however, pacca and katcha arhatis were the main marketing channels. For the sample as a whole the shares of village beopari, pacca and katcha arhatis were 46, 31 and 16 percents respectively (Table 5.8).

vii) Marketing Costs of Growers

No marketing costs were incurred for sales to village beoparis and local shopkeepers. The average marketing

## TABLE 5.7

### AVERAGE STORAGE CAPACITY CLASSIFIED BY TYPE FOR SAMPLE GROWERS OF EACH PROVINCE

CROP: GRAM (40 Kg.)

| Province | Farm Size | Avg. Quantity Kept for Storage | Total Storage Capacity of all Types | % of Storage Capacity Utilization to total Capacity | %age of Standard Storage Capacity to Total | Losses (%) |
|---|---|---|---|---|---|---|
| Punjab | Small | 4.33 | 111 | 4 | 19 | – |
| | Medium | 8.11 | 233 | 3 | 57 | – |
| | Large | 21.57 | 714 | 3 | 91 | 1 |
| | Total | 12.55 | 396 | 3 | 79 | 1 |
| NWFP | Small | 12.43 | 119 | 10 | – | – |
| | Medium | 14.05 | 58 | 24 | – | – |
| | Large | 18.91 | 339 | 5 | – | – |
| | Total | 15.43 | 192 | 8 | – | – |
| Sind | Small | 1.91 | 11 | 17 | – | – |
| | Medium | 2.00 | 8 | 25 | – | – |
| | Large | 12.15 | 183 | 7 | – | – |
| | Total | 4.39 | 51 | 8 | – | – |
| Pakistan | Small | 4.45 | 70 | 6 | 13 | – |
| | Medium | 8.81 | 180 | 5 | 53 | – |
| | Large | 19.75 | 557 | 4 | 76 | 1 |
| | Total | 11.01 | 274 | 4 | 66 | 1 |

TABLE 5.8

MARKETING CHANNELS FOR SAMPLE GROWERS OF EACH PROVINCE

CROP: GRAM (%AGE)

| Province | Farm Size | Type of Actor | | | | | |
|---|---|---|---|---|---|---|---|
| | | Local Sales | Vilalge Shopkeeper | Village Beopari | Pacca Arhati | Katcha Arhati | Total |
| Punjab | Small | - | 16 | 84 | - | - | 100 |
| | Medium | - | 6 | 94 | - | - | 100 |
| | Large | - | 7 | 93 | - | - | 100 |
| | Total | - | 8 | 92 | - | - | 100 |
| NWFP | Small | - | - | 6 | - | 94 | 100 |
| | Medium | - | - | 19 | - | 81 | 100 |
| | Large | 29 | - | 5 | - | 66 | 100 |
| | Total | 18 | - | 7 | - | 75 | 100 |
| Sind | Small | - | - | - | 71 | 29 | 100 |
| | Medium | - | - | - | 95 | 5 | 100 |
| | Large | - | - | - | 99 | 1 | 100 |
| | Total | - | - | - | 94 | 6 | 100 |
| Pakistan | Small | - | 6 | 31 | 24 | 39 | 100 |
| | Medium | - | 3 | 51 | 30 | 16 | 100 |
| | Large | 5 | 4 | 49 | 32 | 10 | 100 |
| | Total | 3 | 4 | 46 | 31 | 16 | 100 |

costs for sales to pacca and katcha arhatis were estimated at Rs. 19.17 and Rs. 9.16 per maund respectively. These costs formed 8.6 percent and 3.92 percents of the farm gate prices realized by the sample growers for sales through these agencies and 8.0 and 3.8 percents of the average sale prices.

Commission charges was the major component of the marketing costs (Table 5.9)

viii) Farm Gate Prices

The farm gate prices realized by the sample growers varied from Rs. 206.00 per maund in the case of local sales to Rs. 233.71 per maund for katcha arhatis. (Table 5.10) It may however be mentioned that quality characteristics, time of sale, sale lots, distance to nearest markets, obligations to sell through certain intermediary are some of the major factors which influence sale prices, marketing costs and hence the farm gate prices obtained through different channels. As the available data base does not permit necessary adjustments for the various determining factors, the comparative analysis is only indicative.

It appears that the maximum average prices were reported for the large sample holdings of Punjab for their sales to village shopkeepers and hence the average farm gate prices in their case was the maximum.

TABLE 5.9

CLASSIFICATION OF MARKETING COSTS OF GROWERS FOR SALES TO DIFFERENT FUNCTIONARIES AND THE FARM GATE PRICES FOR EACH PROVINCES

GRAM

| Province | Farm Size | PACCA ARHATI | | | | | | | | | | KATCHA ARHATI | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE | | | | | | | Farm Gate Price | Average Marketing Price | Marketing Cost | %AGE OF MARKETING COST | | | | | | | Farm Gate Price |
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Punjab | Small | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| NWFP | Small | – | – | – | – | – | – | – | – | – | – | 262.25 | 7.05 | – | 23 | – | 52 | 25 | – | 100 | 255.20 |
| | Medium | – | – | – | – | – | – | – | – | – | – | 262.57 | 8.69 | – | 30 | – | 62 | 8 | – | 100 | 253.88 |
| | Large | – | – | – | – | – | – | – | – | – | – | 278.15 | 10.86 | – | 17 | – | 53 | 24 | 6 | 100 | 267.29 |
| | Total | – | – | – | – | – | – | – | | – | – | 270.45 | 9.63 | – | 20 | – | 52 | 22 | 6 | 100 | 260.82 |
| Sind | Small | 269.59 | 18.23 | 5 | 8 | 3 | 47 | – | 37 | 100 | 251.36 | 126.61 | 9.33 | – | 20 | 5 | 22 | 32 | 21 | 100 | 117.28 |
| | Medium | 280.00 | 17.80 | 6 | 8 | 2 | 47 | – | 37 | 100 | 262.20 | 108.00 | 6.74 | 19 | 30 | 6 | 30 | 15 | – | 100 | 101.26 |
| | Large | 293.15 | 19.46 | 5 | 8 | 1 | 42 | – | 44 | 100 | 273.69 | 108.00 | 6.50 | 20 | 16 | 6 | 31 | 15 | 12 | 100 | 101.50 |
| | Total | 280.54 | 19.17 | 5 | 8 | 2 | 43 | – | 42 | 100 | 261.37 | 114.24 | 7.57 | 11 | 21 | 6 | 27 | 22 | 13 | 100 | 106.67 |
| Pakistan | Small | 269.59 | 18.23 | 5 | 8 | 3 | 47 | – | 37 | 100 | 251.36 | 235.12 | 7.45 | – | 22 | 1 | 45 | 27 | 5 | 100 | 227.67 |
| | Medium | 280.00 | 17.80 | 6 | 8 | 2 | 47 | – | 37 | 100 | 262.20 | 214.60 | 8.70 | 4 | 28 | 2 | 58 | 8 | – | 100 | 205.90 |
| | Large | 293.15 | 19.46 | 5 | 8 | 1 | 42 | – | 44 | 100 | 273.69 | 254.84 | 10.81 | 2 | 16 | – | 52 | 24 | 6 | 100 | 224.03 |
| | | 280.54 | 19.17 | 5 | 8 | 2 | 43 | – | 42 | 100 | 261.37 | 242.87 | 9.16 | 2 | 20 | 1 | 51 | 21 | 5 | 100 | 233.71 |

1. Preparation Charges 2. Transportation Charges 3. Octroi 4. Commission 5. Paladari, Weighmen & Chunger 6. Cost of Deduction 7. Total

TABLE 5.10

AVERAGE FARM GATE PRICES FOR SALES THROUGH DIFFERENT CHANNELS

CROP: GRAM

| Province | Farm Size | Local Sales | | | Village Shopkeeper | | | Village Beopari | | | Pacca Arhati | | | Katcha Arhati | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sale Price | Marketing Cost | Farm Gate Price | Sale Price | Marketing Cost | Farm Gate Price | Sale Price | Marketing Cost | Farm Gate Price | Sale Price | Marketing Cost | Farm Gate Price | Sale Price | Marketing Cost | Farm Gate Price |
| Punjab | Small | - | - | - | 224.00 | - | 224.00 | 191.94 | - | 191.94 | - | - | - | - | - | - |
| | Medium | - | - | - | 174.00 | - | 174.00 | 280.22 | - | 280.22 | - | - | - | - | - | - |
| | Large | - | - | - | 288.70 | - | 288.77 | 226.83 | - | 226.83 | - | - | - | - | - | - |
| | Total | - | - | - | 260.64 | - | 260.64 | 268.60 | - | 268.60 | - | - | - | - | - | - |
| NWFP | Small | - | - | - | - | - | - | 300.00 | - | 300.00 | - | - | - | 262.25 | 7.05 | 255.70 |
| | Medium | - | - | - | - | - | - | 300.00 | - | 300.00 | - | - | - | 262.57 | 8.69 | 253.88 |
| | Large | 206.00 | - | 206.00 | - | - | - | 333.00 | - | 333.00 | - | - | - | 278.15 | 10.86 | 267.29 |
| | Total | 206.00 | - | 206.00 | - | - | - | 323.90 | - | 323.90 | - | - | - | 270.45 | 9.63 | 260.82 |
| Sind | Small | - | - | - | - | - | - | - | - | - | 269.59 | 18.23 | 251.36 | 126.61 | 9.33 | 117.28 |
| | Medium | - | - | - | - | - | - | - | - | - | 280.00 | 17.80 | 262.20 | 108.00 | 6.74 | 101.26 |
| | Large | - | - | - | - | - | - | - | - | - | 293.15 | 19.46 | 273.69 | 108.00 | 6.50 | 101.50 |
| | Total | - | - | - | - | - | - | - | - | - | 280.54 | 19.17 | 261.37 | 114.24 | 7.57 | 106.67 |
| Pakistan | Small | - | - | - | 224.00 | - | 224.00 | 249.83 | - | 249.83 | 269.59 | 18.23 | 251.36 | 235.12 | 7.45 | 227.67 |
| | Medium | - | - | - | 174.00 | - | 174.00 | 291.27 | - | 291.27 | 280.00 | 17.80 | 262.20 | 214.60 | 8.70 | 205.90 |
| | Large | 206.00 | - | 206.00 | 288.70 | - | 288.70 | 299.00 | - | 299.00 | 293.15 | 19.46 | 273.69 | 254.84 | 10.81 | 224.03 |
| | Total | 206.00 | - | 206.00 | 260.64 | - | 260.64 | [illegible] | - | 298.84 | 280.54 | 19.17 | 261.37 | 242.87 | 9.16 | 223.71 |

ix) Transportation Modes and Costs

The usual modes of transport of tractor/trolley, trucks, bullock/camel carts, horse drawn carts were used by sample growers. Percentage shares of different modes for sample growers of different farm sizes are given in Table 5.11. The corresponding ratios for each sample district are included in Table V-8 of the Statistical Appendix.

It appears that tractor/trolley was the only mode used by the sample growers of Punjab. It was also the most important mode for Sindh sample, accounting for transporting 87% of their produce. For NWFP sample, horse drawn carts was the most important mode in terms of share of produce transported and truck was the most important mode on the basis of the proportion of sample growers using this mode of transport.

TABLE 5.11

PERCENTAGE CLASSIFICATION OF QUANTITIES TRANSPORTED BY DIFFERENT MODE FOR SAMPLE GROWERS OF DIFFERENT FARM SIZE FOR EACH PROVINCE

GRAM

| | Farm Size | Tractor/ Trolley | | Truck | | Bullocks/ Camel Carts | | Horse Drawn Carts | | Pack Animal | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. |
| Punjab | Small | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| | Medium | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| | Large | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| | Total | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| NWFP | Small | – | – | 86 | 17 | – | – | 14 | 83 | – | – | 100 | 100 |
| | Medium | – | – | 75 | 91 | 25 | 9 | – | – | – | – | 100 | 100 |
| | Large | – | – | 83 | 57 | – | – | 17 | 43 | – | – | 100 | 100 |
| | Total | – | – | 82 | 41 | 6 | 1 | 12 | 58 | – | – | 100 | 100 |
| Sind | Small | 90 | 35 | 5 | 41 | – | – | 5 | 24 | – | – | 100 | 100 |
| | Medium | 50 | 95 | – | – | – | – | 50 | 5 | – | – | 100 | 100 |
| | Large | 86 | 95 | – | – | – | – | 14 | 5 | – | – | 100 | 100 |
| | Total | 87 | 90 | 3 | 41 | – | – | 10 | 6 | – | – | 100 | 100 |
| Pakistan | Small | 80 | 14 | 16 | 23 | – | – | 4 | 63 | – | – | 100 | 100 |
| | Medium | 59 | 52 | 25 | 33 | 8 | 3 | 8 | 12 | – | – | 100 | 100 |
| | Large | 67 | 57 | 24 | 29 | – | – | 9 | 14 | – | – | 100 | 100 |
| | Total | 73 | 46 | 19 | 28 | 1 | 1 | 7 | 25 | – | – | 100 | 100 |

The average cost per maund per kilometer did not show much variation as among various modes, varying between Rs. 0.19 per maund per kilometer for tractor/trolleys as well as for horse drawn carts to Rs. 0.21 for trucks (Table 5.12).

x) Marketing Channels for the Second Stage Marketing Actors

Summary characteristics of the second stage actors, village beoparis, katcha arhatis and pacca arhatis, are included in Table 5.13. The shares of their sales to different agencies is given in Table 5.14.

These actors trade among themselves, though the largest share of the sales has been with the processor except for village beoparis who sold the major share to pacca arhaties.

On the basis of the present survey, four major maketing channels have been identified as shown below:

Punjab:

I. Farmer --- Beopari --- Pacca Arhati --- Processor --- Wholesaler ---- Retailer.

Sind:

II. Farmer --- Pacca Arhati --- Processor --- Wholesaler --- Retailer.

N.W.F.P

II. Farmer --- Beopari --- Processor --- Wholesaler --- Retailer.

TABLE 5.12

AVERAGE TRANSPORTATION COST BY DIFFERENT MODES OF TRANSPORTATION

CROP: GRAM (Rs. 40 Kg. Per km

| Province | Farm Size | Tractor/Trolley | Truck | Bullock/Cammel Cart | Horse Drawn Cart |
|---|---|---|---|---|---|
| Punjab | Small | 0.40 | – | – | – |
| | Medium | 0.11 | – | – | – |
| | Large | 0.23 | – | – | – |
| | Total | 0.26 | – | – | – |
| NWFP | Small | – | 0.22 | – | 0.16 |
| | Medium | – | 0.31 | 0.20 | – |
| | Large | – | 0.18 | – | 0.24 |
| | Total | – | 0.21 | 0.20 | 0.17 |
| Sind | Small | 0.17 | 0.10 | – | 0.20 |
| | Medium | 0.15 | – | – | 0.20 |
| | Large | 0.15 | – | – | 0.10 |
| | Total | 0.15 | 0.10 | – | 0.16 |
| Pakistan | Small | 0.26 | 0.20 | – | 0.18 |
| | Medium | 0.15 | 0.31 | 0.20 | 0.20 |
| | Large | 0.18 | 0.18 | – | 0.18 |
| | Total | 0.19 | 0.21 | 0.20 | 0.19 |

TABLE 5.13

SUMMARY OF CHARACTERISTICS OF DIFFERENT TYPE OF MARKET ACTOR BY DISTRICT CROP: GRAM

| | Pacca Arhati | | | | | | | Katcha Arhati | | | | | | | Village Beopari | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quantity Traded | Purchases inflow | Sales outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price | Quantity Traded | Purchases inflow | Sales/outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price | Quantity Traded | Purchases inflow | Sales/outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price |
| Bakkar | 53260 | Beopari | Processor | 900 | 10500 | 295.79 | 331.35 | - | - | - | - | - | - | - | 36320 | Farmer | Pacca Arhati | 956 | 7264 | 245.[illegible] | [illegible] |
| Khushab | 10715 | Beopari | Processor | 425 | 1200 | 295.79 | 331.35 | | - | - | - | - | - | - | 8175 | Farmer | Pacca Arhati | 227 | 908 | 285.[illegible] | [illegible] |
| Punjab | 63975 | Beopari | Processor | 890 | 9750 | 295.79 | 331.35 | - | - | - | - | - | - | - | 44495 | Farmer | Pacca Arhati | 601 | 3178 | 268.[illegible] | [illegible] |
| Jacobabad | 79500 | Beopari Pacca Arhati | Processor | 1136 | 13250 | 280.54 | 364.54 | | | | + | | - | - | | - | - | - | - | - | - |
| Bannu | 1500 | Katcha Arhati | Processor | 530 | 750 | 300.15 | 330.00 | 1250 | Beopari | Pacca Arhati | 125 | 1250 | 270.45 | 300.15 | 7500 | Farmer | Processor | 375 | 3750 | 323.9[illegible] | 335.00 |
| Pakistan | 144975 | Beopari Katcha Arhati Pacca Arhati | Processor | 995 | 11250 | 280.54 to 300.15 | 331.35 to 364.54 | 1250 | Beopari | Pacca Arhati | 125 | 1250 | 270.45 | 300.15 | 51995 | Farmer | Pacca Arhati Processor | 488 | 3250 | 268.6[illegible] to 323.9[illegible] | [illegible] to 335.00 |

+ Katcha Arhati of Sample Growers of Jacobabad accounting for 6 percent of Sample Growers were not traceable.

TABLE 5.14

PERCENTAGE OF GRAM SOLD TO DIFFERENT ACTORS BY SECOND STAGE SELLERS

| Province | Type of Actor | TO WHOM SOLD | | | |
|---|---|---|---|---|---|
| | | Katcha Arhati | Pacca Arhati | Processor | Total |
| Punjab | Village Beopari | - | 100 | - | 100 |
| | Katcha Arhati | - | - | - | - |
| | Pacca Arhati | - | - | 100 | 100 |
| Sindh | Village Beopari | - | - | - | - |
| | Katcha Arhati | - | - | - | - |
| | Pacca Arhati | - | - | 100 | 100 |
| NWFP | Village Beopari | - | - | 100 | 100 |
| | Katcha Arhati | - | 100 | - | 100 |
| | Pacca Arhati | - | - | 100 | 100 |
| Pakistan | Village Beopari | - | 67 | 33 | 100 |
| | Katcha Arhati | - | 100 | - | 100 |
| | Pacca Arhati | - | - | 100 | 100 |

IV. Farmer --- Katcha Arhati --- Pacca Arhati --- Processor --- Wholesaler --- Retailer.

Percentage shares of farmgate prices and of marketing margins in the retail prices for each of the above marketing channels are ginve in Table 5.15 The actual amounts are shown in Table V-10 of the Statistical Appendix.

The farmers shares in the final retail prices have varied between 60.02 to 74.54 percent for the sample growers.

The percentage price spread between the growers and the consumer has been analysed in terms of the following elements of marketing performance.

- average farmer's share in consumer rupee.

- distribution of gross margin among various intermediaries/stages.

- share of net margin to gross margin at each stage.

The above data are included in Table 5.16 for each of the provincial samples. It appears that the on the whole processors gets the maximum share of the gross margin followed by retailers and market dealers. Similar trends were noticed in the case of provincial samples except that the second highest share was accounted for by dealers for the Punjab and NWFP samples.

The net margins form a very high proportion of gross margins varying from 94.90 percent for processor to 84.25 percent for the retailers for the sample as a whole. These high ratios indicate elements of inefficiency in the

TABLE 5.15

PERCENTAGE OF GROSS MARGIN COST NET MARGIN AND FARM GATE PRICE TO CONSUMER PRICE

CROP: GRAM

| | GRAM | | | |
|---|---|---|---|---|
| | PUNJAB | SIND | N W F P | |
| | I | II | III | IV |
| A. Farm gate price | 61.81 | 60.15 | 74.54 | 60.02 |
| Farmer cost | - | 4.41 | - | 2.22 |
| B. Beopari | | | | |
| - Gross Margin | 6.26 | - | 3.24 | - |
| - Cost | 0.06 | - | 0.42 | - |
| - Net Margin | 6.20 | - | 2.82 | |
| C. Katcha Arhati | | | | |
| - Gross Margin | - | - | - | 6.83 |
| - Cost | - | - | - | 0.35 |
| - Net Margin | | | - | 6.48 |
| D. Pacca Arhati | | | | |
| - Gross Margin | 8.18 | 5.52 | - | 6.87 |
| - Cost | 0.49 | 0.11 | - | 0.32 |
| - Net Margin | 7.69 | 5.41 | | 6.55 |
| E. Processor | | | | |
| - Gross Margin | 9.25 | 15.42 | 7.72 | 9.56 |
| - Cost | 0.65 | 0.65 | 0.65 | 0.65 |
| - Net Margin | 8.60 | 14.77 | 7.07 | 8.91 |
| F. Wholesaler | | | | |
| - Gross Margin | | 6.67 | 6.67 | 6.67 |
| - Cost | 0.57 | 0.57 | 0.57 | 0.57 |
| - Net Margin | 6.10 | 6.10 | 6.10 | 6.10 |
| G. Retailer | | | | |
| - Gross Margin | 7.83 | 7.83 | 7.83 | 7.83 |
| - Cost | 1.23 | 1.23 | 1.23 | 1.23 |
| - Net Margin | 6.60 | 6.60 | 6.60 | 6.60 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE 5.16

RATIO OF GROSS MARGIN AND NET MARGIN

CROP: GRAM

| | Punjab | | | | | Sind | | | | | NWFP | | | | | Total | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | |
| | | Amount (Rs.) | % | Amount (Rs.) | Ratio to Gross Margin | | Ratio to Gross Margin | % | Amount (Rs. | Ratio to Gross Margin | | Amount (Rs. | % | Amount (Rs.) | Ratio to Gross Margin | | Amount (Rs.) | % | Amount (Rs. | Ratio to Gross Margin |
| Farmgate | 61.81 | - | - | - | - | 60.15 | - | - | - | - | 60.89 | - | - | - | - | 61.32 | - | - | - | - |
| Farmer Cost | - | - | - | - | - | 4.41 | - | - | - | - | 2.09 | - | - | - | - | 3.09 | - | - | - | - |
| Dealer | 1[illegible].44 | 62.75 | 37.82 | 60.36 | 96.19 | 5.52 | 24.00 | 15.58 | 23.54 | 98.08 | 13.07 | 56.79 | 35.30 | 46.57 | 82.00 | 7.74 | 33.63 | 21.75 | 28.56 | 84.98 |
| Processor | 9.25 | 40.18 | 24.22 | 37.35 | 92.96 | 15.42 | 66.99 | 43.51 | 64.16 | 95.78 | 9.45 | 41.06 | 25.53 | 38.23 | 93.11 | 13.35 | 60.01 | 37.51 | 56.95 | 94.90 |
| Whole | 6.67 | 28.97 | 17.46 | 26.48 | 91.40 | 6.67 | 28.97 | 18.82 | 26.48 | 91.40 | 6.67 | 28.97 | 18.02 | 26.48 | 91.40 | 6.67 | 28.95 | 18.74 | 26.48 | 91.37 |
| Retailer | 7.83 | 34.04 | 20.50 | 28.68 | 84.25 | 7.83 | 34.04 | 22.09 | 28.68 | 84.25 | 7.83 | 34.04 | 21.15 | 28.68 | 84.25 | 7.83 | 34.04 | 22.00 | 28.65 | 84.25 |
| Total | 100 | 165.94 | 100 | 152.87 | 92.12 | 100 | 154.00 | 100 | 142.86 | 92.77 | 100 | 160.86 | 100 | 139.96 | 87.01 | 100 | 155.66 | 100 | 140.69 | 89.81 |

marketing system and the scope for reducing the gross margins in the overall price structure.

The Planning and Development Division Study (19) estimated the share of grower's farmgate prices in the consumers rupee at 69.50 percent for gram whole. The ratios of gross margins of wholesalers and retailers in the total and the shares of net margin in gross margins were estimated as follows:

| | Gross Margin % | Ratio of net margin to gross margin % |
|---|---|---|
| Wholesaler | 10.94 | 55 |
| Retailers | 17.18 | 66 |

Aslam Choudhry (6) estimates the gross margin of processors at 7.4 percent of his purchase price. His net margin was estimated at 39.28 percent of the gross margin. The retailers gross margin was estimated by him at 22 percent of his purchase price, the net margin being 90 percent of the gross margin.

Nazir Ahmad, (15) estimates the share of farm gate price at 73.14 percent of the consumer price on the basis of his case study of Faisalabad market. His estimates of gross margins as percentages of consumer's price and share of net margins in gross margins are given below:

| | Gross Margin % | Net Margin as % of gross margin |
|---|---|---|
| Village Dealers | 13.00 | 32.61 |
| Commission Agent | 5.13 | 55.36 |
| Processors | 18.62 | 71.53 |
| Retailer | 33.75 | 91.55 |

xi) Marketing and Operation Cost of Second Stage Actors

The average marketing and operation costs of second stage actors have varied between Re. 0.49 for beopari to Re. 1.53 per maund for katcha arhati. Operating costs constitute the major component, accounting for 59 to 80 percent of the total for different actors. The value of losses in the total cost has varied between 6 to 13 percent for the sample intermediaries (Table 5.17).

Detailed breakdown of operating costs, storage costs, cost of losses and of transport costs are given in Tables V.11 to V.14 of the Statistical Appendix.

xii) Pulses Processing Units

A total of 12 pulses processing units were surveyed. These units undertake pulse splitting operations for all types of pulses crops.

Estimates of the average fixed assets and the pulses recovery ratios for the sample units are given in Table

TABLE 5.17

COST COMPONENTS OF SECOND STAGE MARKET INTERMEDIRIES

CROP: GRAM

| | | Rs./40 Kg. | | | | | | | (Percentages) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Operating cost | Storage Cost | Losses | Transport Cost | Credit Cost | Other | Total | Operating Cost | Storage Cost | Losses | Transport Cost | Credit Cost | Other | Total |
| Beopari | Punjab | 0.22 | - | 0.01 | 0.02 | | 0.02 | 0.27 | 82 | - | 4 | 7 | - | 7 | 100 |
| | Sind | | | | | | | - | | | | | | | |
| | NWFP | 1.39 | - | 0.14 | 0.24 | | 0.05 | 1.82 | 76 | - | 8 | 13 | - | 3 | 100 |
| | Pakistan | 0.38 | - | 0,03 | 0.04 | - | 0.03 | 0.49 | 80 | - | 6 | 8 | - | 6 | 100 |
| Katch Arhati | Punjab | | | | | | | | | | | | | | |
| | Sind | | | | | | | | | | | | | | |
| | NWFP | 1.31 | 0.10 | - | - | - | 0.12 | 1.53 | 85 | 7 | - | - | - | 8 | 100 |
| | Pakistan | 1.31 | 0.10 | - | - | - | 0.12 | 1.53 | 85 | 7 | - | - | - | 8 | 100 |
| Pacca Arhati | Punjab | 1.60 | 0.15 | 0.16 | 0.16 | - | 0.08 | 2.15 | 75 | 7 | 7 | 7 | - | 4 | 100 |
| | Sind | 0.27 | 0.06 | 0.03 | 0.05 | - | 0.05 | 0.46 | 59 | 12 | 7 | 11 | - | 11 | 100 |
| | NWFP | 1.04 | 0.09 | 0.11 | 0.16 | - | - | 1.40 | 75 | 6 | 8 | 11 | - | - | 100 |
| | Pakistan | 0.68 | 0.08 | 0.06 | 0.09 | | 0.05 | 0.96 | 71 | 9 | 6 | 9 | - | 5 | 100 |

TABLE 5.18

AVERAGE PROCESSING COST OF THE SAMPLE UNITS -- GRAM

Rs./40 Kg.

| HEAD | | AMOUNT |
|---|---|---|
| DIRECT COST | | |
| - Salary and Wages | | 0.61 |
| - Contract Labour | | - |
| - Electricity | | 0.52 |
| - Telephone | | 0.10 |
| - Repair and Maintenance | | 0.13 |
| - Other Miscellaneous | | 0.06 |
| | Sub-Total: | 1.42 |
| FIXED COST: | | |
| - Salaries and Allowances | | 0.16 |
| - Administrative | | 0.12 |
| - Rent and Tax | | 0.15 |
| - Miscellaneous Cost | | - |
| | Sub-Total: | 0.43 |
| FINANCIAL COST | | 0.03 |
| DEPRECIATION | | 0.51 |
| TRANSPORTATION COST | | - |
| STORAGE COST | | - |
| OTHER COST | | 0.44 |
| TOTAL: | | 2.83 |

V-15 of the Statistical Appendix while their average cost structure is given in Table 5.18.

xiii) **Wholesalers and Retailers**

The major components of average costs of wholesalers and retailers are given in Table 5.19. It appears that transportation cost is the major component accounting for about half of the total average costs.

xiv) **Shares of Marketing Services in Gross Margins**

Percentage shares of costs of various marketing services in the gross margins of gram for various marketing channels and their averages are shown in Table 5.20. The actual amounts are included in Table V.16 of the Statistical Appendix.

Net margins or profits absorb 87 percent of the gross margins. ransport cost is the next important item accounting 34% of the total.

xv) **Schematic Diagrams of market flows**

a Schema tic diagrams for market flows showing market channels for each province and for the sample as whole are given on page 238 to 241.

b Diagrams showing geographical flow for one major producing district for each province are given page 242 to 244.

TABLE 5.19

AVERAGE COSTS OF SAMPLE WHOLESALERS AND RETAILERS

Rs.40/Kg.

| | Wholesalers | Retailers |
|---|---|---|
| OPERATING COSTS: | | |
| - Labour | 0.84 | 0.63 |
| - Rent | 0.86 | 0.29 |
| - Electricity | 0.17 | 0.04 |
| - Phone | 0.08 | 0.23 |
| - Taxes | 0.12 | 0.12 |
| - Others | 0.40 | 0.13 |
| Sub-Total: | 2.47 | 1.44 |
| TRANSPORTATION | 2.89 | 1.05 |
| TOTAL: | 5.36 | 2.49 |
| TRANSPORTATION COST AS % OF TOTAL: | 54 | 42 |

Table- 5.20

CLASSIFICATION OF GROSS MARKETING MARGIN BY MAJOR MARKETING SERVICES BY MARKETING CHANNELS

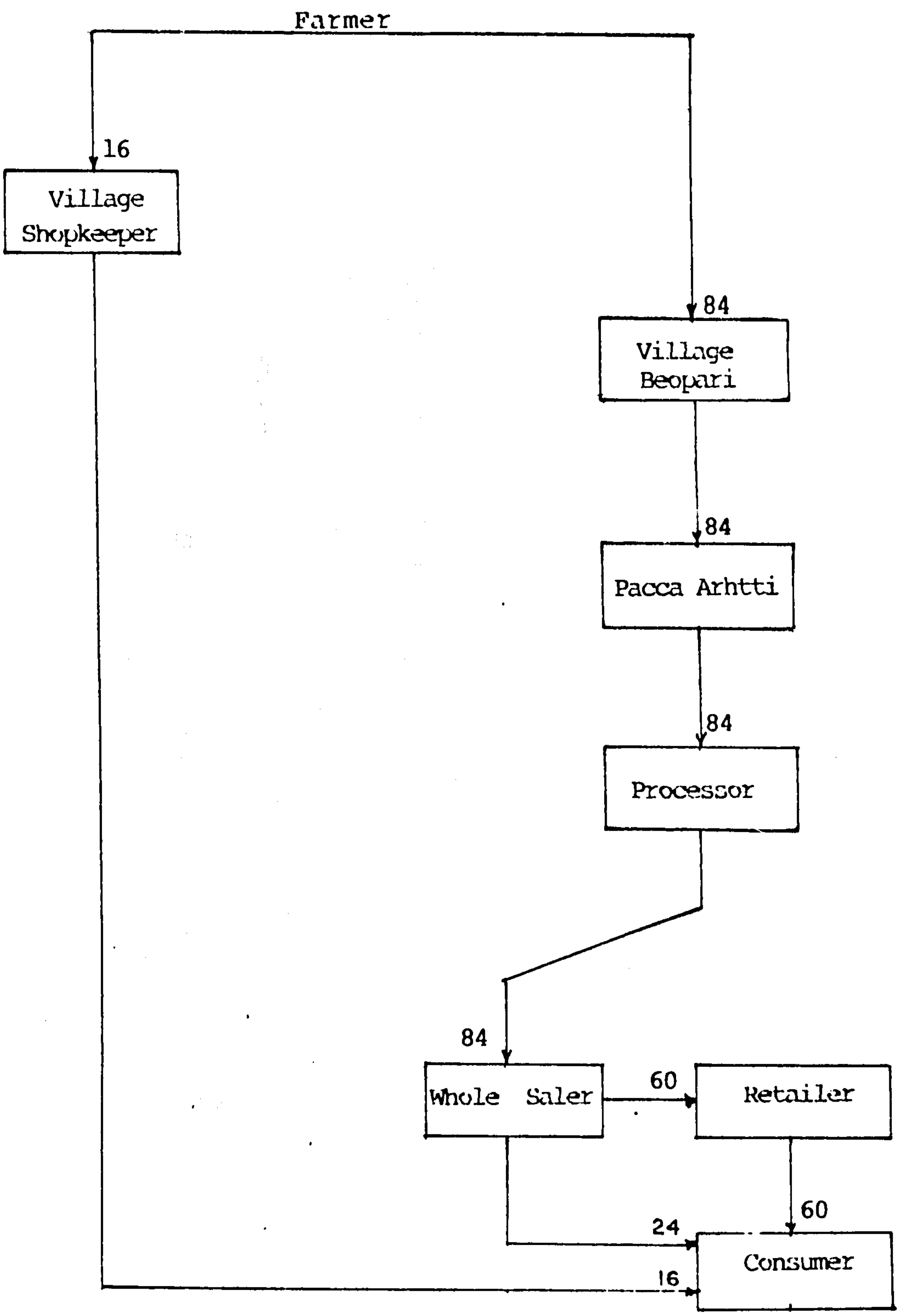
GRAM

(Percentage)

| | GRAM | | | | Average |
|---|---|---|---|---|---|
| | I | II | III | IV | |
| Labour | 1.42 | 0.97 | 1.91 | 1.52 | 1.45 |
| Storage | 0.39 | 0.32 | 0.45 | 0.39 | 0.38 |
| Transport | 2.48 | 3.19 | 3.78 | 3.47 | 3.22 |
| Packing | 0.13 | 0.55 | - | - | 0.22 |
| Rent | 1.13 | 0.70 | 1.72 | 1.34 | 1.21 |
| Taxes | 0.14 | 0.36 | 0.21 | 0.14 | 0.21 |
| Credit Cost | - | - | - | - | - |
| Processing Cost | 1.71 | 1.64 | 2.56 | 1.63 | 1.88 |
| Net Margins | 91.81 | 82.21 | 88.25 | 86.34 | 87.14 |
| Miscellaneous | 0.79 | 10.06 | 1.12 | 5.17 | 4.29 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Figure- 5.1

SCHEMETIC DIAGRAM SHOWING CHANNELS
Gram (Punjab)




5.2

Figure-5.3

SCHEMETIC DIAGRAM SHOWING CHANNELS

Gram (NWFP)

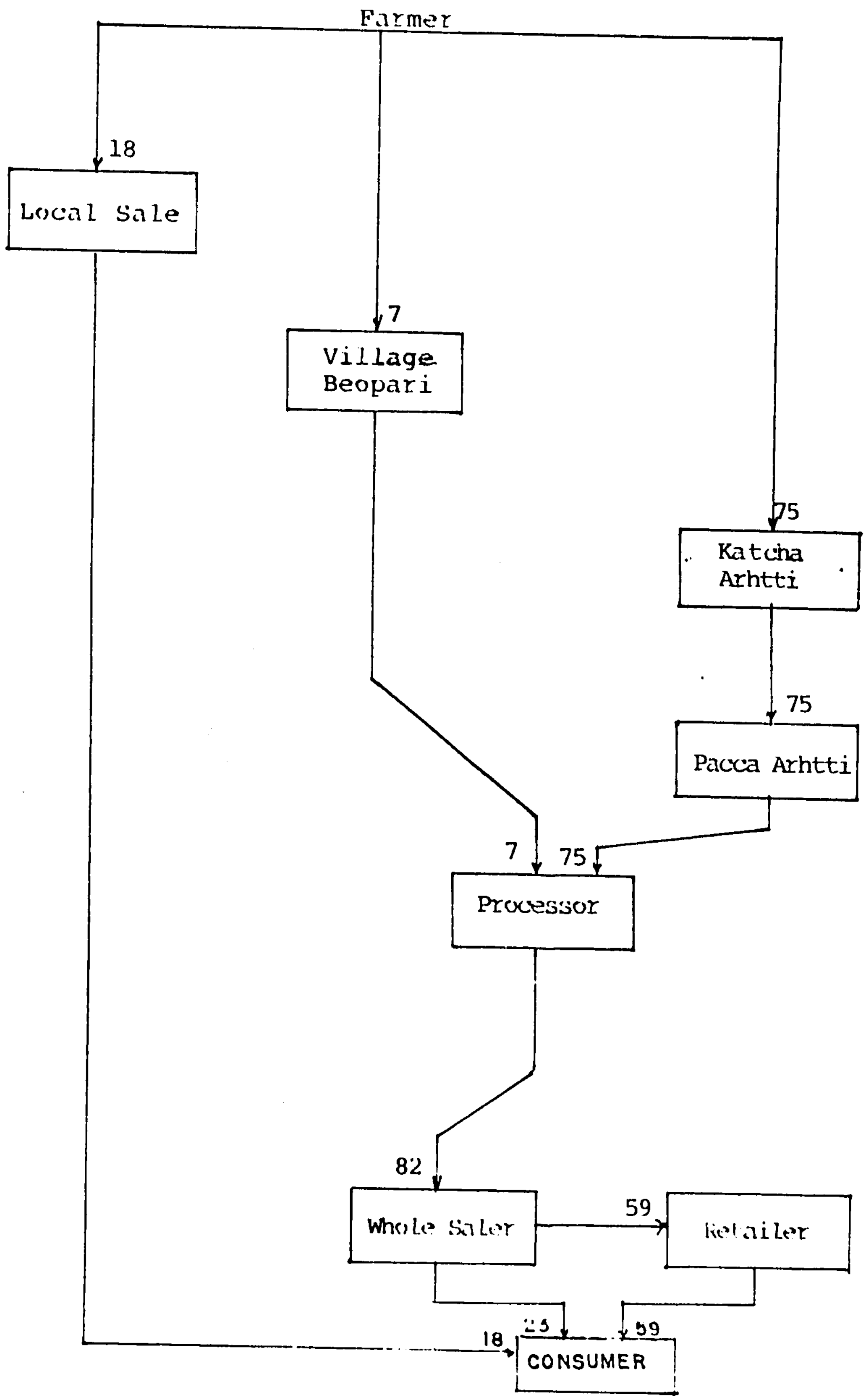
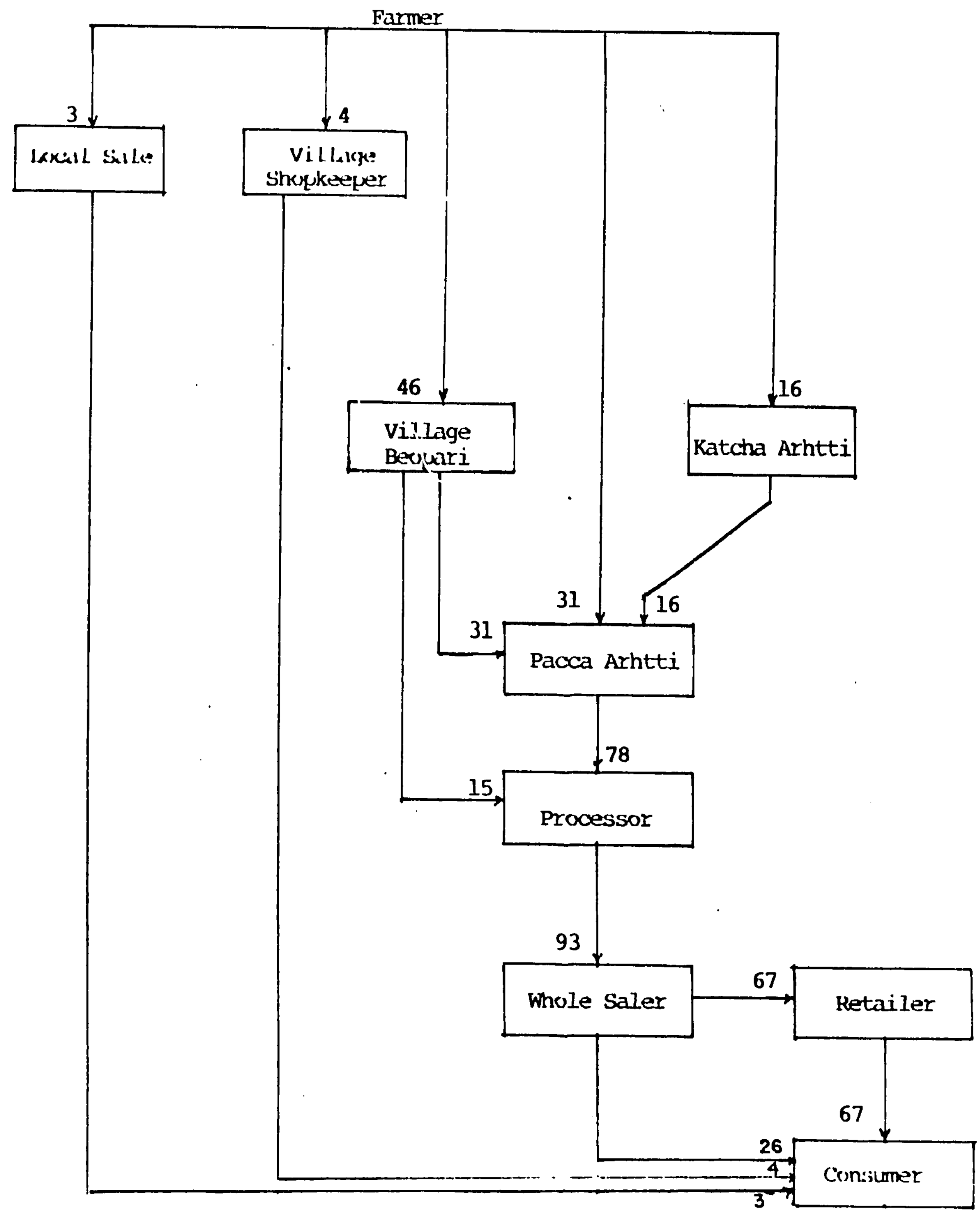


Figure- 5.4

SCHEMETIC DIAGRAM SHOWING MARKETING CHANNELS

Gram (Pakistan)



# DIAGRAM SHOWING GEOGRAPHICAL FLOW
## GRAM (KHUSHAB)

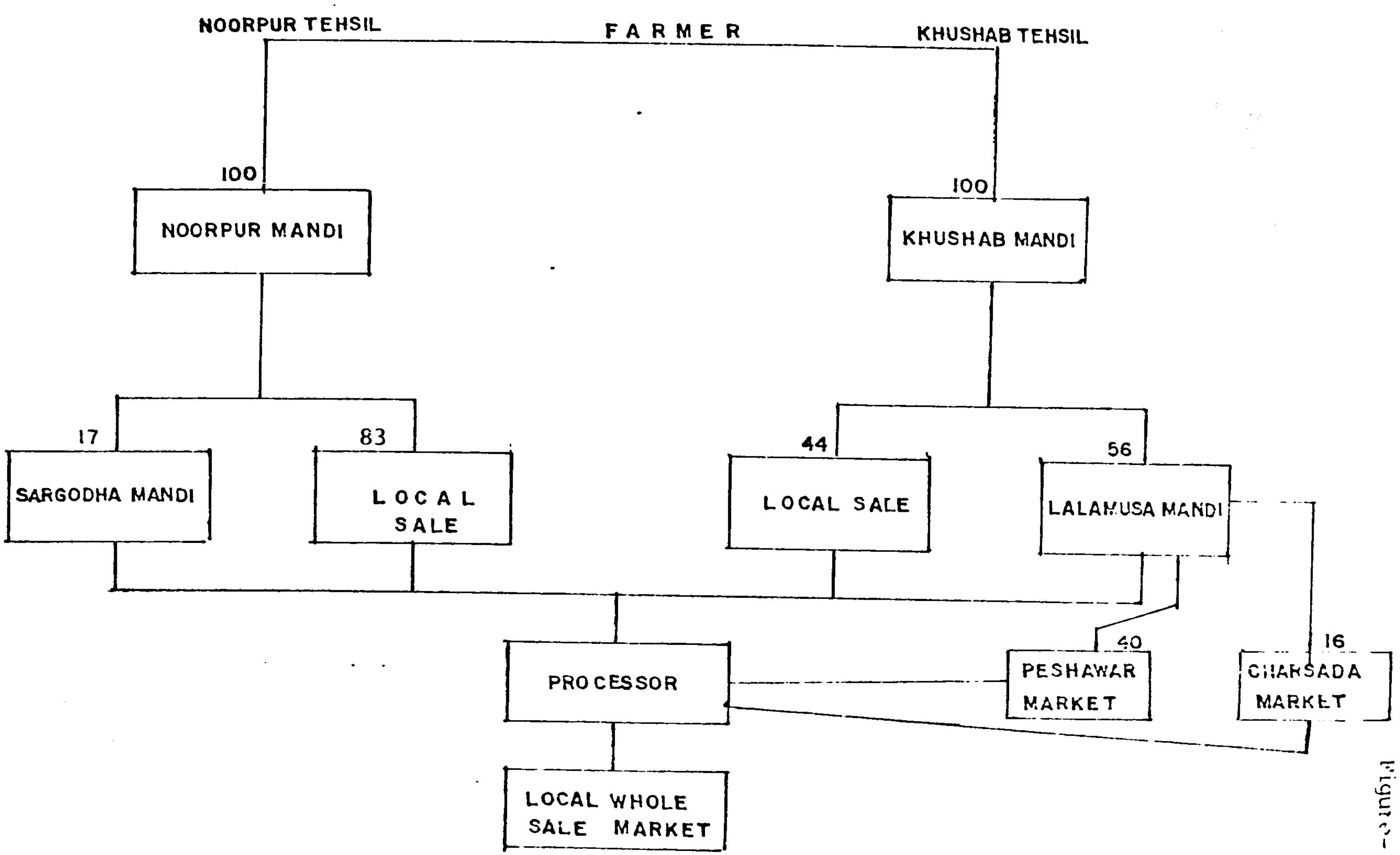



Figure-5.5

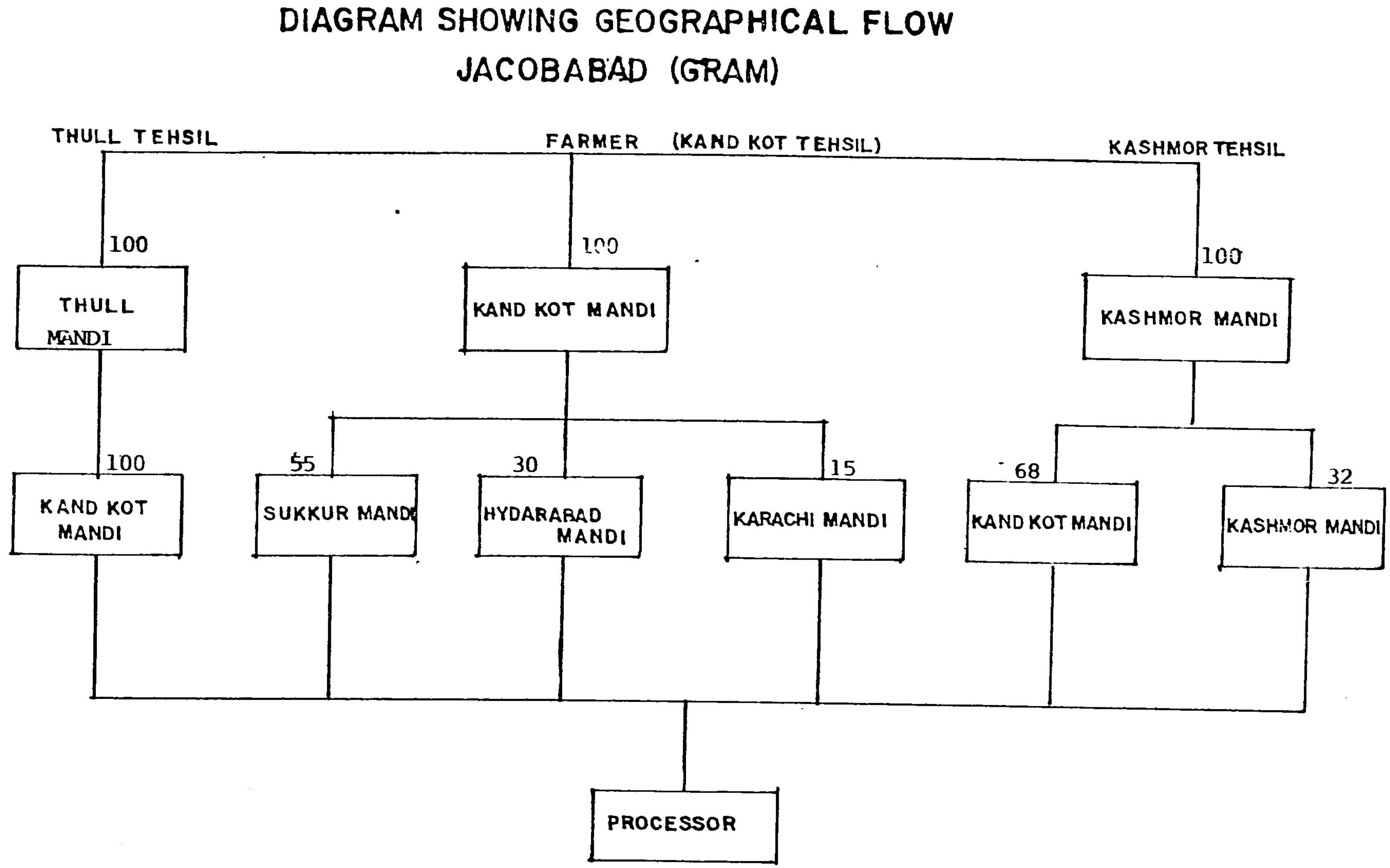



Figure- 5.6

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DIAGRAM SHOWING GEOGRAPHICAL FLOW

GRAM (BANNU)

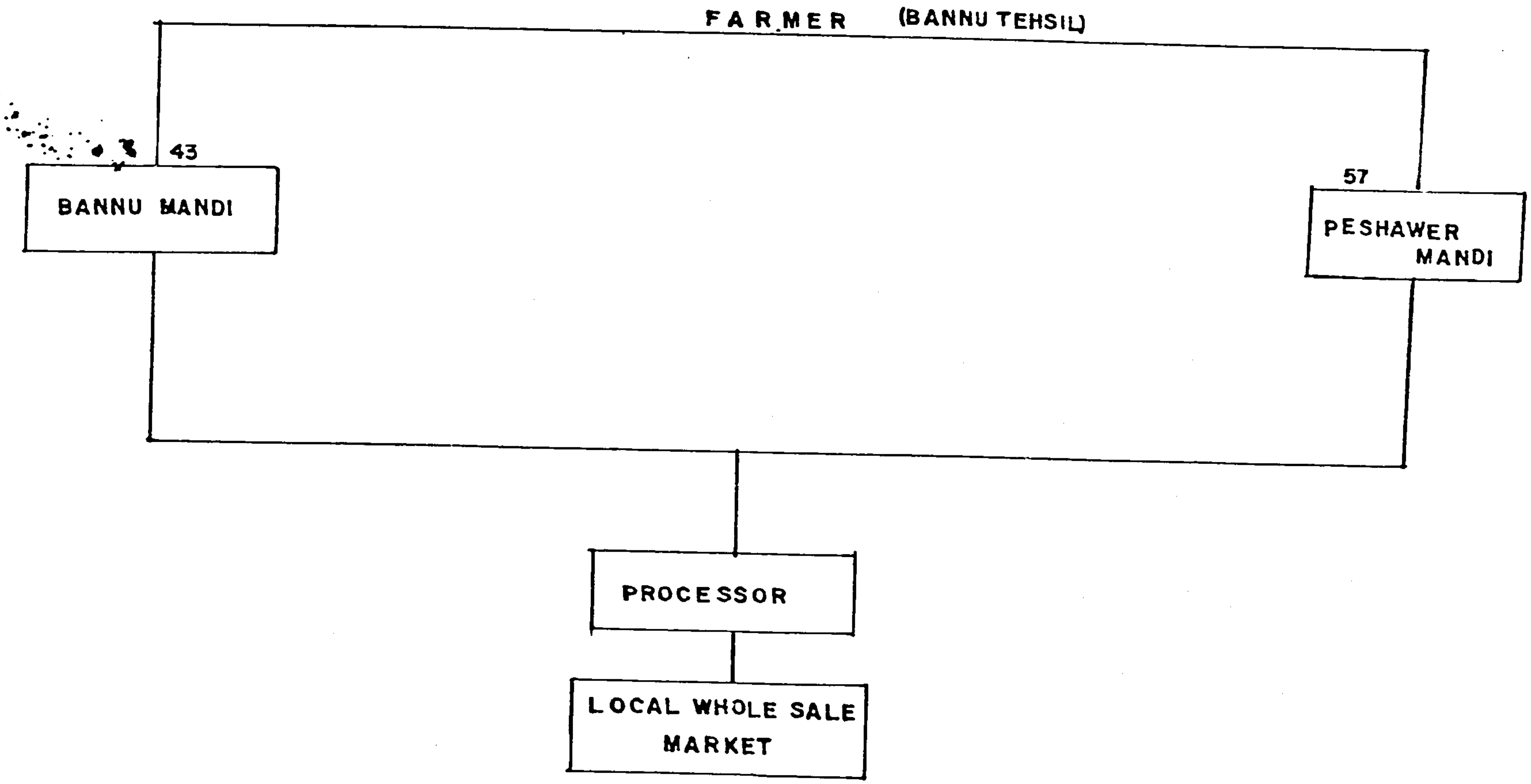


Figure-5.7

## 5.3 MARKETING SYSTEM OF MUNG

### i) Village Sample Characteristics

The average population per sample village was 4100. The average cultivated area per head of population was 0.46 for the sample as a whole. The corresponding ratios for the Punjab, Sind and NWFP samples were 0.47, 0.58 and 0.26 acres respectively.

Mung was the predominant crop grown in the sample villages of the Punjab accounting for 40 percent of the total cultivated area. For Sind and NWFP the ratios were 7 and 21 percents respectively (Table 5-21)*

### ii) Growers Sample Characteristics

The growers sample consisted of 64 growers. The share of the small, medium and large size farms in the total sample were 36, 16 and 48 percents respectively. The average size of the sample household was 11.61 persons of whom 4.53 were children of upto 10 years of age. (5-22)

The area under mung formed 13.61 percent of the total cultivated area for the sample as a whole. The relative shares for small, medium and large farmers were 39, 23 and 12 percents respectively. The shares in respect of Punjab, Sind and NWFP samples were 10, 15 and 24 percents respectively.

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* As there is only one sample district in each province detailed district wise tables for Mung are not included in the Statistical Appendix.

TABLE 5.21

AVERAGE POPULATION, CULTIVATED AREA, DISTANCE AND SHARE OF MUNG ACREAGE FOR SAMPLE VILLAGES

CROP: MUNG

| Province | No. of Village | Average Village Population (No.) | Average Cultivated Area/Village (Acres) | Average Distance in Kilo Meters From | | | | | Total Cultivated Area (Acre) | Mung Crop Area (Acre | % of Mung Area to Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Nearest Town | Railway Station | Procurement Centre Food | Procurement Centre Passco | Regulated Market | | | |
| Punjab | 2 | 2100 | 3288 | 3 | 13 | - | 1 | 5 | 6576 | 650 | 10 |
| Sind | 3 | 4500 | 2833 | 5 | 6 | - | 11 | 12 | 8500 | 575 | 7 |
| NWFP | 2 | 5500 | 1455 | 8 | 27 | 31 | - | - | 2909 | [illegible]00 | 21 |
| Total | 7 | 4100 | 2569 | 5 | 14 | 9 | 5 | 6 | 17985 | 1825 | 10 |

TABLE 5.22

CLASSIFICATION OF SAMPLE HOLDING BY FARM SIZES AND AVERAGE HOUSEHOLD COMPOSITION FOR EACH PROVINCE

CROP: MUNG

| Province | Farm Size | Sample Size | | Household Composition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Above 10 Years | | | Children | | | Total | | |
| | | Number | % to Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Punjab | Small | 10 | 15 | 2.90 | 2.20 | 5.10 | 1.70 | 1.20 | 2.90 | 4.60 | 3.40 | 8.00 |
| | Medium | 5 | 8 | 3.80 | 3.20 | 7.00 | 2.40 | 2.60 | 5.00 | 6.20 | 5.80 | 12.00 |
| | Large | 9 | 14 | 3.11 | 1.78 | 4.89 | 1.22 | 1.00 | 2.22 | 4.33 | 2.78 | 7.11 |
| | Sub-Total | 24 | 37 | 3.17 | 2.25 | 5.42 | 1.67 | 1.42 | 3.09 | 4.84 | 3.67 | 8.51 |
| Sind | Small | 1 | 2 | 4.00 | 4.00 | 8.00 | 2.00 | 2.00 | 4.00 | 6.00 | 6.00 | 12.00 |
| | Medium | 1 | 2 | 2.00 | 2.00 | 4.00 | 5.00 | 3.00 | 8.00 | 7.00 | 5.00 | 12.00 |
| | Large | 22 | 34 | 4.82 | 4.32 | 9.14 | 3.50 | 2.23 | 5.73 | 8.32 | 6.55 | 14.87 |
| | Sub-Total | 24 | 38 | 4.67 | 4.21 | 8.88 | 3.50 | 2.25 | 5.57 | 8.17 | 6.46 | 14.63 |
| NWFP | Small | 12 | 19 | 3.75 | 2.83 | 6.58 | 2.50 | 1.58 | 4.08 | 6.25 | 4.41 | 10.66 |
| | Medium | 4 | 6 | 4.75 | 3.00 | 7.75 | 3.75 | 3.50 | 7.25 | 8.50 | 6.50 | 15.00 |
| | Large | – | – | – | – | – | – | – | – | – | – | – |
| | Total | 16 | 25 | 4.00 | 2.88 | 6.88 | 2.81 | 2.06 | 4.87 | 6.81 | 4.94 | 11.75 |
| Pakistan | Small | 23 | 36 | 3.39 | 2.61 | 6.00 | 2.13 | 1.43 | 3.56 | 5.52 | 4.04 | 9.56 |
| | Medium | 10 | 16 | 4.00 | 3.00 | 7.00 | 3.20 | 3.00 | 6.20 | 7.20 | 6.00 | 13.20 |
| | Large | 31 | 48 | 4.32 | 3.58 | 7.90 | 2.84 | 1.87 | 4.71 | 7.16 | 5.45 | 12.61 |
| | Total | 64 | 100 | 3.94 | 3.14 | 7.08 | 2.64 | 1.89 | 4.53 | 6.58 | 5.03 | 11.61 |

The yields of mung were higher for the Sind sample growers for all holding groups as compared to the other two provinces. The average yield of the total sample was 5.03 maunds per acre. (Table 5-23)

The percentage share of different uses of the total output of mung for different size sample growers of each province are shown in Table 5.24. It appears that payment in kind is the major element which influences the share of the total output which is sold in the market. For the sample as a whole, its share in the total output was 20 percent. Quantities kept for seed formed 5 percent of the total output while only 1 percent was kept for domestic consumption.

The average per capita quantity retained for domestic consumption for mung whole comes to 0.028 kg. per annum. It may be mentioned that mung is generally consumed in split form which is generally purchased from the market. The average monthly consumption of mung split reported by Household Income and Expenditure Survey[1] (1985-86) was 0.09 kg. for the rural areas. The Consumer Survey, carried out as a part of the present assignment, has yielded an average per capita consumption of 0.05 kg. These two estimates give yearly average consumption of 1.08 maunds and 0.60 maunds respectively.

### iii) Marketed Surplus

The shares of the total produce marketed by the sample growers are also shown in Table 5-24.

Mung is mainly grown as a cash crop and 73 to 99 percent of the output was sold by different sized sample growers. The ratio of the marketed surplus varied directly with the size of the farm in the Punjab, though no distinct trend was noticeable for the sample of the other provinces. For

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1. Federal Bureau of Statistics, Household Income and Expenditure Survey, 1985-86

TABLE 5.23

PERCENTAGE SHARE OF AREA UNDER MUNG IN THE TOTAL AREA OF DIFFERENT FARM SIZES OF SAMPLE HOLDING OF EACH PROVINCE

CROP: MUNG

| Province | Farm Size | No. of Farmers | Average Cultivated Area per Farmer | Reference Crop | | Average Yield Per Acre/40 Kg. |
|---|---|---|---|---|---|---|
| | | | | Area | Percentage | |
| Punjab | Small | 10 | 7.00 | 3.15 | 45.00 | 3.90 |
| | Medium | 5 | 19.00 | 6.80 | 35.79 | 4.60 |
| | Large | 9 | 172.44 | 12.72 | 7.38 | 2.67 |
| | Total | 24 | 71.54 | 5.50 | 10.48 | 2.33 |
| Sind | Small | 1 | 11.00 | 2.00 | 18.18 | 7.50 |
| | Medium | 1 | 20.00 | 1.50 | 7.50 | 8.00 |
| | Large | 22 | 125.32 | 18.77 | 14.98 | 6.04 |
| | Total | 24 | 116.17 | 17.35 | 14.94 | 6.06 |
| NWFP | Small | 12 | 6.50 | 2.42 | 37.18 | 1.87 |
| | Medium | 4 | 19.50 | 2.25 | 11.54 | 3.28 |
| | Large | | | | | - |
| | Total | 16 | 9.75 | 2.38 | 24.36 | 2.20 |
| Pakistan | Small | 23 | 6.91 | 2.72 | 39.36 | 3.07 |
| | Medium | 10 | 19.30 | 4.45 | 23.06 | 4.45 |
| | Large | 31 | 139.00 | 17.01 | 12.24 | 5.31 |
| | Total | 64 | 72.83 | 9.91 | 13.61 | 5.03 |

TABLE 5.24

%AGE SHARE OF DIFFERENT USES OF TOTAL OUTPUT OF MUNG BY SAMPLE GROWERS OF DIFFERENT SIZES FOR EACH PROVINCE

CROP: MUNG (40 Kg.)

| Province | Farm Size | No. of Farmers | Gross Production | Domestic Consumption | | Payment in Kind | | Kept for Seed | | Total Uses | | Marketed | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Quantity | %age | Quantity | %age | Quantity | %age | Quantity | %age | Quantity | %age |
| Punjab | Small | 10 | 12.28 | 0.55 | 5 | 1.48 | 12 | 0.30 | 2 | 2.33 | 19 | 9.95 | 81 |
| | Medium | 5 | 31.30 | 0.55 | 2 | 1.20 | 4 | 0.95 | 3 | 2.70 | 9 | 28.60 | 91 |
| | Large | 9 | 34.00 | - | - | - | - | 0.06 | - | 0.06 | - | 33.94 | 100 |
| | Total | 24 | 24.39 | 0.34 | 1 | 0.86 | 4 | 0.34 | 1 | 1.55 | 6 | 22.53 | 94 |
| Sind | Small | 1 | 25.00 | 1.00 | 7 | - | - | 1.00 | 7 | 2.00 | 14 | 13.00 | 86 |
| | Medium | 1 | 12.00 | - | - | - | - | 1.00 | 8 | 1.00 | 8 | 11.00 | 92 |
| | Large | 22 | 113.45 | 0.10 | - | 27.45 | 24 | 7.41 | 7 | 34.95 | 31 | 78.50 | 69 |
| | Total | 24 | 105.13 | 0.13 | - | 25.17 | 24 | 6.88 | 7 | 32.17 | 31 | 72.95 | 69 |
| NWFP | Small | 12 | 4.52 | 0.55 | 12 | 0.25 | 6 | 0.34 | 7 | 1.15 | 25 | 3.38 | 75 |
| | Medium | 4 | 7.38 | 0.85 | 12 | 0.24 | 3 | 0.29 | 4 | 1.38 | 19 | 6.00 | 81 |
| | Large | - | - | - | - | - | - | - | - | - | - | - | - |
| | Total | 16 | 5.23 | 0.63 | 12 | 0.25 | 5 | 0.33 | 6 | 1.20 | 23 | 4.03 | 77 |
| Pakistan | Small | 23 | 8.35 | 0.57 | 7 | 0.77 | 9 | 0.35 | 4 | 1.70 | 20 | 6.65 | 80 |
| | Medium | 10 | 19.80 | 0.62 | 3 | 0.70 | 4 | 0.69 | 3 | 2.00 | 10 | 17.80 | 90 |
| | Large | 31 | 90.39 | 0.07 | - | 19.48 | 21 | 5.27 | 6 | 24.82 | 27 | 65.56 | 73 |
| | Total | 64 | 49.88 | 0.33 | 1 | 9.82 | 20 | 2.79 | 5 | 12.95 | 26 | 36.93 | 74 |

the sample as a whole, the ratio of marketed surplus to the total output was 74 percent classification by the size of sample holding shows ratios of 80, 90 and 73 percents for the small, medium and large growers.

Aslam (6) estimated marketable surplus on the bases of total estimated production and estimated quantity marketed in the selected area. For mung, the selected area comprised of the tehsils of Leiha, Bahawalpur and Faisalabad. He estimated marketable surplus at 85.3 percent.

Nazir (15) has also adopted the same bases as Aslam and arrived at 85.5 percent as marketable surplus, which is more or less the same as reported by Aslam.

The ratios of marketed surplus estimated in the Planning and Development Division Study (19) are given below:

| Farm Size | Marketable Surplus |
|---|---|
| 0 - 12. 5 Acre | 79% |
| 12.5 - 25 Acre | 93% |
| Above 25 Acre | 94% |
| Average: | 91% |

The above estimates are quite close to the findings of the present survey except for the sample growers in the large farm size category.

iv) Seasonal Spread of Marketing Operations

The sale of mung is spread over the entire the year but it can be divided into two distinct periods.

| Period | Harvesting Season |
|---|---|
| Spring Crop | May and June |
| Normal Summer Crop | September, October, November |

The sale of mung crop in other than the above five months can be regarded as off-season sale. It has been observed that a new mung variety has been introduced by the Agriculture Department, which is sown in March and harvested in May and June, while the normal crop sown in May/June is harvested in September/October and November.

The major quantity of mung was sold during May-June, and October-November soon after the harvests of the two crops and only about 6 percent was sold in off-season. As regards the different areas, in D.G. Khan/Leiha about half of the quantity was sold soon after harvest and the remaining during the off-season.

The average prices per maund for the spring crop for the Punjab sample grower was lower at Rs. 120 as compared to the average price of Rs. 254.91 for the summer crop. In the case of Sind, the price progressively increased from an average Rs. 227.42 per maund in the harvest season to Rs. 325 per maund in September/October but later declined to Rs. 235.00 in the off-season. (Table 5-25)

v) <u>Storage Facilities</u>

Storage facilities available with the sample mung growers were adequate for storing quantities kept for domestic consumption and for use as seed. On the whole, these storage facilities were of standard type (Table 5-26).

Storage losses were estimated at 0.63 percent of the quantity stored at the farmers level.

TABLE 5.25

PERCENTAGE CLASSIFICATION OF TOTAL MUNG SOLD BY MONTH BY SAMPLE GROWERS OF DIFFERENT FARM SIZES AND AVERAGE MONTHLY SALE PRICES FOR EACH PROVINCE

CROP: MUNG

| Province | Farm Gate | Percentage of Quantity Sold in | | | | | | | | | Average Sale Price | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Punjab | Small | - | - | - | - | - | - | - | - | 100 | - | - | - | - | - | - | - | - | 261.18 | 261.18 |
| | Medium | - | - | - | - | - | - | - | - | 100 | - | - | - | - | - | - | - | - | 253.42 | 253.[illegible] |
| | Large | - | 35 | 53 | - | - | - | - | - | 9 | - | 120.00 | 120.00 | - | - | - | - | - | 240.00 | 130.55 |
| | Total | - | 21 | 29 | - | - | - | - | - | 50 | - | 120.00 | 120.00 | - | - | - | - | - | 254.91 | 179.19 |
| Sind | Small | - | - | 100 | - | - | - | - | - | - | - | - | 190.00 | - | - | - | - | - | - | 190.00 |
| | Medium | - | - | 100 | - | - | - | - | - | - | - | - | 200.00 | - | - | - | - | - | - | 200.00 |
| | Large | - | 46 | 52 | - | - | - | 1 | - | 1 | - | 233.45 | 222.12 | - | - | - | 325.00 | - | 235.00 | 228.92 |
| | Total | - | 45 | 53 | - | - | - | -1 | - | 1 | - | 233.45 | 221.40 | - | - | - | 325.00 | - | 235.00 | 228.[illegible] |
| NWFP | Small | - | - | - | - | - | - | 30 | 70 | - | - | - | - | - | - | - | 200.00 | 211.50 | - | 208.[illegible] |
| | Medium | - | - | - | - | - | - | 27 | 73 | - | - | - | - | - | - | - | 200.00 | 210.85 | - | 208.35 |
| | Large | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Total | - | - | - | - | - | - | 29 | 71 | - | - | - | - | - | - | - | 200.00 | 211.30 | - | 208.57 |
| Pakistan | Small | - | - | 9 | - | - | - | 8 | 18 | 65 | - | - | - | - | - | - | 200.00 | 211.50 | 261.18 | 241.[illegible] |
| | Medium | - | - | 6 | - | - | - | 4 | 10 | 65 | - | - | - | - | - | - | 200.00 | 210.85 | 253.42 | 243.9[illegible] |
| | Large | - | 45 | 52 | - | - | - | 1 | - | 2 | - | 218.91 | 206.50 | - | - | - | 325.00 | - | 238.57 | 214.1[illegible] |
| | Total | - | 39 | 45 | - | - | - | 2 | 2 | 12 | - | 218.91 | 206.20 | - | - | - | 271.85 | 211.30 | 254.10 | 217.7[illegible] |

TABLE 5.26

AVERAGE STORAGE CAPACITY CLASSIFIED BY TYPE FOR SAMPLE GROWERS OF EACH PROVINCE

CROP: MUNG

| Province | Farm Size | Avg.Qty. Kept for Storage * | Total Storage Capacity of all Type | %age of Storage Capacity Utilization to Total Capacity | Standard Storage Capacity | | Sub Standard Storage Capacity | | Losses (%age) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Capacity | %age share(1) to Total Storage Capacity | (2) Capacity | %age Share to Total Storage Capacity | |
| Punjab | Small | 0.85 | 229.00 | 0.37 | 44.00 | 19 | 185.00 | 81 | 0.49 |
| | Medium | 1.50 | 232.00 | 0.64 | 40.00 | 17 | – | – | 0.70 |
| | Large | 0.06 | 13347.00 | – | 13333.00 | 100 | 14.00 | – | – |
| | Total | 0.68 | 5148.00 | – | 5026.54 | 98 | 82.33 | 2 | 0.61 |
| Sind | Small | 2.00 | 15.00 | 13.33 | 15.00 | 100 | – | – | 0.20 |
| | Medium | 1.00 | 300.00 | 0.33 | 300.00 | 100 | – | – | – |
| | Large | 7.51 | 508.00 | 1.47 | 455.00 | 90 | 53.00 | 10 | 0.30 |
| | Total | 7.01 | 479.00 | 1.46 | 430.20 | 90 | 48.58 | 10 | 0.67 |
| NWFP | Small | 0.89 | 72.00 | 1.23 | 63.00 | 87 | 9.00 | 13 | 0.93 |
| | Medium | 1.41 | 120.00 | 0.95 | 120.00 | 100 | – | – | 0.30 |
| | Large | – | – | – | – | – | – | – | – |
| | Total | 0.96 | 84.00 | 1.14 | 77.25 | 92 | 6.75 | | 0.71 |
| Pakistan | Small | 0.92 | 137.00 | 0.67 | 53.00 | 39 | 84.00 | 61 | 0.71 |
| | Medium | 1.31 | 194,00 | 0,68 | 144,00 | 74 | 50,00 | 26 | 0.33 |
| | Large | 5.34 | 4235,00 | 0,13 | 4194,00 | 99 | 41,00 | 1 | 0.41 |
| | Total | 3.12 | 2131.00 | 0.15 | 208.00 | 98 | 50.00 | 2 | 0.63 |

1 = Pacca room, pacca bharola, drum/box

2 = Katcha room, katcha bharola and others.

* Qauntity kept for domestic consumption and kept for seed.

vi) Marketing Channels

Village beopari was the only market actor for the sale of mung by the sample growers of Sind and NWFP province . In the Punjab also, sales to him formed 82 percent of the total sales by the sample growers, the remaining quantity being sold to pacca arhatis.

The great concentration of sales through these actors shows their specialization in dealing with the mung crop. (Table 5-27) .

The Planning and Development Division Study (19) estimated local village sales for mung at 69 percent.

vii) Marketing Costs

The growers did not incur any marketing costs for sales to village beoparis and the sale prices were settled on the basis of local market conditions and their relative bargining power. For sales to pacca arhatis, the average marketing charges ranged between Rs. 17.94 per maund for the small sample growers to Rs. 14.00 per maund for the medium sample growers in the Punjab. These costs formed 7.27 and 5.70 percents of the farm gate prices obtained through sales to these agencies. The classification of marketing costs by major components show that commission accounts for almost one half of the total cost. (Table 5.28).

Aslam (6) estimated that the cost incurred by the grower in sale of mung to village dealer (beopari) was Rs. 1.08 per maund, this was composed of storage cost (Rs. 0.42)

TABLE 5.27

MARKETING CHANNELS FOR SAMPLE GROWERS OF EACH PROVINCE

CROP: MUNG (%AGE OF QUANTITY SOLD )

| Province | Farm Size | Local Sold | Shopkeeper | Village Beopari | Pacca Arhatti | Katcha Arhatti | Katcha/ Pacca Arhatti | Total |
|---|---|---|---|---|---|---|---|---|
| Punjab | Small | – | – | 28 | 72 | – | – | 100 |
| | Medium | – | – | 81 | 19 | – | – | 100 |
| | Large | – | – | 100 | – | – | – | 100 |
| | Total | – | – | 82 | 18 | – | – | 100 |
| Sind | Small | – | – | 100 | – | – | – | 100 |
| | Medium | – | – | 100 | – | – | – | 100 |
| | Large | – | – | 100 | – | – | – | 100 |
| | Total | – | – | 100 | – | – | – | 100 |
| NWFP | Small | – | – | 100 | – | – | – | 100 |
| | Medium | – | – | 100 | – | – | – | 100 |
| | Large | – | – | – | – | – | – | – |
| | Total | – | – | 100 | – | – | – | 100 |
| Pakistan | Small | – | – | 54 | 46 | – | – | 100 |
| | Medium | – | – | 85 | 15 | – | – | 100 |
| | Large | – | – | 100 | – | – | – | 100 |
| | Total | – | – | 96 | 4 | – | – | 100 |

TABLE 5.28

CLASSIFICATION OF MARKETING COSTS OF GROWERS FOR SALES TO DIFFERENT FUNCTIONARIES AND THE FARM GATE PRICES FOR EACH PROVINCES

MUNG

| Province | Farm Size | VILLAGE BEOPARI | | | | | | | | | | PACCA ARHATI | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE | | | | | | | Farm Gate Price | Average Marketing Price | Marketing Cost | %AGE OF MARKETING COST | | | | | | | Farm Gate Price |
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Punjab | Small | 250.05 | – | – | – | – | – | – | – | – | 250.05 | 264.75 | 17.94 | 7 | 5 | – | 44 | 18 | 26 | 100 | 246.81 |
| | Medium | 251.90 | – | – | – | – | – | – | – | – | 251.90 | 260.00 | 14.00 | 9 | 7 | – | 56 | – | 28 | 100 | 246.00 |
| | Large | 230.60 | – | – | – | – | – | – | – | – | 230.60 | – | – | – | – | – | – | – | – | – | – |
| | Total | 220.30 | – | – | – | – | – | – | – | – | 220.30 | 261.46 | 15.28 | 9 | 6 | – | 52 | 6 | 27 | 100 | 246.18 |
| Sind | Small | 190.00 | – | – | – | – | – | – | – | – | 190.00 | – | – | – | – | – | – | – | – | – | – |
| | Medium | 200.00 | – | – | – | – | – | – | – | – | 200.00 | – | – | – | – | – | – | – | – | – | – |
| | Large | 227.54 | – | – | – | – | – | – | – | – | 227.54 | – | – | – | – | – | – | – | – | – | – |
| | Total | 220.09 | – | – | – | – | – | – | – | – | 220.09 | – | – | – | – | – | – | – | – | – | – |
| NWFP | Small | 235.15 | – | – | – | – | – | – | – | – | 236.15 | – | – | – | – | – | – | – | – | – | – |
| | Medium | 207.15 | – | – | – | – | – | – | – | – | 207.15 | – | – | – | – | – | – | – | | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | 238.00 | – | – | – | – | – | – | – | – | 238.00 | – | – | – | – | – | – | – | – | – | – |
| Pakistan | Small | 220.57 | – | – | – | – | – | – | – | – | 220.57 | 264.75 | 17.94 | 7 | 5 | – | 44 | 18 | 26 | 100 | 246.81 |
| | Medium | 233.75 | – | – | – | – | – | – | – | – | 233.75 | 260.00 | 14.00 | 9 | 7 | – | 56 | – | 28 | 100 | 246.00 |
| | Large | 198.64 | – | – | – | – | – | – | – | – | 198.64 | – | – | – | – | – | – | – | – | – | – |
| | Total | 216.08 | – | – | – | – | – | – | – | – | 216.08 | 261.46 | 15.28 | 9 | 6 | – | 52 | 6 | 27 | 100 | 246.1 |

1. Preparation Charges 2. Transportation Charges 3. Octroi 4. Commission 5. Paladari, Weighmen & Chuger 6. Cost of Deduction 7. Total

and wastage (Rs. 0.66). He has not mentioned the cost of marketing when selling through other market actors.

Nazir (15) estimates growers cost of marketing to village dealer at Rs. 2.45 per maund, composed of storage cost (Rs. 0.20) and wastage (Rs. 2.25). He has not mentioned the cost of marketing through other dealers.

viii) Farm Gate Prices

The average farm gate prices for the sample growers are also shown in Table 5.28. It appears that for sales to pacca arhati, the sale prices were higher, but due to market charges borne by the growers, the farm gate prices were lower than in the case of village beoapris. The difference was however only marginal.

It is significant to note that the average marketing costs formed 7.26 percent of the farm gate price for the small growers and 5.69 percent for the medium growers.

ix) Transportation Modes and Costs

The modes of transport used by the sample growers of the Punjab were horse drawn carts and the pack animals. The sample growers of Sind, however used tractor/trolley and bullock and camel carts for transporting their crop. The shares of these modes in quantity transported by sample growers are shown in Table 5.29 . The average transportation costs varied between Rs. 0.14 to Rs. 0.20 per maund per kilometer.

## TABLE 5.29

PERCENTAGE CLASSIFICATION OF QUANTITIES TRANSPORTED BY DIFFERENT MODE FOR SAMPLE GROWERS OF DIFFERENT FARM SIZE FOR EACH PROVINCE

MUNG

| | Farm Size | Tractor/Trolley | | Truck | | Bullocks/ Camel Carts | | Horse Drawn Carts | | Pack Animal | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. |
| Punjab | Small | – | – | – | – | – | – | 83 | 41 | 17 | 59 | 100 | 100 |
| | Medium | – | – | – | – | – | – | 100 | 100 | – | – | 100 | 100 |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | 86 | 70 | 14 | 30 | 100 | 100 |
| Sind | Small | – | – | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | – | – |
| | Large | 40 | 63 | – | – | 60 | 37 | – | – | – | – | 100 | 100 |
| | Total | 40 | 63 | – | – | 60 | 37 | – | – | – | – | 100 | 100 |
| NWFP | Small | – | – | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | – | – | – | – | – | – |
| Pakistan | Small | – | – | – | – | – | – | 83 | 41 | 17 | 59 | 100 | 100 |
| | Medium | – | – | – | – | – | – | 100 | 100 | – | – | 100 | 100 |
| | Large | 40 | 63 | – | – | 60 | 37 | – | – | – | – | 100 | 100 |
| | Total | 24 | 45 | – | – | 35 | 27 | 35 | 20 | 6 | 8 | 100 | 100 |

## x) Marketing Channels for Secondary Stage Market Actors

Summary characteristics of secondary stage actors; village beoparis, katcha arhatis and pacca arhatis, are included in Table 5.30. The percentage shares of different agencies in sales of second stage actors are shown in Table 5.31.

These actors trade among themselves, though the largest share of the sales has been with the processor expect for village beoparis and katcha arhati who sold the entire quantities to pacca arhati.

On the basis of the present survey, three major marketing channels have been identified as shown below:

Punjab:

I. Farmer --- Beopari --- Pacca Arhati --- Processor --- Wholesaler --- Retailer

II. Farmer --- Pacca Arhati --- Processor --- Wholesaler--- Retailer.

Sind:

III Farmer --- Beopari --- Processor --- Wholesaler --- Retailer.

N.W.F.P

IV. Farmer --- Beopari --- Processor --- Wholesaler --- Retailer.

Percentage shares of farmgate prices and of marketing margins in the retail prices for each of the above

TABLE 5.30

SUMMARY CHARACTERISTICS OF DIFFERENT TYPE OF MARKET ACTOR BY DISTRICTS

CROP: MUNG

| | Pacca Arhati | | | | | | | Katcha Arhati | | | | | | | Village [illegible] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quantity Traded | Purchases/ inflow | Sales outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price | Quantity Traded | Purchases inflow | Sales/out-flow | Purchase Lot | Sale Lot | Purchase Price | Sale Price | Quantity Traded | Purchases inflow | Sales/ outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price |
| D.G.Khan/ Leiah | 87925 | Pegari Farmers | Processor Pacca Arhati | 1085 | 2512 | 236.74 to 26[illegible].46 | 253.75 to 273.35 | 1100 | – | – | – | – | – | – | 3795 | Farmers | Pacca Arhati | 11[illegible] | 623 | [illegible]0.30 | 236.7[illegible] |
| Sanghar/ Khairpur | – | – | – | | | | | | | | | | | | 18297 | Farmers | Processor | 398 | 915 | 220.09 | 250.00 |
| Swat | | | Not | traceable | | | | | | | | | | | 106 | Farmers | Pacca Arhati | 4 | 24 | 238.00 | 263.00 |
| Pakistan | 87925 | Pegari Farmers | Processor | 1085 | 2512 | 236.74 to 26[illegible].46 | 253.75 to 273.35 | – | – | – | – | – | – | – | 22200 | Farmers | Pacca Arhati Processor | 206 | 726 | 220.09 to 238.00 | 236.74 to 263.00 |

TABLE 5.31

PERCENTAGE OF MUNG SOLD TO DIFFERENT ACTORS BY SECOND STAGE SELLERS

| Province | Type of Actor | TO WHOM SOLD | | | |
|---|---|---|---|---|---|
| | | MUNG | | | |
| | | Katcha Arhati | Pacca Arhati | Processor | Total |
| Punjab | Village Beopari | - | 100 | - | 100 |
| | Katcha Arhati | - | - | - | - |
| | Pacca Arhati | - | 25 | 75 | 100 |
| Sind | Village Beopari | - | - | 100 | 100 |
| | Katcha Arhati | - | - | - | - |
| | Pacca Arhati | - | - | - | - |
| NWFP | Village Beopari | - | 100 | - | 100 |
| | Katcha Arhati | - | - | - | - |
| | Pacca Arhati | - | - | - | - |
| Pakistan | Village Beopari | - | 72 | 28 | 100 |
| | Katcha Arhati | - | - | - | - |
| | Pacca Arhati | - | 25 | 75 | 100 |

marketing channels are ginve in Table 5..32. The actual amounts are shown in Table V-10 of the Statistical Appendix.

The farmers shares in the final retail price, have varied between 59.19 to 66.20 percents for the sample growers.

The percentage price spread between the grower and the consumer has been analysed in terms of the following elements of marketing performance.

- average farmer's share in consumer rupee.

- distribution of gross margin among various intermediaries/stages.

- share of net margin to gross margin at each stage.

The above data are incldued in Table 5.33 for each of the provincial samples. It appears that the on the whole processors got the maximum share of the gross margin followed by dealers and retailers. Similar trends were noticed in the case of provincial samples except for the NWFP sample where dealers got the highest share followed by retailers and wholesalers.

The net margins form a very high proportion of gross margins varying from 93.74 percent for processors to 78.87 percent for the retailers for the smaple as a whole.

The Planning and Development Division Study (19) estimated the share of grower's farmgate prices in the consumer's rupee at 64.22 percent for mung whole. The ratios of gross margins of wholesalers and retailers and the shares

TABLE 5.32

PERCENTAGE OF GROSS MARGIN COST NET MARGIN AND FARM GATE PRICE TO CONSUMER PRICE

CROP: MUNG

| | MUNG | | | |
|---|---|---|---|---|
| | PUNJAB | | SIND | NWFP |
| | I | II | III | IV |
| A. Farm gate Price | 59.24 | 66.20 | 59.19 | 64.00 |
| Farmer cost | - | 4.12 | - | - |
| B. Beopari | | | | |
| - Gross Margin | 4.43 | - | 8.05 | 6.73 |
| - Cost | 0.57 | - | 0.29 | 0.32 |
| - Net Margin | 3.86 | - | 7.76 | 6.41 |
| C. Katcha Arhati | | | | |
| - Gross Margin | - | - | - | - |
| - Cost | - | - | - | - |
| - Net Margin | - | - | - | - |
| D. Pacca Arhati | | | | |
| - Gross Margin | 4.58 | 3.20 | - | - |
| - Cost | 0.44 | 0.44 | - | - |
| - Net Margin | 4.14 | 2.76 | - | - |
| E. Processor | | | | |
| - Gross Margin | 19.39 | 14.12 | 20.40 | 16.91 |
| - Cost | 1.66 | 1.66 | 1.66 | 1.66 |
| - Net Margin | 17.73 | 12.46 | 18.74 | 15.25 |
| F. Wholesaler | | | | |
| - Gross Margin | 5.45 | 5.45 | 5.45 | 5.45 |
| - Cost | 0.62 | 0.62 | 0.62 | 0.62 |
| - Net Margin | 4.83 | 4.83 | 4.83 | 4.83 |
| G. Retailer | | | | |
| - Gross Margin | 6.91 | 6.91 | 6.91 | 6.91 |
| - Cost | 1.46 | 1.46 | 1.46 | 1.46 |
| - Net Margin | 5.45 | 5.45 | 5.45 | 5.45 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 |

TABLE 5.33

RATIO OF GROSS MARGIN AND NET MARGIN

CROP: MUNG

| | Punjab | | | | | SIND | | | | | NWFP | | | | | Total | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | | % of Gross Margin to Consumer Price | Gross Margin | | Net Margin | |
| | | Amount (Rs.) | % | Amount (Rs.) | Ratio to Gross Margin | | Ratio to Gross Margin | % | Amount (Rs.) | Ratio to Gross Margin | | Amount (Rs. | % | Amount (Rs.) | Ratio to Gross Margin | | Amount (Rs.) | % | Amount (Fs. | Ratio to Gross Margin |
| Farm Gate | 60.49 | - | | | | 59.19 | - | - | - | | 64.00 | - | | | | 61.37 | - | | | |
| Farmer Cost | 0.74 | - | | | | - | - | - | | | - | - | | | | 0.01 | - | | | |
| Dealer | 7.97 | 29.64 | 20.56 | 26.75 | 86.56 | 8.05 | 29.91 | 19.72 | 28.82 | 96.36 | 6.72 | 25.00 | 53.80 | 23.80 | 95.20 | 7.58 | 28.92 | 20.44 | 24.06 | 83.20 |
| Processor | 18.44 | 66.57 | 47.56 | 62.38 | 90.97 | 20.40 | 75.87 | 49.99 | 69.68 | 91.84 | 16.92 | 62.87 | 11.86 | 56.68 | 90.15 | 18.68 | 66.59 | 47.07 | 62.42 | 93.74 |
| Whole-Seller | 5.45 | 20.28 | 14.06 | 17.96 | 88.60 | 5.45 | 20.28 | 13.36 | 17.96 | 88.60 | 5.45 | 20.28 | 15.14 | 17.96 | 88.60 | 5.45 | 20.27 | 14.35 | 17.96 | 88.60 |
| Retailer | 6.91 | 25.71 | 17.82 | 20.27 | 78.87 | 6.91 | 25.71 | 16.93 | 20.27 | 78.87 | 6.91 | 25.71 | 19.20 | 20.27 | 78.87 | 6.91 | 125.70 | 18.16 | 20.27 | 78.87 |
| Total | 100 | 144.20 | 100 | 127.36 | 88.32 | 100 | 151.77 | 100 | 136.73 | 90.09 | 100 | 133.86 | 100 | 118.71 | 88.68 | 100 | 141.48 | 100 | 124.71 | 88.15 |

of net margins in the gorss margins were estimated as follows:

| | Gross Margin % | Ratio of net margins to gross margin |
|---|---|---|
| Wholesaler | 13.85 | 58 |
| Retailers | 18.46 | 68 |

Aslam Choudhry (6) estimates the margin of processors at 7.05 percent of his purchase price, the net margin being 30 percent of the gross margin. The retailer's gross maring was estimated by him at 14 percent of his purchase price, the net marging being 88 pecent of the gross margin.

Nazir Ahmad (15), on the basis of his case study of Faisalabad market, gives the following estimates of gross margins as percentage of consumers price and ratio of net margins to gross margins.

| | Gross Margin % | Net margins % of gross margin |
|---|---|---|
| Commission Agent | 4.83 | 54.2 |
| Processor | 14.67 | 55.7 |
| Retailer | 35.00 | 89.4 |

xi) Marketing Costs of Second Stage Actors

The average marketing costs of second stage marketing actors have varied beteen Rs. 1.36 per maund for village beoparis to Rs. 1.63 for pacca arhati. Apart from the operating costs which formed 77 percent of the total costs, the other cost elements were transportation taking 9 to 10 percent of the total costs and value of losses reported at 10 to 11 percent of the total for the sample units. (Table 5.34).

The breakup of the operating costs, storage and transportation costs and cost of losses are given in Table 18 to 21of the Statistical Appendix.

xii) Processing Costs

The average processing costs for Mung are given in Table 5.35.

xiii) Wholesalers and Retailers

The major components of average costs of wholesalers and retailers are given in Table 5.36. It appears that transportation cost is the major component especially for wholesalers.

xiv) Schematic Diagrams of Market Channesl

a Schematic diagram for market flow showing market Channells for each province and for the sample as whole are given on page 271 to 274.

b. Diagram showing geographical flow for one major producing district for each province are given on page 275 to 276.

TABLE 5.34

COST COMPOENT OF SECOND STAGE MARKET INTERMEDIARIES

CROP: MUNG

| | | Rs./40 Kg. | | | | | | | (Percentages ) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Operating cost | Storage Cost | Losses | Transport Cost | Credit Cost | Other | Total | Operating Cost | Storage Cost | Losses | Transport Cost | Credit Cost | Other | Total |
| Beopari | Punjab | 1.68 | | 0.20 | 0.20 | - | 0.03 | 2.11 | 80 | - | 9 | 9 | - | 2 | 100 |
| | Sind | 0.75 | - | 0.20 | 0.14 | - | - | 1.09 | 69 | - | 18 | 13 | - | - | 100 |
| | NWFP | 0.96 | - | 0.07 | 0.13 | - | 0.04 | 1.20 | 80 | - | 6 | 11 | - | 3 | 100 |
| | Pakistan | 1.04 | - | 0.14 | 0.14 | - | 0.04 | 1.36 | 77 | - | 10 | 10 | - | 3 | 100 |
| Katcha Arhati | Punjab | - | | - | - | - | - | - | - | - | - | - | - | - | - |
| | Sind | | | | | | | | | | | | | | |
| | NWFP | | | | | | | | | | | | | | |
| | Pakistan | - | | - | - | - | - | - | - | | - | - | | - | - |
| Pacca Arhati | Punjab | 1.26 | 0.05 | 0.18 | 0.14 | - | | 1.63 | 77 | 3 | 11 | 9 | - | - | 100 |
| | Sind | | | | | | | | | | | | | | |
| | NWFP | | | | | | | | | | | | | | |
| | Pakistan | 1.26 | 0.05 | 0.18 | 0.14 | - | - | 1.63 | 77 | 3 | 11 | 9 | - | - | 100 |

TABLE 5.35

AVERAGE PROCESSING COST OF SAMPLE UNITS — MUNG

Rs./40 Kg.

| ITEM | AMOUNT |
|---|---|
| DIRECT COST | |
| - Salary and Wages | 1.78 |
| - Contract Labour | 0.14 |
| - Electricity | 2.17 |
| - Telephone | 0.46 |
| - Repair and Maintenance | 0.76 |
| - Other Miscellaneous | 0.19 |
| Total: | 5.50 |
| FIXED COST: | |
| - Salaries and Allowances | 1.26 |
| - Administrative | 0.45 |
| - Rent and Tax | 0.34 |
| - Miscellaneous Cost | - |
| Total: | 2.05 |
| Financial Cost | 0.02 |
| Depreciation | 1.95 |
| Transport Cost | 0.02 |
| Storage Cost | 0.02 |
| Other Cost | 1.98 |
| GRAND TOTAL: | 11.54 |

TABLE 5.36

AVERAGE COSTS OF SAMPLE WHOLESALERS AND RETAILERS

Rs./40 Kg.

| | Wholesalers | Retailers |
|---|---|---|
| OPERATING COSTS: | | |
| - Labour | 0.19 | 0.84 |
| - Rent | 0.09 | 0.84 |
| - Electricity | 0.01 | 0.17 |
| - Phone | 0.07 | 0.10 |
| - Taxes | 0.04 | 0.12 |
| - Others | 0.04 | 0.40 |
| Sub-Total | 0.44 | 2.47 |
| Transportation | 1.88 | 2.97 |
| Total: | 2.32 | 5.44 |
| Transportation Cost as % of Total | 81 | 55 |

Figure- 5.8

SCHEMETIC DIAGRAM SHOWING MARKETING CHANNELS
Mung (Punjab)

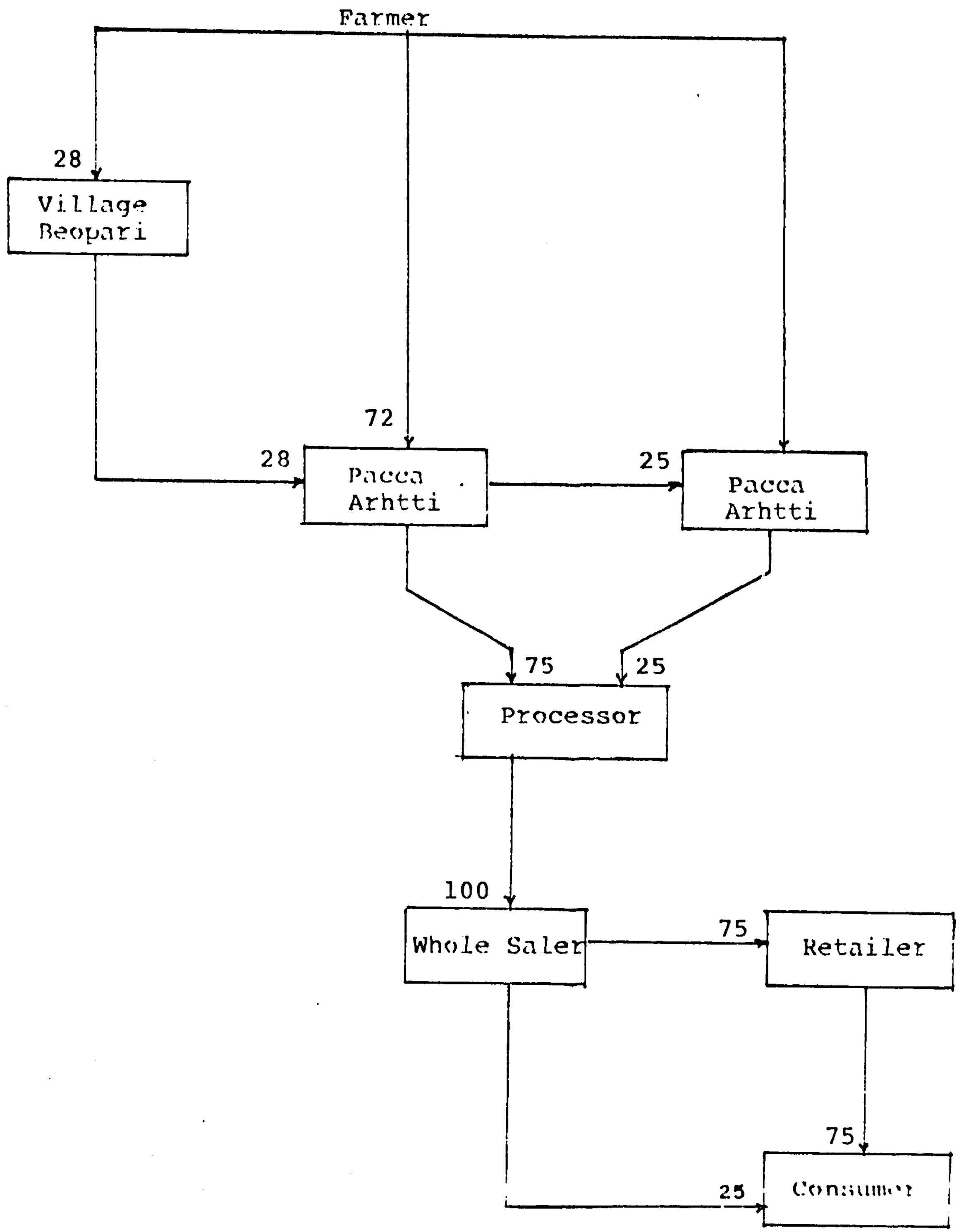


Figure- 5.9

SCHEMETIC DIAGRAM SHOWING MARKETING CHANNELS
Mung (Sind)

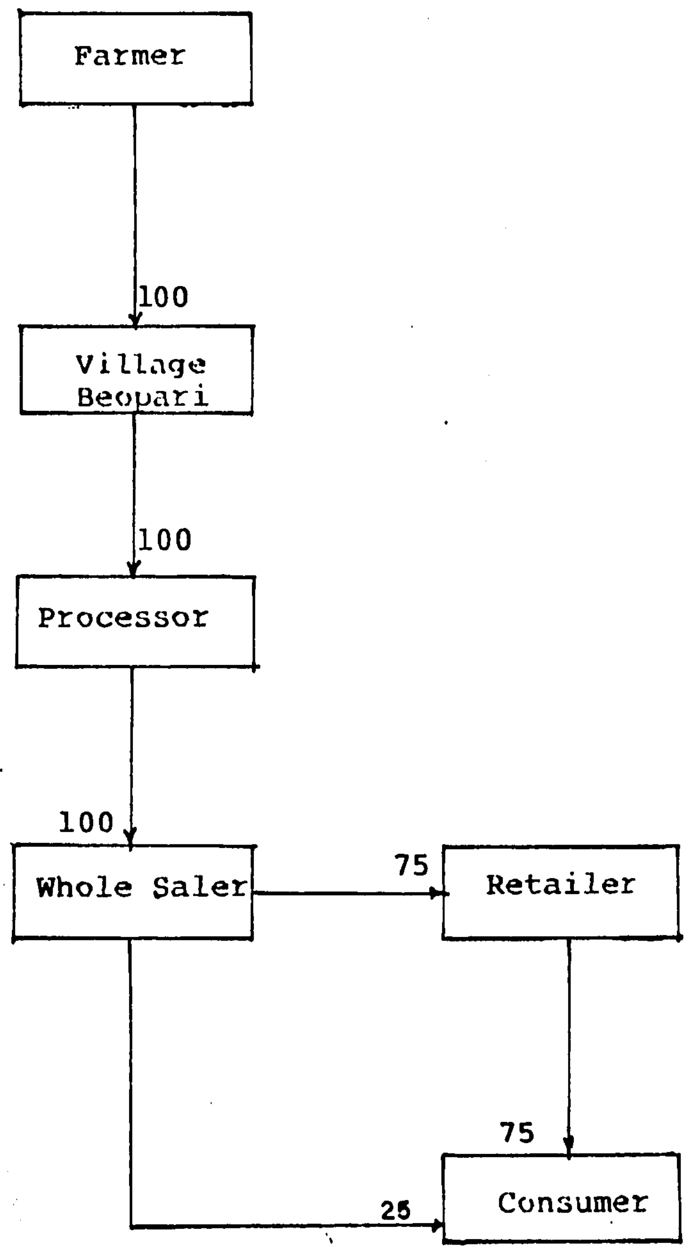
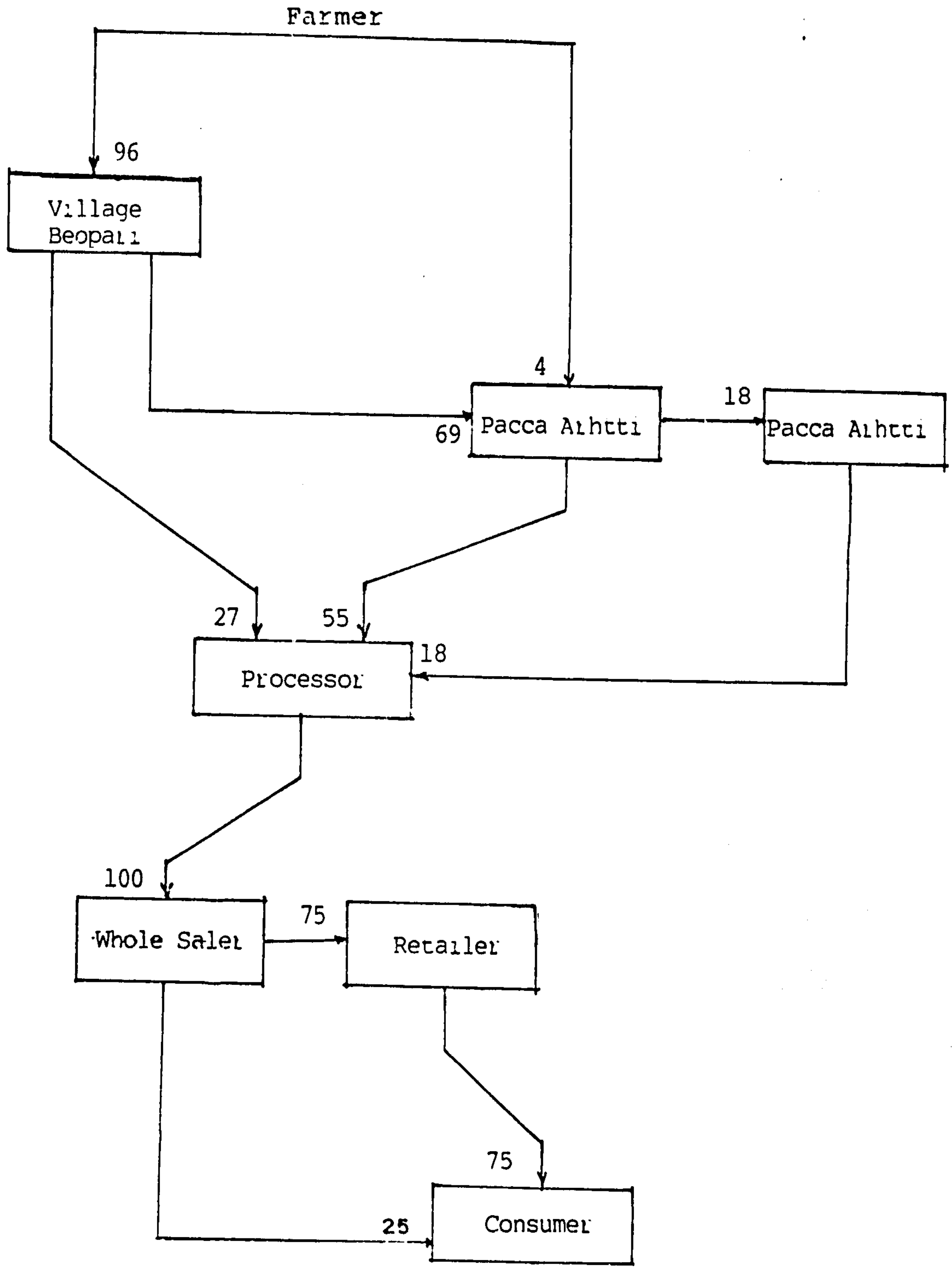


Figure- 5.11

SCHEMETIC DIAGRAM SHOWING MARKETING CHANNELS

Mung (Pakistan)



# DIAGRAM SHOWING GEOGRAPHICAL FLOW
## MUNG (LEIAH)

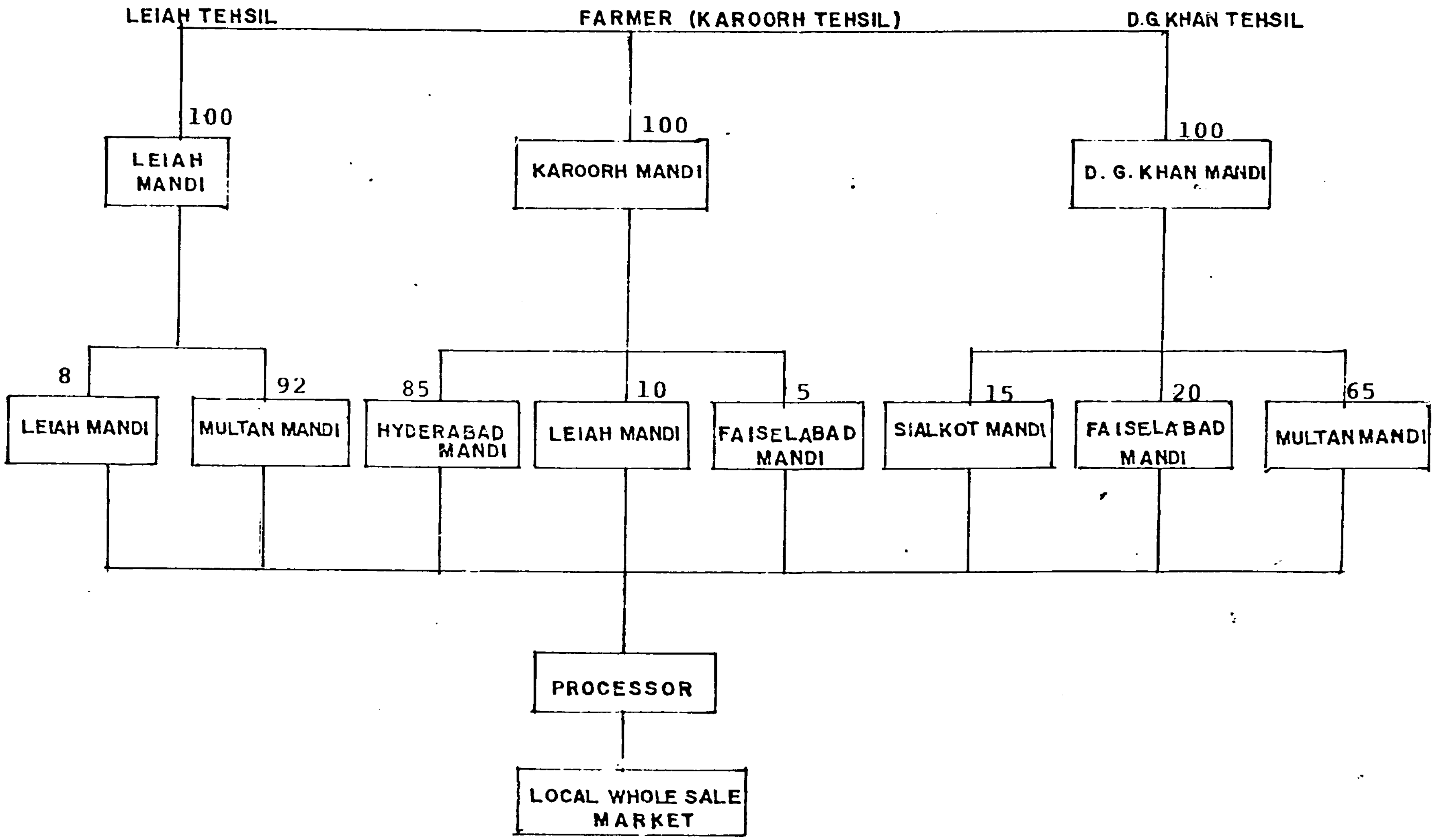



Figure 5.12

DIAGRAM SHOWING GEOGRAPHICAL FLOW

Sangher (Mung)

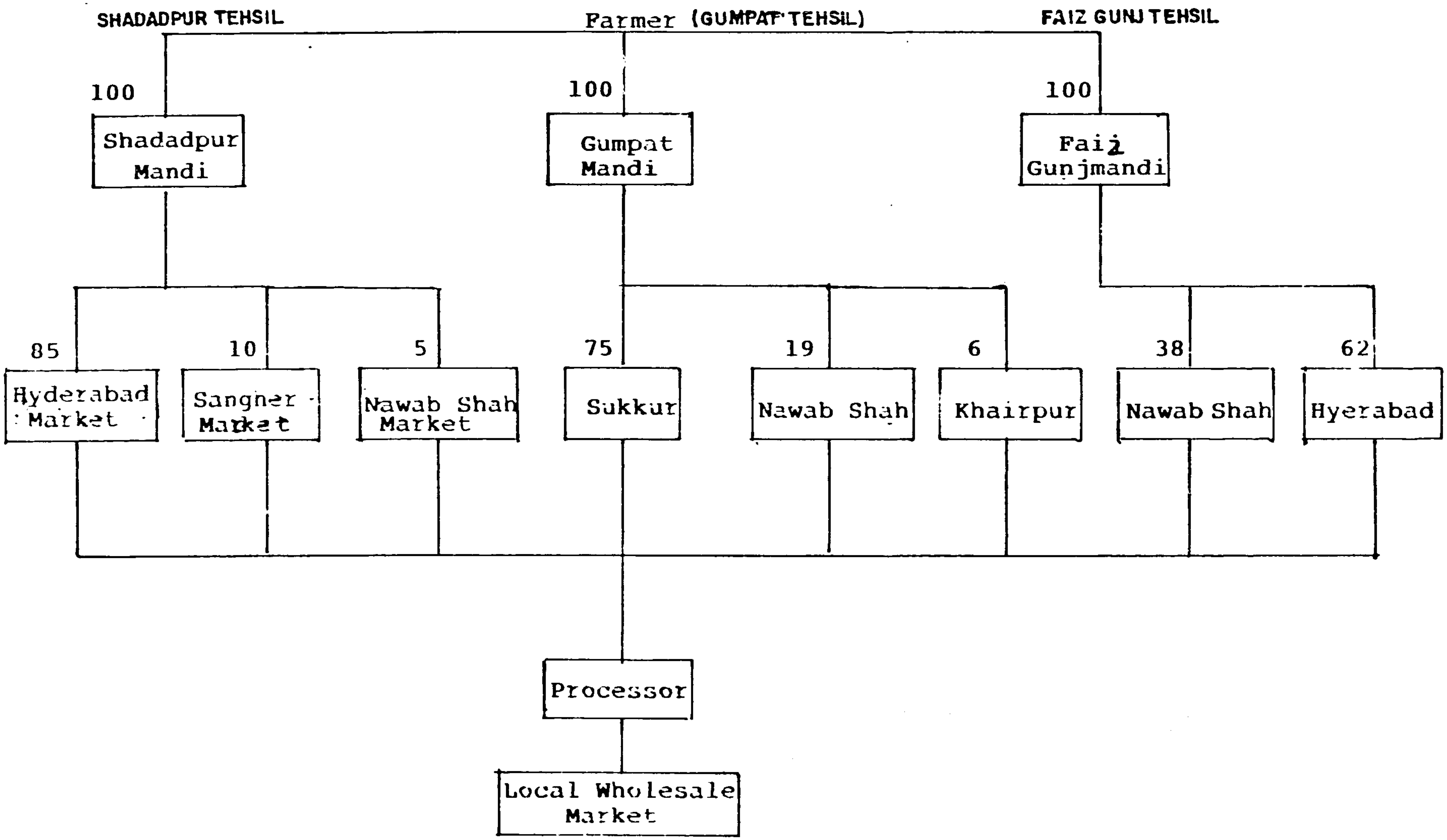



Figure- 5.13

xv) **Shares of Marketing Services in Gross Margins**

Percentage shares of costs of various marketing services in the gross margins of mung for various marketing channels and their averages are shown in Table 5.37. The actual amounts are included in Table V.22 of the statistical Appendix.

Net margins or profits absorb 85 percent of the gross margins. Processing cost is the next important item accounting for 4-3 percent followed by transport at 3.74 percent of the total.

TABLE - 5.37

PERCENTAGE SHARES OF AGRICULTURAL SERVICES IN GROSS MARGINS

(PERCENTAGE)

| | MUNG | | | | Average |
|---|---|---|---|---|---|
| | I | II | III | IV | |
| Labour | 1.68 | 1.34 | 1.01 | 1.10 | 1.29 |
| Storage | 0.49 | 0.60 | 0.46 | 0.54 | 0.52 |
| Transport | 3.42 | 4.70 | 3.29 | 3.72 | 3.78 |
| Packing | 0.25 | 1.26 | 0.07 | 0.15 | 0.43 |
| Rent | 1.31 | 1.06 | 0.70 | 0.93 | 1.00 |
| Taxes | 0.11 | 0.13 | 0.11 | 0.12 | 0.12 |
| Credit Cost | - | - | - | - | - |
| Processing Cost | 4.08 | 4.93 | 4.08 | 4.63 | 4.43 |
| Net Margins | 87.87 | 74.88 | 89.63 | 88.14 | 85.13 |
| Miscellaneous | 0.79 | 11.10 | 0.65 | 0.67 | 3.30 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

## 5.4 MARKETING SYSTEM OF MASH

### i) Village Sample Characteristics

The average population per sample village was 2991 while the average cultivated area per head of population was 0.31 acres for the entire sample.

Mash was grown on 14 percent of the total cultivated area in the sample villages. (Table 5-38)+

### ii) Growers Sample Characteristics

The growers sample consisted of 78 households of which 64 percent belonged to the group of small farmers, 21 percent were medium farmers and 15 percent were large farmers. The average size of the sample household was 8.94 persons of whom 2.68 were children of upto 10 years of age. (Table 5-39).

Area under mash constituted 22 percent of the total cultivated area for the total sample. The ratio appeared to be inversely correlated with the size of the holdings. The average yields varied between 2.72 maunds to 2.57 maunds per acre. These average were also negatively correlated with the size of the holding, indicating, other things being equal, more intensive cultivation of the smaller units (Table 5-40).

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+ Detailed district wise tables are included in the Statistical Appendix.

TABLE 5.38

AVERAGE POPULATION, CULTIVATED AREA, DISTANCES AND SHARE OF MASH ACREAGE FOR SAMPLE PROVINCE

CROP: MASH

| CROP | PROVINCE | No. of Villages | Avg. Village Population (No) | Avg. Cultivated Area Village (Acres) | AVERAGE DISTANCE IN KILO METERS FROM | | | | | %age to total Area |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Nearest Town | Rly.Stn. | Procurement Centre Food | Procure-Centr PASCO | Regulated Market | |
| MASH | PUNJAB | 6 | 2991 | 950 | 7 | 5 | 6 | 5 | 11 | 14 |

TABLE 5.39

CLASSIFICATION OF SAMPLE HOLDINGS BY FARM SIZES AND AVERAGE HOUSEHOLD COMPOSITION FOR SAMPLE OF PUNJAB

CROP: MASH

| PROVINCE | Farm Size | Sample Size | | HOUSEHOLD COMPOSITION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | No | % to total | Above 10 Years | | | Children | | | TOTAL | | |
| | | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| PUNJAB | Small | 50 | 64 | 3.48 | 2.48 | 5.96 | 1.34 | 1.10 | 2.44 | 4.82 | 3.58 | 8.40 |
| | Medium | 16 | 21 | 3.81 | 2.88 | 6.69 | 2.00 | 1.31 | 3.31 | 5.81 | 4.19 | 10.00 |
| | Large | 12 | 15 | 4.00 | 2.92 | 6.92 | 1.5 | 1.33 | 2.83 | 5.50 | 4.25 | 9.75 |
| | Total | 78 | 100 | 3.63 | 2.63 | 6.26 | 1.50 | 1.18 | 2.68 | 5.13 | 3.81 | 8.94 |

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TABLE 5.40

%AGE SHARE OF AREA UNDER MASH IN THE TOTAL AREA OF DIFFERENT SIZE OF SAMPLE HOLDINGS OF PUNJAB

CROP: MASH

| PROVINCE | Farm Size | %age of cultivated Area | Average Yield (40 Kg/Acre) |
|---|---|---|---|
| PUNJAB | Small | 25.12 | 2.72 |
| | Medium | 25.00 | 2.72 |
| | Large | 17.85 | 2.57 |
| | Total | 22.08 | 2.67 |

TABLE 5.41

%AGE SHARES OF DIFFERENT USES OF THE TOTAL OUTPUT OF MASH SMPLE GROWERS OF DIFFERENT SIZES OF PUNJAB

(%age)

| PROVINCE | Farm Size | Domestic Consumption | Payment in kind | Kept for Seed | Marketed | Total | |
|---|---|---|---|---|---|---|---|
| Punjab | Small | 13 | 8 | 9 | 70 | 100 | |
| | Medium | 7 | 5 | 4 | 83 | 100 | |
| | Large | 10 | 17 | 5 | 67 | 100 | |
| | Total | 10 | 10 | 6 | 73 | 100 | |

The percentage shares of different uses of the total output for different size sample growers of Punjab are shown in Table 5-41). It appears that domestic consumption and payments in kind are the two major elements which influence the share of the total output which is sold in the market. Each of the above two uses accounted for 10 percent of the total output while another 6 percent was kept for seed.

The average per capita quantity retained for domestic consumption for mash whole comes to 0.10 kg. for the year. It may be mentioned that mash is generaly consumed in split form which is obtained from the market. The average monthly consumption of mash reported by Household Income and Expenditure Survey[1] (1985-86) was 0.08 kg. for the rural areas. The Consumer Survey, carried out as a part of the present assignment, has yielded an average per capita consumption of 0.05 kg. These two estimates give yearly average consumption of 0.96 maunds and 0.60 maunds respectively.

iii) Marketed Surplus

The shares of the total produce marketed by the sample growers are also shown in Table 5-41.

It appears that for the sample as a whole, 73 percent of the produce was marketed. The ratio of the marketed surplus was 70 percent for the small farms, 83 percent for the medium farms and 67 percent for the large farms.

The Planning and Development Division Study (19) also estimated marketed surplus of mash at 75 percent. The shares of small, medium and large farms were however 72, 79 and 75 percents respectively.

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1. Federal Bureau of Statistics, Household Income and Expenditure Survey, 1985-86

iv) <u>Seasonal Spread of Marketing Operations</u>

The harvesting of mash starts in September. A major share of the marketed surplus is sold immediately after harvest during September to November. The quantities sold during these three months were 72 percent of the total sales for the sample as a whole while the corresponding ratio for the small, medium and large sample holdings were 73, 86 and 57 percents respectively. The average sale prices during the three months were Rs. 226.30 per maund as against Rs. 290.00 per maund for August, immediately before the harvesting season. (Table 5-42).

v) <u>Storage Facilities</u>

The average storage capacity for the sample growers was reported to be 144 maunds. The capacity was directly correlated with the size of the holdings. More than two thirds of the storage capacity was of standard type. In view of the small quantity of mash retained for domestic consumption and for use as seed, the available capacity was adequate for these storage requirements. (Table 5-43)

Storage losses were estimated at 0.92% of the quantity stored at the growers level.

vi) <u>Marketing Channels</u>

It appears that village beopari was the most important market actor for the sample growers, accounting for more than two thirds of the total sales. The relative importance of this actor however varied directly with the size of holdings. In the case of small sized growers, it accounted for 43 percent of the total sales. For the other two groups, however, sales to village beopari were 76 and 88 percents of the total sales. Pacca arhatis was the second most important market actor with a share of 26 percent of the total sales. (Table 5.44).

## TABLE 5.42

**%AGE CLASSIFICATION OF TOTAL MASH SOLD BY MONTHS BY SAMPLE GROWERS OF DIFFERENT FARM SIZES AND AVERAGE MONTH PRICES FOR PUNJAB**

CROP: MASH

| Province | Farm Size | %age of total quantity sold in | | | | | | | | | Average Sale Price (Rs. 40 kg) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
| PUNJAB | Small | 1 | - | - | - | - | 2 | 7 | 64 | 26 | 200.00 | - | - | - | - | 220.00 | 253.06 | 245.54 | 236.91 |
| | Medium | - | - | - | - | 4 | 5 | 48 | 33 | 10 | - | - | - | - | 290.00 | 220.00 | 214.20 | 259.70 | 236.57 |
| | Large | - | - | 28 | - | - | - | 10 | 47 | 15 | - | - | 200.00 | - | - | - | 210.00 | 218.00 | 230.32 |
| | Total | 1 | - | 8 | - | 2 | 2 | 21 | 49 | 17 | 200.00 | - | 200.00 | | 290.00 | 220.00 | 215.13 | 240.79 | 235.50 |

## TABLE 5.43

**AVERAGE STORAGE CAPACITY CLASSIFIED BY TYPE FOR SAMPLE GROWERS OF PUNJAB**

( 40 Kg)

| Farm Size | Average Storage Capacity | % of storage Capacity used for Mash | % Store of Standard storage to total storage | Losses (%age) |
|---|---|---|---|---|
| small | 121.00 | 0.94 | 69 | 0.73 |
| Medium | 144.00 | 0.97 | 61 | 0.96 |
| Large | 234.00 | 1.18 | 76 | 1.10 |
| Total | 144.00 | 1.00 | 69 | 0.92 |

## TABLE 5.44

MARKETING CHANNELS FOR SAMPLE GROWERS OF PUNJAB

CROP: MASH (%age.)

| Province | Farm Size | Local Sold | Village Shopkeeper | Village Beopari | Pacca Arhati | Katcha Arhati | Katcha/Pacca Arhati | T o t a l |
|---|---|---|---|---|---|---|---|---|
| | Small | - | 1 | 43 | 50 | 6 | - | 100 |
| PUNJAB | Medium | - | 4 | 76 | 14 | 6 | - | 100 |
| | Large | - | - | 88 | 10 | 2 | - | 100 |
| | Total | - | 2 | 68 | 26 | 4 | - | 100 |

vii) Marketing Costs

The average marketing costs for pacca arhati were Rs. 18.40 per maund as against Rs. 21.70 per maund for katcha arhati. These cost formed 8.69 percent to 9.40 percent of the farm gate prices and 8.00 and 8.60 percents of the average sale prices. (Table 5.45).

viii) Farm Gate Prices

Farm gate prices have been estimated by deducting marketing costs of growers from the sale prices realized by them.

Table 5-46 on the next page show the average farm gate prices for sample growers classified by farm sizes for sales made to different market actors. It appears that the average farm gate prices were the highest at Rs. 252.00 per maund for sales made to village shopkeepers, and the least at Rs. 211.72 per maund for sale to pacca arhatis or about 16.0 percent lower as compared to the former.

It is significant to note that while in most cases, sale prices realized for sales in the markets to pacca arhatis or through katcha arhatis were higher than those obtained through village beoparis, the average farm gate prices were lower in the former cases because of the marketing costs borne by the growers.

TABLE 5.45

CLASSIFICATION OF MARKETING COSTS OF GROWERS FOR SALES TO DIFFERENT FUNCTIONARIES AND THE FARM GATE PRICES FOR EACH PROVINCES

MASH Rs./[illegible]

| Province | Farm Size | PACCA ARHATI: Average Marketing Price | PACCA ARHATI: Marketing Cost | %AGE OF MARKETING PRICE: 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price | KATCHA ARHATI: Average Marketing Price | KATCHA ARHATI: Marketing Cost | %AGE OF MARKETING COST: 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Punjab | Small | 257.47 | 28.69 | - | 20 | - | 35 | 23 | 22 | 100 | 226.38 | 225.45 | 19.82 | - | 19 | 7 | 35 | 4 | 35 | 100 | 205.63 |
| | Medium | 250.76 | 22.63 | - | 21 | 8 | 34 | 5 | 32 | 100 | 226.13 | 284.30 | 22.75 | - | 18 | 2 | 45 | 5 | 30 | 100 | 261.55 |
| | Large | 210.00 | 12.34 | - | 16 | - | 54 | 13 | 17 | 100 | 197.66 | 200.00 | 25.00 | - | 18 | 2 | 40 | - | 40 | 100 | 175.00 |
| | Total | 230.12 | 18.40 | - | 18 | 3 | 45 | 10 | 24 | 100 | 211.72 | 252.49 | 21.70 | - | 18 | 4 | 42 | 3 | 33 | 100 | 230.79 |

TABLE 5.46

AVERAGE FARM GATE PRICES FOR SALES THROUGH DIFFERENT CHANNELS -

(Rs. 40 Kg)

| PROVINCE | FARM SIZE | VILLAGE SHOPKEEPER | | | VILLAGE BEOPARI | PACCA ARHATI | | | KATCHA ARHATI | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sale Price | Market-ing Cost | Farm Gate Price | Farm Gate Price | Sale Price | Marke-ting Cost | Farm Gate Price | Sale Price | Marke-ting Cost | Farm Gate Price |
| PUNJAB | Small | 240.00 | - | 240.00 | 229.70 | 257.47 | 28.69 | 228.78 | 225.45 | 19.82 | 207.23 |
| | Medium | 260.00 | - | 260.00 | 232.37 | 250.76 | 22.67 | 228.13 | 284.30 | 22.75 | 261.55 |
| | Large | - | - | - | 208.63 | 210.00 | 12.34 | 197.66 | 200.00 | 25.00 | 175.00 |
| | Total | 252.00 | - | 252.00 | 222.01 | 230.12 | 18.40 | 211.72 | 252.49 | 21.70 | 230.79 |

TABLE 5.48

AVERAGE TRANSPORT COST OF DIFFERENT MODES FOR SAMPLE GROWERS OF DIFFERENT FARM SIZES FOR SAMPLE PROVINCE

(Rs./40 Kg/Km)

| PROVINCE | FARM SIZE | Tractor/ Trolley | Truck | Horse drawn Cart | Pack Animal | |
|---|---|---|---|---|---|---|
| PUNJAB | Small | 0.18 | 0.28 | 0.13 | 0.13 | |
| | Medium | - | 0.26 | - | . | |
| | Large | 0.29 | - | 0.12 | - | |
| | Total | 0.19 | 0.27 | 0.13 | 0.13 | |

ix) **Transportation Modes and Costs**

The usual modes of transport of tractor/trolley, trucks, horse drawn carts and pack animal were used by the sample growers. Percentage shares of different modes for sample growers of different farm sizes are given in Table 5.47. The corresponding ratios for each sample district are included in V.28(a) of the Statistical Appendix.

It appears that tractor/trolley was the most important mode accounting for 44 percent of the total produce transported by sample growers followed by truck for 27 percent.

The average cost was the least at Re. 0.13 per maund per kilometer for horse drawn carts and the highest at Re. 0.27 per maund per kilometer for trucks. (Table 5.48).

TABLE 5.47

PERCENTAGE CLASSIFICATION OF QUANTITIES TRANSPORTED BY DIFFERENT MODE FOR SAMPLE GROWERS OF DIFFERENT FARM SIZE FOR EACH PROVINCE

WASH

| | Farm Size | Tractor/Trolley | | Truck | | Bullocks/ Camel Carts | | Horse Drawn Carts | | Pack Animal | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. |
| Punjab | Small | 10 | 26 | 68 | 27 | – | – | 19 | 28 | 3 | 9 | 100 | 100 |
| | Medium | – | – | 83 | 81 | 17 | 19 | – | – | – | – | 100 | 100 |
| | Large | 13 | 70 | – | – | – | – | 67 | 30 | – | – | 100 | 100 |
| | Total | 10 | 44 | 65 | 27 | 3 | 4 | 20 | 23 | 2 | 2 | 100 | 100 |

x) <u>Marketing Channels for the Second Stage Market Actors</u>

Summary characteristics of the second stage actors; village beoparis katcha arhatis and pacca arhatis; are included in Table 5.49

The percentage shares of different agencies is sales of second stage actors are shown in Table 5.50.

These actors trade among themselves, though the largest share of the sales has been with the processors except for vilalge beoparis who sold the entire quantity to pacca arhatis.

On the basis of the present survey, three major marketing channels have been identified as shown below:

I. Farmer --- Beopari --- Pacca Arhati --- Processor --- Wholesaler --- Retailer.

II. Farmer --- Katcha Arhati --- Processor --- Wholesaler --- Retailer.

III Farmer --- Pacca Arhati --- Processor --- Wholesaler --- Retailer.

Percentage shares of farmgate prices and of marketing margins in the retail prices for each of the above

TABLE 5.49

SUMMARY CHARACTERISTICS OF DIFFERENT TYPE OF MARKET ACTOR BY DISTRICTS

CROP: MASH

| | Pacca Arhati | | | | | | | Katcha Arhati | | | | | | | Village Beopari | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quantity Traded | Purchases/inflow | Sales outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price | Quantity Traded | Purchases inflow | Sales/outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price | Quantity Traded | Purchases inflow | Sales/outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price |
| Rawalpindi | 517 | Beopari | Processor | 86 | 259 | 210.00 to 246.95 | 255.00 | 967 | Farmers Beopari | Processor | 36 | 121 | 252.49 | 274.50 | 2350 | Farmers | Pacca Arhati | 17 | 196 | 222.01 | 246.95 |
| Sialkot | – | – | – | | | | | | | | | | | | 1497 | Farmers | Pacca Arhati | 12 | 150 | 222.01 | 246.95 |
| Punjab | 517 | Beopari | Processor | 86 | 259 | 210.00 to 246.95 | 255.00 | 967 | Farmers Beopari | Processor | 36 | 121 | 252.49 | 274.50 | 3847 | Farmers | Pacca Arhati | 15 | 175 | 222.01 | 246.95 |

TABLE 5.50

PERCENTAGE OF MASH SOLD TO DIFFERENT ACTORS BY SECOND STAGE SELLERS

Percentage

| Province | | TO WHOM SOLD | | | |
|---|---|---|---|---|---|
| | | Katcha Arhati | Pacca Arhati | Processor | Total |
| Punjab | Village Beopari | - | 100 | - | 100 |
| | Katcha Arhati | - | - | 100 | 100 |
| | Pacca Arhati | - | - | 100 | 100 |

marketing channels are given in Table 5-51. The actual amounts are shown in Table V-30 of the Statistical Appendix.

The farmers shares in the final retail prices have varied between 55.00 to 59.95 percents for the sample growers.

The percentage price spread between the growers and the consumers has been analysed in terms of the following elements of marketing performance.

- average farmers' share in consumers rupee.
- distribution of gross margin among various intermediaries/stage.
- share of net margin to gross margin at each stage.

The above data are included in Table 5-52 for each of the provincial samples. It appears that the on the whole processors get the maximum share of the gross margin followed by wholesalers and retailers.

The net margins form a very high proportion of gross margins varying from 92.89 percent for wholesalers to 78.00 percent for the retailers for the sample as a whole.

The Planning and Development Division Study (19) estimated the share of grower's farmgate pries in the consumers rupee at 64.05 percent for mash whole. The ratios of gross margins of wholesalers and retailers in the total and the shares of net margins in the gross margins were estimated as follows:

TABLE 5.51

PERCENTAGE OF GROSS MARGIN COST NET MARGIN AND FARM GATE PRICE TO CONSUMER PRICE

MASH

| | MASH | | |
|---|---|---|---|
| | PUNJAB | | |
| | I | II | III |
| A. Farm gate Price | 57.67 | 59.95 | 55.00 |
| Farmer Cost | - | 5.63 | 4.78 |
| B. Beopari | | | |
| - Gross Margin | 6.48 | - | - |
| - Cost | 0.62 | - | - |
| - Net Margin | 5.86 | - | - |
| C. Katcha Arhati | | | |
| - Gross Margin | - | 5.72 | - |
| - Cost | - | 0.71 | - |
| - Net Margin | - | 5.01 | - |
| D. Pacca Arhati | | | |
| - Gross Margin | 2.09 | - | 6.46 |
| - Cost | 0.94 | - | 0.94 |
| - Net Margin | 1.16 | - | 5.52 |
| E. Processor | | | |
| - Gross Margin | 15.19 | 10.13 | 15.19 |
| - Cost | 1.61 | 1.61 | 1.61 |
| - Net Margin | 13.58 | 8.52 | 13.58 |
| F. Wholesaler | | | |
| - Gross Margin | 10.59 | 10.59 | 10.59 |
| - Cost | 0.75 | 0.75 | 0.75 |
| - Net Margin | 9.84 | 9.84 | 9.84 |
| G. Retailer | | | |
| - Gross Margin | 7.98 | 7.98 | 7.98 |
| - Cost | 1.36 | 1.36 | 1.36 |
| - Net Margin | 6.62 | 6.62 | 6.62 |
| Total | 100.00 | 100.00 | 100.00 |

TABLE 5.52

RATIO OF GROSS MARGIN AND NET MARGIN

CROP: MASH

| | %age of Gross Margin to Consumer | Distribution Gross Margin | | Net Margin | |
|---|---|---|---|---|---|
| | | Amount (Rs.) | %age of Gross Margin | Amount (Rs.) | %age of Net Margin to Gross Margin |
| Farm gate | 58.17 | – | – | – | – |
| Farmer cost | 2.15 | – | – | – | – |
| Dealer | 9.35 | 36.00 | 23.57 | 28.08 | 78.00 |
| Processor | 11.76 | 45.26 | 29.63 | 39.07 | 86.32 |
| Wholesaler | 10.59 | 40.76 | 26.68 | 37.86 | 92.89 |
| Retailer | 7.98 | 30.73 | 20.12 | 25.50 | 82.98 |
| Total | 100.00 | 152.75 | 100.00 | 130.51 | 85.44 |

| | Gross Margin % | Ratio of net margins to gross margin |
|---|---|---|
| Wholesaler | 12.52 | 60 |
| Retailers | 20.30 | 70 |

Aslam Choudhry (6) estimates the margin of processor at 5.1 percent of his purchase price. His net margin was estimated at 29.64 percent of the total margin. The retailers gross margin was estimated at 13 percent of his purchase price, the net margin being 90 percent of the gross margin.

Nazir Ahmad (15), on the basis of his case study of Faisalabad market, gives the following estimates of gross margin as percentage of consumer price and ratio of net margins to gross margins.

| | Gross Margin % | Net Margin as % of Gross Margin |
|---|---|---|
| Commission | 5.30 | 58.1 |
| Processor | 15.20 | 56.9 |
| Retailer | 40.00 | 90.8 |

## xi) Marketing Costs of Second Stage Actors

The average marketing costs of second stage actors have varied between Rs. 2.37 for beopari to Rs. 3.60 for pacca arhati. The ratio of operational costs of total have varied between 64 to 83 percent of the total for different intermediaries. The value of losses have ranged between 9 to 10 percent and transport costs 11 to 21 percent of the total. (Table 5.53).

The breakdown of the operating costs, storage and transportation costs and cost of losses are given in Tables V.34 to V. 37 of the Statistical Appendix.

## xii) Processing Costs

The average processing costs for mash are given in Table 5.54.

## xiii) Wholesalers and Retailers

The major components of average costs of wholesalers and retailers are given in Table 5.55. The transportation costs were the most important component forming 85% of the total cost for the sample wholesalers and 53 percent for retailers.

TABLE 5.53

COST COMPONENTS OF SECOND STAGE MARKET INTERMEDIRIES

CROP: MASH

| | | Rs./40 Kg. | | | | | | | (Percentages) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Operating cost | Storage Cost | Losses | Trans-port Cost | Credit Cost | Other | Total | Operating Cost | Storage Cost | Losses | Trans-port Cost | Credit Cost | Other | Total |
| Beopari | Punjab | 1.52 | 0.02 | 0.22 | 0.50 | - | 0.11 | 2.37 | 64 | 1 | 9 | 21 | - | 5 | 100 |
| Katcha Arhati | Punjab | 2.28 | 0.27 | - | - | - | 0.19 | 2.74 | 83 | 10 | - | - | - | 7 | 100 |
| Pucca Arhati | Punjab | 2.48 | 0.12 | 0.35 | 0.40 | 0.06 | 0.19 | 3.60 | 69 | 3 | 10 | 11 | 2 | 5 | 100 |

TABLE 5.54

AVERAGE PROCESSING COST FOR SAMPLE UNITS

MASH

| | DIRECT COST | | | | | | | FIXED COST | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Salary & Wages | Contract Labour | Electricity | Tele-phone | Repair & Maintenance | Other Misc. | Total | Salaries and Allowances | Administrative | Rent & Tax | Misc. Cost | Total | Financial Cost | Depreciation | Transport Cost | Storage Cost | Other Cost | Total |
| Punjab | 1.10 | 0.21 | 1.73 | 0.71 | 0.74 | 0.11 | 4.60 | 1.74 | 0.29 | 0.33 | - | 2.36 | 0.02 | 2.05 | 0.04 | 0.02 | 2.49 | 11.58 |

TABLE 5.55

AVERAGE COSTS OF SAMPLE WHOLESALERS AND RETAILERS

Rs./40 Kg.

| | Wholesalers | Retailers |
|---|---|---|
| OPERATING COSTS: | | |
| - Labour | 0.19 | 0.84 |
| - Rent | 0.09 | 0.84 |
| - Electricity | 0.01 | 0.17 |
| - Phone | 0.07 | 0.10 |
| - Taxes | 0.04 | 0.12 |
| - Others | 0.04 | 0.40 |
| Sub-Total | 2.46 | 2.47 |
| Transportation | 2.46 | 2.76 |
| Total | 2.90 | 5.23 |
| Transportation Cost as % of Total | 85 | 53 |

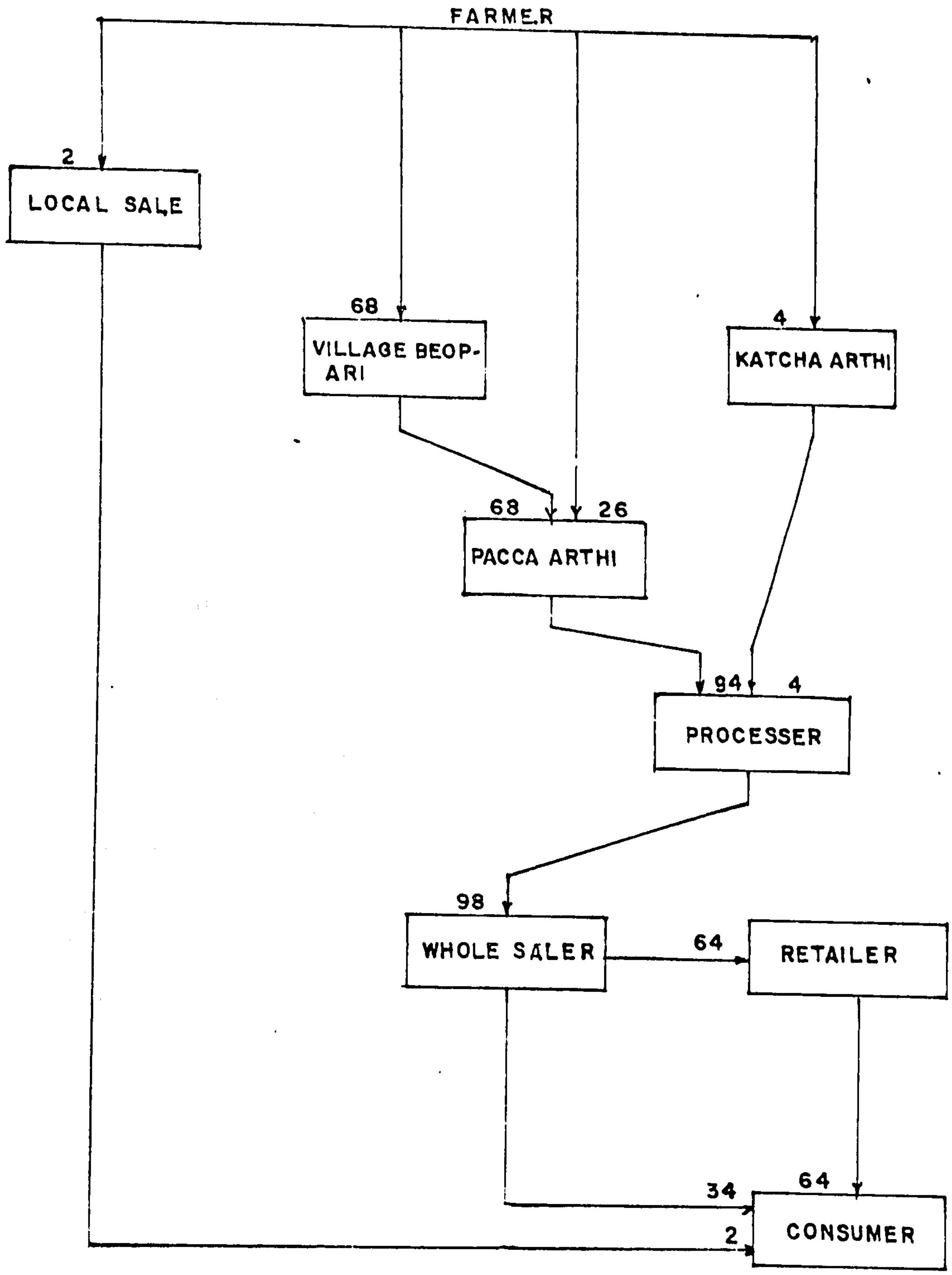
xiv) Schematic Diagrams of Market Channells

a Schematic diagrams for market flows showing market channells for each province and for the sample as whole are given on page 302.

b Diagrams showing geographical flow for one major producing district for each province are given on page 303.

Figure- 5.14

SCHEMETIC DIAGRAM OF SHOWING MARKETING CHANNEL MASH (PUNJAB)



## DIAGRAM SHOWING GEOGRAPHICAL FLOW
## MASH (SIALKOT)

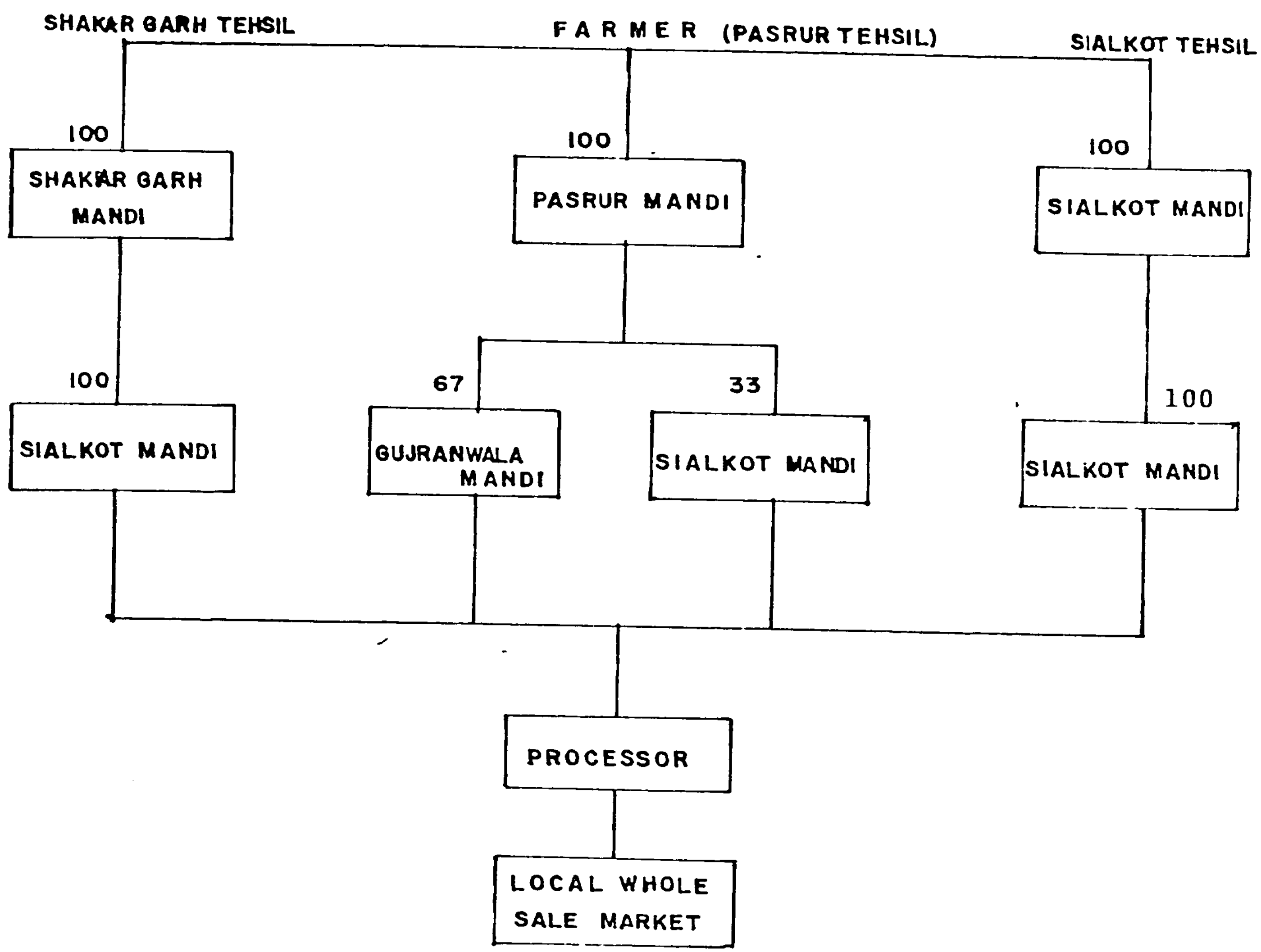



Figure- 5.15

xv) **Shares of Marketing Services in Gross Margins**

Percentage shares of costs of various marketing services in the gross margins of mash for various marketing channels and their average are shown in Table 5.56. The actual amounts are included in Tabe V.38 of the Statistical Appendix.

Net margins or profits absorb about 80 percent of the gross margins. Transport is the next important item accounting for 4.93% followed by processing cost at 3.79% of the total.

TABLE - 5.56

PERCENTAGE SHARES OF MARKETING SERVICES IN GROSS MARGINS

(PERCENTAGE)

| | MASH | | | Average |
|---|---|---|---|---|
| | I | II | III | |
| Labour | 1.89 | 1.50 | 1.36 | 1.59 |
| Storage | 0.09 | 0.18 | 0.07 | 0.12 |
| Transport | 3.76 | 6.14 | 4.96 | 4.96 |
| Packing | 0.39 | 0.17 | 0.05 | 0.16 |
| Rent | 1.37 | 0.86 | 1.35 | 1.20 |
| Taxes | 0.10 | 0.67 | 0.41 | 0.39 |
| Credit Cost | 0.03 | - | 0.03 | 0.03 |
| Processing Cost | 3.80 | 4.01 | 3.57 | 3.80 |
| Net Margins | 87.55 | 74.86 | 79.04 | 80.49 |
| Miscellaneous | 1.02 | 11.61 | 9.16 | 7.26 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 |

## 5.5 MARKETING SYSTEM OF MASOOR

### i) Village Sample Characteristics

The average population per sample village was 3583 while the average cultivated area per head of population was 0.81 acres for the entire sample.

Masoor was grown on 10 percent of the total cultivated areas in the sample villages. (Table 5.57)+

### ii) Growers Sample Characteristics

The growers sample consisted of 76 households of which 71 percent belonged to the group of small farmers, 25 percent were medium farmers and 4 percent were large farmers. The average size of the sample household was 9.04 persons of whom 3.04 were children of upto 10 years of age. (Table 5.58).

Area under masoor constituted 21.53 percent of the total cultivated area for the total sample. The ratio appeared to be inversely correlated with the size of the holdings. The average yields varied between 2.64 maunds for the large sample growers to 3.97 maunds per acre for the medium sample growers as shown in Table 5-59.

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+ Detailed district wise tables are included in the Statistical Appendix.

TABLE 5.57

AVERAGE POPULATION CULTIVATED AREA, DISTANCES AND SHARE OF MASOOR FOR SAMPLE VILLAGES

CROP: MASOOR

| District | No. of Village | Average Village Population (No.) | Average Cultivated Area/Village (Acres) | Average Distance in Kilo Meters From | | | | | %age to Total Area |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Nearest Town | Railway Station | Procurement Centre Food | Procurement Centre Passco | Regulated Market | |
| Rawalpindi | 3 | 4900 | 5200 | 7 | 8 | 10 | 10 | 36 | 7 |
| Sialkot | 3 | 2267 | 667 | 10 | 12 | 2 | 13 | 9 | 13 |
| Punjab | 6 | 3583 | 2934 | 8 | 10 | 6 | 11 | 23 | 10 |

TABLE 5.58

CLASSIFICATION OF SAMPLE HOLDINGS BY FARM SIZES AND AVERAGE HOUSEHOLD COMPOSITION FOR THE PUNJAB SAMPLE

CROP: MASOOR

| Province | Farm Size | Sample Size | | Household Composition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Number | %age to Total | Above 10 Years | | | Children | | | Total | | |
| | | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Punjab | Small | 54 | 71 | 3.04 | 2.72 | 5.76 | 1.72 | 1.26 | 2.98 | 4.76 | 3.98 | 8.74 |
| | Medium | 19 | 25 | 3.05 | 3.37 | 6.42 | 1.68 | 1.00 | 2.68 | 4.73 | 4.37 | 9.10 |
| | Large | 3 | 4 | 4.00 | 3.67 | 7.67 | 4.00 | 2.33 | 6.33 | 8.00 | 6.00 | 14.00 |
| | Total | 76 | 100 | 3.08 | 2.92 | 6.00 | 1.80 | 1.24 | 3.04 | 4.88 | 4.16 | 9.04 |

TABLE 5.59

PERCENTAGE SHARE OF AREA UNDER MASOOR IN THE TOTAL AREA OF DIFFERENT SIZE OF SAMPLE HOLDINGS OF PUNJAB

CROP: MASOOR

| Farm Size | Percentage of Cultivated Area | Average Yield (40 Kg/Acre |
|---|---|---|
| Small | 23.29 | 3.83 |
| Medium | 20.41 | 3.97 |
| .Large | 18.64 | 2.64 |
| Total | 21.53 | 3.74 |

The percentage shares of different uses of the total output for different size sample growers are given in Table 5.60.

It appears that domestic consumption payments in kind and seed uses account for almost equal shares, the total being 20 pecent for the sample as a whole.

The average per capita retained for domestic consumption for masoor whole comes to 0.08 kg. The average monthly consumption of masoor reported by Household Income and Expenditure Survey[1] (1985-86) was 0.06 kg. for the rural areas. The Consumer Survey, carried out as a part of the present assignments, has yielded an average per capita consumption of 0.10 kg.

iii) Marketed Surplus

The shares of the total produce marketed by the sample growers are also shown in Table 5-.60

It appears that for the sample as a whole, 80 percent of the produce was marketed. The ratio of the marketed surplus varied directly with the size of the holdings.

The marketed surplus estimated in the Planning and Development Study (19) was 64 percent for the entire sample. The ratios for the small, medium and large farmers were reported as 62, 63 and 67 percents respectively. The present survey shows higher ratios of marketed surplus though the trend by size of holdings remains consistent.

1. Federal Bureau of Statistics, Household Income and Expenditure Survey, 1985-86

TABLE 5.60

PERCENTAGE SHARES OF DIFFERENT USES OF THE TOTAL OUTPUT MASOOR SAMPLE GROWERS OF DIFFERENT SIZES OF PUNJAB

CROP: MASOOR (%AGE)

| Farm Size | Domestic Consumption | Payment in Kind | Kept for Seed | Marketed | Total. |
|---|---|---|---|---|---|
| Small | 7 | 8 | 7 | 78 | 100 |
| Medium | 9 | 4 | 6 | 81 | 100 |
| Large | 5 | 5 | 1 | 89 | 100 |
| Total | 8 | 6 | 6 | 80 | 100 |

## iv) Seasonal Spread of Marketing Operations

The harvesting of masoor starts in April. A major share of the marketed surplus is sold immediately after harvest during April to June. The quantities sold during these three months were 69 percent of the total sales for the sample as a whole while the corresponding ratio for the small, medium and large sample holdings were 72, 59 and 68 percents respectively. The average sale prices during the three months were Rs. 244.33 per maund which declined to Rs. 228.30 per maund during July for the sample farmers. The average prices however rose significantly to Rs. 271.05 per maund in November of the same year. (Table 5-61 .

It is generally held that the prices of agricultural produce are at the lowest levels during the harvesting season when almost the entire marketable surplus is sold by the farmers. The prices then show an upward trend in the subsequent period, reaching the highest levels just before the beginning of the next harvest period. A recent phenomene observed for some crops has been the slight reduction in the price levels for a limited period immediately after the busy sales period. It is reported that during the harvest period, a large number of beoparis and others enter the market and compete among themselves for purchasing the new crop, thus helping in maintaining prices at reasonable levels inspite of the large quantities being off loaded on the market during the short period. Similarity, giving of loans by market actors to the growers through the year is a device to ensure sales through them. Immediately after the harvest season when the bulk of the crop has been disposed of, the exist of most of beoparis reduces competition among buyers thus resulting in decline in prices.

TABLE 5.61

PERCENTAGE CLASSIFICATION OF TOTAL MASOOR SOLD BY MONTHS BY SAMPLE GROWERS OF DIFFERENT FARM SIZES AND AVERAGE MONTH PRICES FOR PUNJAB

CROP: MASOOR

| Province | Avg. Qty. Sold | PERCENTAGE OF TOTAL QUANTITY SOLD IN | | | | | | | | | AVERAGE SALES PRICES ( RS.PER 40 KG ) | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. | |
| | Small | 51 | 11 | 10 | 19 | – | – | – | 9 | – | 254.20 | 208.10 | 236.64 | 215.80 | – | – | – | 281.38 | – | [illegible]2.77 |
| Punjab | Medium | 50 | 5 | 4 | 23 | – | – | 5 | 8 | 5 | 243,54 | 275,00 | 320.00 | 241.82 | – | – | 235.00 | 255.55 | 230.00 | [illegible]7.50 |
| | Large | 66 | 2 | – | – | – | – | 3 | – | – | 220.00 | 240.00 | – | – | – | – | 220.00 | – | – | [illegible]26.05 |
| | Total | 52 | 11 | 6 | 19 | – | – | 2 | 8 | 2 | 246.13 | 230.63 | 256.24 | 228.30 | – | – | 233.10 | 271.05 | 230.00 | [illegible]43.10 |

v) Storage Facilities

The average storage capacity for the sample growers was reported to be 126 maunds. The capacity varied directly with the size of the holdings except for the large farms. About one half of the storage capacity was of standard type. In view of the small quantity of masoor retained for domestic consumption and for use as seed, the available capacity was adequate for these storage requirements. (Table 5-62)

Storage losses were estimated at 0.91 percent of the quantity stored at the growers level.

vi) Marketing Channels

It appears that village beopari was the most important market actor for the sample growers, accounting for about two thirds of the total sales. The relative importance of this actor however varied inversely with the size of holdings. In the case of small sized growers, it accounted for 72 percent of the total sales. For the other two groups, however, the shares declined to 62 and 31 percents respectively. Pacca arhatis was the second most important market actor with a share of 25 percent of the total sales. (Table 5-63)

vii) Marketing Costs

The average marketing costs for sales to pacca arhati were Rs. 22.72 per maund as against Rs. 15.22 per maund for katcha arhati. These costs formed 9.05 and 6.92 percents of the sale prices and 9.95 and 7.44 percents of the farm gate prices.

The major cost component was reported to be cost of deductions which accounted for almost one half of the total marketing costs. These deductions are made by the arhatis on different pretexts and generally amount to the price of 1.5 to 2.0 kg. per maund of 40 kg. (Table 5-64)

TABLE 5.62

AVERAGE STORAGE CAPACITY CLASSIFIED BY TYPE FOR SAMPLE GROWERS OF PUNJAB

CROP: MASOOR 40kg

| Farm Size | Average Storage Capacity | %age of Storage Capacity Used for | %age Share of Standard Storage to Total Storage | Losses (%age) |
|---|---|---|---|---|
| Small | 124.00 | 0.74 | 48 | 0.13 |
| Medium | 134.00 | 1.37 | 67 | 1..49 |
| Large | 102.00 | 1.06 | 49 | 1 .20 |
| Total | 126.00 | 1.77 | 52 | 0.91 |

TABLE 5.63

MARKETING CHANNELS FOR SAMPLE GROWERS OF PUNJAB

CROP: MASOOR (%age)

| Farm Size | Village Shopkeeper | Village Beopari | Pacca Arhatti | Katch Arhatti. | Total |
|---|---|---|---|---|---|
| Small | 1 | 72 | 27 | - | 100 |
| Medium | 9 | 62 | 29 | - | 100 |
| Large | - | 31 | 4 | 65 | 100 |
| Total | 4 | 65 | 25 | 6 | 100 |

TABLE 5.64

CLASSIFICATION OF MARKETING COSTS OF GROWERS FOR SALES TO DIFFERENT FUNCTIONARIES AND THE FARM GATE PRICES FOR EACH PROVINCES

MASOOR

| Province | Farm Size | PACCA ARHATI | | | | | | | | | | KATCHA ARHATI | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE | | | | | | | Farm Gate Price | Average Marketing Price | Marketing Cost | %AGE OF MARKETING COST | | | | | | | Farm Gate Price |
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Punjab | Small | 241.21 | 21.58 | – | 26 | 4 | 28 | – | 42 | 100 | 213.63 | – | – | – | – | – | – | – | – | – | – |
| | Medium | 263.74 | 24.60 | – | 25 | 3 | 27 | – | 45 | 100 | 239.14 | – | – | – | – | – | – | – | – | – | – |
| | Large | 220.00 | 18.44 | – | 19 | – | 30 | – | 51 | 100 | 201.56 | 220.00 | 15.22 | – | 18 | 4 | 36 | – | 42 | 100 | 204.78 |
| | Total | 251.05 | 22.72 | – | 24 | 4 | 28 | – | 44 | 100 | 228.33 | 220.00 | 15.22 | – | 18 | 4 | 36 | – | 42 | 100 | 204.78 |

1. Preparation Charges 2. Transportation Charges 3. Octroi 4. Commission 5. Paladari, Weighmen & Changer 6. Cost of Deduction 7. Total

viii) Farm Gate Prices

Farm gate prices have been estimated by deducting marketing costs of growers from the sale prices realized by them.

Table 5.65 shows the average farmgate prices for sample growers classified by farm sizes for sales made to different market actors. It appears that the average farm gate prices were the highest at Rs. 245.43 per maund for sales made to village shopkeepers, and the least at Rs. 204.78 per maund for sales to katcha arhatis or about 16.6 percent lower as compared to the former. Sales in the village however are limited by the local marketing facilities available to the growers.

It is significant to note that while in most cases, sale prices realized for sales in the markets to pacca arhatis or through katcha arhatis were higher than those obtained through village shopkeeper the average farm gate prices were lower in the former cases because of the marketing costs borne by the growers.

TABLE 5.65

AVERAGE FARM GATE PRICE FOR SALE THROUGH DIFFERENT CHANNELS OF MASOOR FOR PUNJAB

CROP: MASOOR

| Province | Farm Size | Village Shopkeeper | | | Vilalge Beopari | | | Pacca Arhati | | | Katcha Arhati | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Marketed Price | Marketing Cost | Farm Gate Price | Marketed Price | Marketing Cost | Farm Gate Price | Marketed Price | Marketing Cost | Farm Gate Price | Marketed Price | Marketing Cost | Farm Gate Price |
| Punjab | Small | 250.00 | | 250.00 | 237.38 | | 237.38 | 241.21 | 21.58 | 219.63 | - | | |
| | Medium | 245.00 | | 245.00 | 208.16 | | 205.16 | 263.74 | 24.60 | 239.14 | - | | |
| | Large | - | | - | 240.00 | | 240.00 | 220.00 | 18.44 | 201.56 | 220.00 | 15.22 | 204.78 |
| | Total | 245.43 | | 245.43 | 227.43 | | 227.43 | 251.05 | 22.72 | 228.33 | 220.00 | 15.22 | 204.78 |

## ix) Transportation Modes and Costs

The major modes of transport used by the sample growers were tractor/trolley and trucks. Percentage shares of different modes for sample growers of different farm sizes are given in Table 5.66. The corresponding ratios for each sample district are included in Table V.48 of the Statistical Appendix.

The average cost was estimated at Re. 0.16 per maund per kilometer (Table 5.67).

## x) Marketing Channels for the Second Stage Market Actors

Summary cahracteristics of the second stage actors; village beoparis, katcha arhatis and pacca arhatis, are included in Table 5.68.

TABLE 5.66

PERCENTAGE CLASSIFICATION OF QUANTITIES TRANSPORTED BY DIFFERENT MODE FOR SAMPLE GROWERS OF DIFFERENT FARM SIZE FOR EACH PROVINCE

MASOOR

| | Farm Size | Tractor/Trolley | | Truck | | Bullocks/ Camel Carts | | Horse Drawn Carts | | Pack Animal | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. |
| Punjab | Small | 20 | 63 | 80 | 37 | - | - | - | - | - | - | 100 | 100 |
| | Medium | - | - | 100 | 100 | - | - | - | - | - | - | 100 | 100 |
| | Large | - | - | 100 | 100 | - | - | - | - | - | - | 100 | 100 |
| | Total | 14 | 63 | 86 | 70 | - | - | - | - | - | - | 100 | 100 |

TABLE 5.67

AVERAGE TRANSPORT COST OF DIFFERENT MODES FOR SAMPLE GROWERS OF DIFFERENT FARM SIZES FOR PUNJAB

(Rs./40 Kg./Km.)

| Farm Size | Tractor/ Trolley | Bullocks/ Camel Cart | Horse Drawan Cart | Pack Animal | Truck |
|---|---|---|---|---|---|
| Small | 0.16 | - | - | - | 0.15 |
| Medium | - | - | - | - | 0.17 |
| Large | - | - | - | - | 0.11 |
| Total | 0.16 | - | - | - | 0.16 |

TABLE 5.68

SUMMARY CHARACTERISTICS OF DIFFERENT TYPE OF MARKET ACTOR BY DISTRICT

CROP: MASOOR

| | Pacca Arhati | | | | | | | Katcha Arhati | | | | | | | Beopari | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quantity Traded | Purchases/ inflow | Sales outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price | Quantity Traded | Purchases inflow | Sales/out-flow | Purchase Lot | Sale Lot | Purchase Price | Sale Price | Quantity Traded | Purchases inflow | Sales/ outflow | Purchase Lot | Sale Lot | Purchase Price | Sale Price |
| Rawalpindi | 4395 | Village Beopari | Mill Processor | 275 | 488 | 251.05 to 262.38 | 286.19 | 550 | Farmers | Processor | 14 | 39 | 220.00 | 256.85 | – | – | – | – | – | – | – |
| Sialkot | 2850 | Beopari | Pacca Arhati | 285 | 713 | 251.05 to 262.38 | 256.19 | – | – | – | – | – | – | – | 3397 | Farmers | Pacca Arhati | 23 | 377 | 227.63 | 262.35 |
| Punjab | 7245 | Beopari | Processor Pacca Arhati | 279 | 557 | 251.05 to 262.38 | 256.19 | 550 | Farmers | Processor | 14 | 39 | 220.00 | 256.85 | 3397 | Farmers | Pacca Arhati | 23 | 377 | 227.63 | 262.38 |

The percentage shares of different agencies in sales of second stage actors are shown in Table 5.69.

These actors trade among themselves, though the largest share of the sales has been with the processor except for village beoparis who sold the entire quantity to pacca arhatis.

On the basis of the present survey, three major marketing channels have been identified as shown below:

I. Farmer --- Beopari --- Pacca Arhati --- Wholesaler --- Retiailer.

II. Farmer --- Katcha Arhati --- Processor --- Wholesaler --- Retailer.

III Farmer --- Pacca Arhati --- Processor --- Wholesaler --- Retailer.

Percentage shares of farmgate prices and of marketing margin in the retail prices for each of the above marketing channels are given in Table 5-70. The actual amounts are shown in Table V-33 of the Statistical Appendix.

The farmers shares in the final retail prices have varied between 54.22 to 60.46 percents for the sample growers.

The percentage price spread between the grower and the consumers has been analysed in terms of the following elements of marketing performance.

- average farmer's share in consumer rupee.

- distribution of gross margin among various intermediaries/stage.

TABLE 5.69

PERCENTAGE OF MASOOR SOLD TO DIFFERENT ACTORS BY SECOND STAGE SELLERS

| | | TO WHOM SOLD | | | |
|---|---|---|---|---|---|
| | | Katcha Arhati | Pacca Arhati | Processor | Total |
| Punjab | Village Beopari | - | 100 | - | 100 |
| | Katcha Arhati | - | - | 100 | 100 |
| | Pacca Arhati | - | 20 | 80 | 100 |

TABLE 5.70

## PERCENTAGE OF GROSS MARGIN COST NET MARGIN AND FARM GATE PRICES TO CONSUMER PRICE

CROP: MASOOR

| | MASOOR | | |
|---|---|---|---|
| | PUNJAB | | |
| | I | II | III |
| A. Farm Gate | 60.23 | 54.22 | 60.46 |
| Farmer Cost | - | 4.03 | 6.02 |
| B. Beopari | | | |
| - Gross Margin | 9.25 | - | - |
| - Cost | 1.40 | - | - |
| - Net Margin | 7.85 | - | - |
| C. Katcha Arhati | | | |
| - Gross Margin | - | 9.76 | - |
| - Cost | - | 0.48 | - |
| - Net Margin | - | 9.28 | - |
| D. Pacca Arhati | | | |
| - Gross Margin | 6.30 | -- | 9.30 |
| - Cost | 0.59 | -- | 0.59 |
| - Net Margin | 5.71 | -- | 8.71 |
| E. Processor | | | |
| - Gross Margin | 6.99 | 14.76 | 6.99 |
| - Cost | 1.64 | 1.64 | 1.64 |
| - Net Margin | 5.35 | 13.12 | 5.35 |
| F. Wholesaler | | | |
| - Gross Margin | 8.01 | 8.01 | 8.01 |
| - Cost | 0.59 | 0.59 | 0.59 |
| - Net Margin | 7.42 | 7.42 | 7.42 |
| G. Retailer | | | |
| - Gross Margin | 9.22 | 9.22 | 9.22 |
| - Cost | 1.44 | 1.44 | 1.44 |
| - Net Margin | 7.78 | 7.78 | 7.78 |
| Total | 100.00 | 100.00 | 100.00 |

- share of net margin to gross margin at each stage.

The above data are included in Table 5-71 for the sample as a whole. It appears that the on the whole dealer gets the maximum share of the gross margin followed by retailers and wholesaler.

The net margins form a very high proportion of gross margins varying from 92.66 percent for wholesalers to 67.69 percent for the processor for the sample as a whole.

The Planning and Development Division Study (19) estimated the share of growers farm gate prices in the consumers rupees for masoor whole at 62.36 percent. The ratios of gross margin of wholesalers and retailers and the shares of net margins in the gross margins were estimated as follows:

| | Gross Margin % | Ratio of Net Margin to Gross Margin % |
|---|---|---|
| Wholesaler | 13.23 | 55 |
| Retailers | 21.70 | 73 |

TABLE 5.71

RATIO OF GROSS MARGIN AND NET MARGIN

MASOOR

| | %age of G.M to Consumer Price | Distribution | | Net Margin | |
|---|---|---|---|---|---|
| | | Rs. | %age of G.M | Rs. | %age to G.M. |
| Farm Gate | 60.29 | - | | | |
| Farmer Cost | 2.01 | - | | - | |
| Dealers | 13.45 | 50.81 | 35.68 | 42.83 | 84.29 |
| Processor | 7.03 | 26.56 | 18.65 | 20.37 | 76.69 |
| Whole-seller | 8.00 | 30.24 | 21.23 | 28.02 | 92.66 |
| Retailer | 9.22 | 34.8 | 24.44 | 29.37 | 84.37 |
| Total | 100 | 142.42 | 100 | 120.59 | 84.67 |

Nazir Ahmad (15) on the basis of his case study of Faisalabad market gives the following estimates of gross margins as percentage of consumers price and ratios of net margins to gross margin.

| | Gross Margin % | Net Margin as % of Gross Margin |
|---|---|---|
| Commission Agent | 4.73 | 52.9 |
| Processor | 14.27 | 65.3 |
| Retailer | 35.00 | 89.4 |

xi <u>Marketing Costs of Second Stage Actors</u>

The average marketing costs of second stage actors have ranged between Rs. 1.80 per maund for pacca arhati to Rs. 5.29 per maund for beopari. The higher cost for beopari was mainly due to incidence of transport costs which formed 29 percent of the total costs for the sample beoparis. The value of losses ranged between 9 to 12 percent of the total cost.(Table 5.72)

The breakdown of the operating costs, storage and transportation costs and cost of losses are given in Tables V.50 to V.53 of the Statistical Appendix.

TABLE 5.72

COST COMPONENTS OF SECOND STAGE MARKETING INTERMEDIRIES

CROP: MASOOR

| | | Rs./40 Kg. | | | | | | | (Percentages ) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Operating cost | Storage Cost | Losses | Trans-port Cost | Credit Cost | Other | Total | Operating Cost | Storage Cost | Losses | Trans-port Cost | Credit Cost | Other | Total |
| Beopari | Punjab | 2.52 | 0.40 | 0.66 | 1.54 | – | 0.17 | 5.29 | 48 | 8 | 12 | 29 | – | 3 | 100 |
| Kaccha Arhati | Punjab | 1.60 | 0.08 | | | – | 0.12 | 1.80 | 89 | 4 | – | – | – | 7 | 100 |
| Pacca Arhati | Punjab | 1.60 | 0.27 | 0.19 | 0.11 | 0.03 | 0.03 | 2.23 | 72 | 12 | 9 | 5 | 1 | 1 | 100 |

xii) <u>Processing Costs</u>

The average processing costs for masoor are given in Table 5.73.

xiii) <u>Wholesalers and Retailers</u>

The major components of average costs of wholesalers and retailers are given in Table 5.74. The transportation costs were the most important component accounting for 80% of the total costs of wholesalers and 55% of retailers.

xiv) <u>Shares of Marketing Services in Gross Margins</u>

Percentage shares of costs of various marketing services in the gross margins of masoor for various marketing channels and their average are shown in Tabe 5.75. The actual amounts are included in Table V.54 of the Statistical Appendix.

Net margins or profits absorb about 80 percent of the gross margins. Transport cost is the next important item accounting for 5.12% followed by processing cost at 3.93 percent of the total.

xv) <u>By-Product</u>

Seed cover is the ony by product of pulses during processing. Its production is estimated at 6 to 10 percent of the output. Its ony use is in poultry and animal feed. The feed mills located in the vicinity of the pulse grinding units obtain seed cover directly from them. The unit price of seed cover was reported at Rs. 45 to Rs. 55 per 40 kg.

TABLE 5.73

AVERAGE PROCESSING COST FOR SAMPLE UNITS

MASOOR

| | DIRECT COST | | | | | | | FIXED COST | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Salary & Wages | Contract Labour | Electricity | Telephone | Repair & Maintenance | Other Misc. | Total | Salaries and Allowances | Administrative | Rent & Tax | Misc. Cost | Total | Financial Cost | Depreciation | Transport Cost | Storage Cost | Other Cost | Total |
| Punjab | 1.56 | 0.83 | 1.95 | 1.28 | 1.58 | 0.85 | 8.05 | 1.83 | 0.72 | 0.35 | – | 2.90 | – | 2.73 | 0.07 | 0.05 | 3.10 | 16.90 |

TABLE 5.74

AVERAGE COSTS OF SAMPLE WHOLESALERS AND RETAILERS

Rs./40 kg.

| | Wholesalers | Retailers |
|---|---|---|
| OPERATING COSTS: | | |
| - Labour | 0.19 | 0.84 |
| - Rent | 0.09 | 0.84 |
| - Electricity | 0.01 | 0.17 |
| - Phone | 0.07 | 0.10 |
| - Taxes | 0.04 | 0.12 |
| - Others | 0.04 | 0.40 |
| Sub-Total: | 0.44 | 2.47 |
| Transportation | 1.78 | 2.97 |
| Total: | 2.22 | 2.97 |
| Transportation Cost as % of Total | 80 | 55 |

TABLE - 5.75

PERCENTAGE SHARES OF MARKETING SERVICES IN GROSS MARGINS

Masoor

(PERCENTAGES)

| | MASOOR | | | Average |
|---|---|---|---|---|
| | I | II | III | |
| Labour | 2.20 | 1.03 | 1.31 | 1.49 |
| Storage | 0.45 | 0.05 | 0.18 | 0.22 |
| Transport | 4.26 | 4.56 | 6.64 | 5.12 |
| Packing | 0.47 | - | 0.18 | 0.21 |
| Rent | 1.38 | 0.80 | 1.16 | 1.09 |
| Taxes | 0.11 | 0.45 | 0.71 | 0.43 |
| Credit Cost | 0.02 | - | 0.02 | 0.01 |
| Processing Cost | 4.12 | 3.58 | 4.15 | 3.93 |
| Net Margins | 85.77 | 82.14 | 74.02 | 80.73 |
| Miscellaneous | 1.22 | 7.39 | 11.63 | 6.77 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 |

xvi) <u>Schematic Diagrams of market channells.</u>

a Schematic Diagram for market flows showing market Channells for each province and for the sample as whole are given on page 334.

b Diagrams showing geographical flow for one major producing district for each province are given on page 335.

Figure-5.16

# SCHEMETIC DIAGRAM OF SHOWING MARKETING CHANNELS MASOOR (PUNJAB)

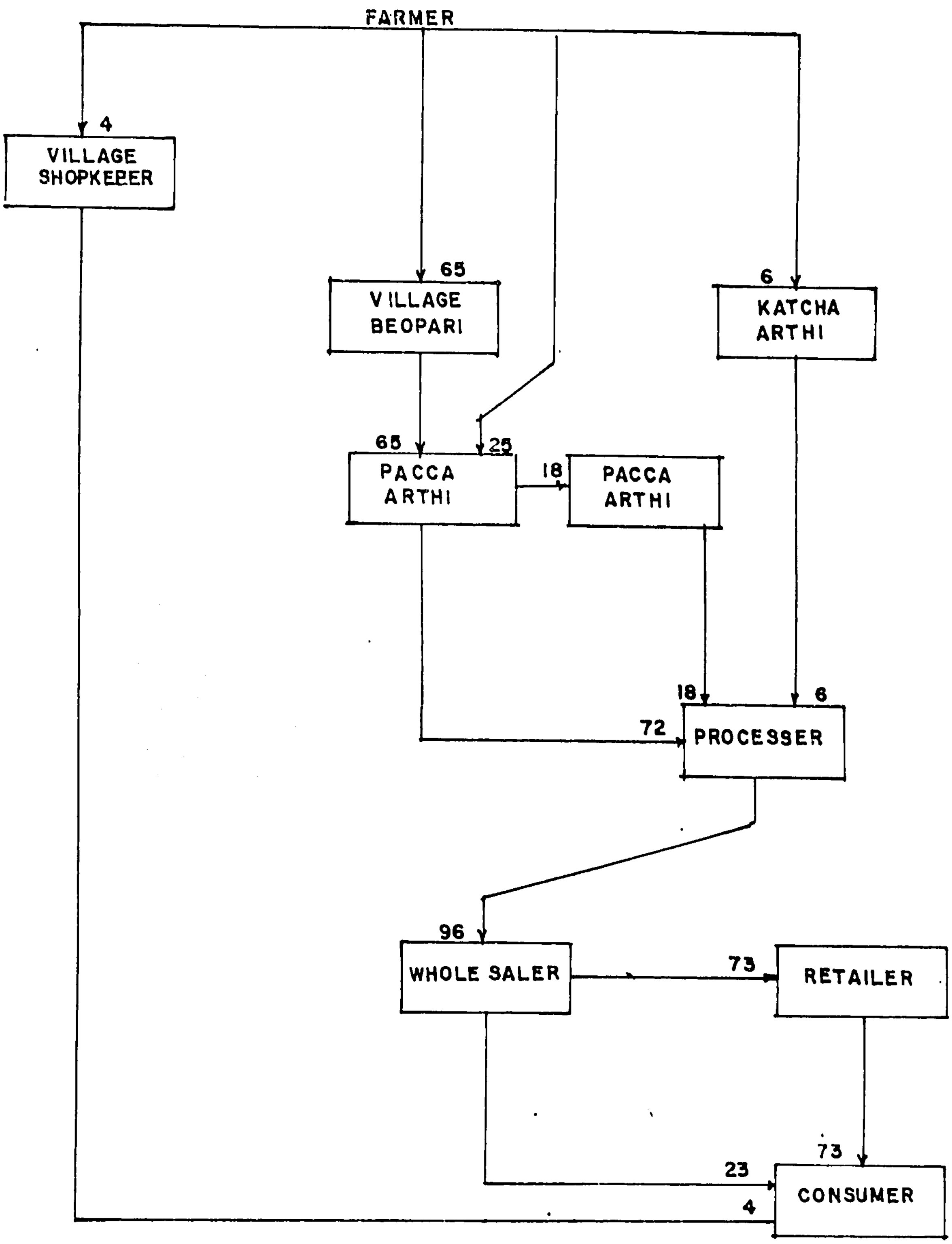

DIAGRAM SHOWING GEOGRAPHICAL FLOW MASOOR (SIALKOT)

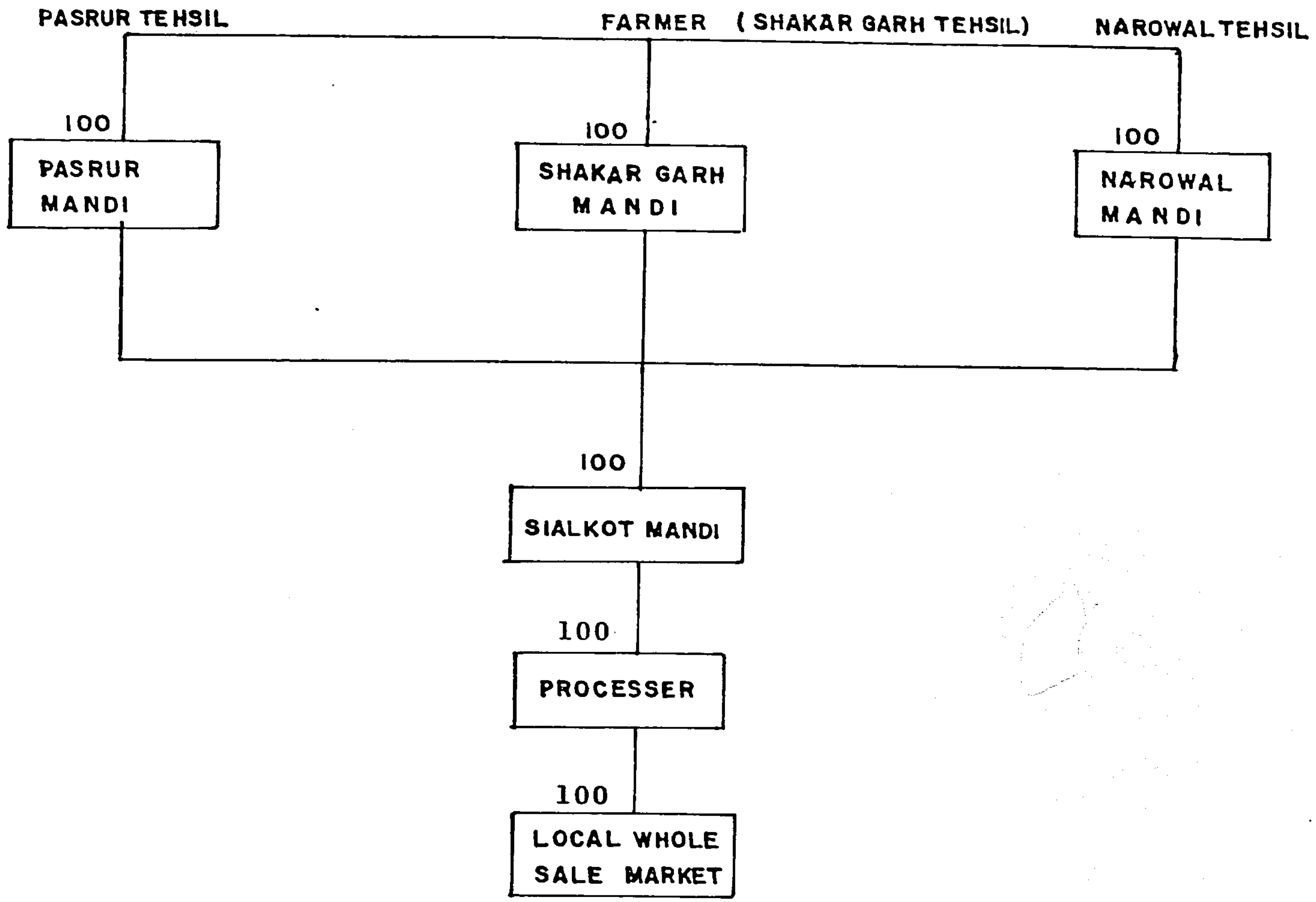


Figure 5.17

# CHAPTER VI

## CONSUMER SURVEY

### 6.1 INTRODUCTION

Satisfaction of consumer's needs is one of the principal goals of marketing activity. A consumer's survey was thus organized as a part of the present study to assess their desires for and willingness to pay for marketing services. The survey was based on stratified random sampling. The main features of the sample design are described in Chapter-I.

### 6.2 BASIC CHARACTERISTICS OF THE SAMPLE

Income Groups

The sample households have been analysed in terms of the following monthly income groups:

I. Upto Rs. 1000
II. Rs. 1001 - 2000
III. Rs. 2001 - 3500
IV. Rs. 3501 - and above

The percentage classification of the sample by the above income groups and by urban and rural areas is given in Table- 6.1+. The main findings are as follows:

- The highest percentage share of the total sample fell in the income group of Rs. 1001-2000. This was true for all the provincial samples except Baluchistan where the

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+ All tables are included at the end of the Chapter.

- higher income groups of Rs. 2001 - 3500 and Rs. 3501 and above had greater percentage shares.

- Relative distribution of the urban sample households showed similar trends as in the case of the total sample. In this case, however, the relative shares of the four income groups were more evenly balanced.

- The rural households showed greater concentration in the income group 1001 - 2000 which accounted for 41.02 percent of the total sample households. Similar tendency was observed in respect of all the provincial samples.

Average Size of the Household

The average size of the sample households by urban and rural areas and by different income groups are given in Table 6.2. The table shows that:

- The average size of the household for the sample as a whole was 8.23. The urban and rural samples had averages of 7.76 and 8.59 persons respectively.

- The size of the household was directly correlated with the income groups, the average number of persons in the highest income group being 58 percent higher than that of the lowest income group.

- All the provincial samples as well as the total urban and rural samples showed similar trends in respect of the average size of the household, though the extent of variation was different in each case.

- The average size of the household for the rural sample was higher than that of urban sample for the total sample as well as for each provincial sample except for Punjab where the opposite was true.

Education Groups

The sample households have been analysed in terms of the following educational level groups for the heads:

I. Illiterates

II. Upto Matric

III. Above Matric

The percentage classification of the urban, rural and total sample by the above education level groups is given in Table 6.3. The table shows that:

- The group of upto matric level for the heads of the sample households had the highest share for the urban sample. This was true for all the provinces except Sindh where above matric group had the highest share.

  The group of illiterate had the highest share for the rural sample as well as for sample as a whole. All the provinces showed similar trends except again for Sindh where the group of upto matric was the most important for the rural as well as for the sample as a whole.

## 6.3 CONSUMPTION OF SELECTED ITEMS

Wheat and rice were the two main staple products consumed by all the households. The average per capita consumption of wheat flour for the sample as a whole was estimated at 9.41 kg. per month. The average for the rural sample was higher at 11.22 kg. as against 7.24 kg. for the urban sample. In the case of rice, the average per capita consumption was 1.58 kg. per month distributed over different quality products. The corresponding average for the urban and rural samples were 1.38 kg. and 1.72 kg. respectively. Taking all the pulses, the average consumption for urban, rural and the total samples were 0.72 kg., 0.70 kg. and 0.71 kg. (Table 6.4).

A comparison of the average consumption estimated on the basis of the present survey and those given in the Household Income and Expenditure Survey is given in Table 6 on the next page.

Co-efficients of correlation between income groups and average consumption of selected commodities are included in Table 6.6. It appears that consumption of all food items are directly correlated with income levels, though the degree of correlation varies among various items. The maximum positive correlation for the urban sample is shown by baked bread (double roti) followed by rice, bason and 'nan'. For the rural sample, items showing highest correlation coefficients are rice, wheat flour and gram pulse.

Data relating to frequency of purchases has been analysed for various income groups on the basis of the maximum frequency shown for a period for any item. (Table 6.7). It appears that with the increase in income levels the tendency to purchase most of the food items in greater quantities at less frequent levels exists for both urban and rural samples. Thus the number of items showing maximum ratios for monthly purchases increased with income levels. This however does not apply to items consumed in a fresh form like 'chapati', 'tandori roti' and 'nan', which were purchased almost on daily basis.

The average prices estimated during the consumer's survey and their comparison with prices estimated on the basis of retailers survey and those issued by are included in Table 6.8 . Comparative prices reported by Federal Bureau of Statistics for December, 1988 for markets located near sample districts are also included.

The table shows that, price estimates drived from consumer's survey and retailer's survey are quite close to each other for wheat and rice. In respect of pulses, however, consumers, survey estimates about 20-25 percent higher than those of retailer survey. It may be added that consumer survey was undertaken 2-3 months after the dealers survey. The appreciation of prices could be attributed to advancement of season.

## Percentage for Purchase of Wheat and Rice in Grain form (Table 6.9)

A significant part of the consumers prefer to obtain the main staple food item, wheat, in grain form instead of purchasing it in consumable processed form. These consumers then arrange for grinding of wheat into flour under their own supervision at the traditional 'chakkis' located at several places. Households with agricultural holdings and producing this crop, also retain a part of their output for domestic consumption and prefer to arrange for its grinding as required instead of buying flour from the market. About one-third of the sample households purchased or obtained wheat in the grain form. The ratio was significantly higher at 55.87 percent for the rural households as against 11.98 percent for the urban sample households.

In the case of rice, the ratios of consumers obtaining paddy were lower at 9.57 percent for the entire sample and at 16.55 and 2.45 percents for the rural and urban centres.

Out of those purchasing/obtaining wheat and rice in grain form, the share of respondents obtaining from their own farm was 68 percent for what and 75 percent for rice. Similar trends were observed in respect of provincial samples.

## FACTORS INFLUENCING PURCHASES

Relative shares of consumers ranking various factors/features as number one at the time of purchasing different food items classified by income groups for urban, rural and total sample are shown in Tables 6.10, 6.11 and 6.12.

It appears that price of the commodity was the most important single factor for all the items for all the income groups. The relative importance of the price factor, however, declined with higher income groups. Thus other factors like taste, colour and texture also appear to influence purchase decisions with increase of income. This was true for both urban and rural samples.

This feature received the second highest ratio of top preference. 'Taste' was another feature which was given first preference for more than 10 percent of the sample households for some of the items like suji, rice and bread.

### Place of Buying (Table 6.13 & 6.14)

'Mohalla Shop' or store located in the near vicinity was the most important place for buying food items for the total sample. For items consumed in relatively fresh baked form obtained from the market, 'mohalla shop' was patronized by more than 80 percent of the sample. The ratio declined to between 60-70 percent for items not used regularly like pulses bason, dalya etc. In the case of more regular items of consumption like wheat flour, rice, etc. the corresponding ratio was generally between 50-60 percents.

Wholesale market was the second most important place of buying for all the items except baked products.

The urban and rural samples showed distinct trends. The relative shares of households buying from 'Mohalla Shop' were significantly higher for almost all the items in the case of the urban sample. In the case of rural areas, wholesale markets were almost equally important as 'Mohalla Shops' for several items.

'Location' was the most important reason for selecting places of buying for a majority of the sample for almost all food items. Ratios of sample household giving preference to quality and price considerations were also significant for several items.

## Purchases in Packetted Form

The form of packaging used for the commodities under study are:

- Gunny bags
- Cloth bags
- Card boxes and
- Polythene bags

Gunny and Cloth bags are used for wheat flour, while rice and pulses are packed in transparent polythene bags.

The present position in respect of purchases of selected food items in packetted form has been analysed on the following basis.

a) Percentage shares of sample households purchasing different food items in packetted form classified by income groups for urban, rural and total samples. (Table 6.15)

b) Percentage classification of households purchasing packetted food by types of package by income groups, separately for urban, rural and total samples. (Table 6.16, 6.17 and 6.18).

c) Percentage classification of households purchasing packetted food by size of package by income groups, separately for urban, rural and total samples. (Tables 6.19, 6.20 and 6.21).

Purchases in packetted form were reported by only a small fraction of respondents, the maximum ratios being 4.21% for the gram pulse, 4.14% for wheat flour, 3.79% for masoor pulse and 3.57% for basmati rice. The ratios were almost double the above levels for urban areas and insignificant for the rural areas. These ratios were also directly correlated with income groups.

The classification of purchases of packetted food by types of package shows that in the case of wheat flour, the predominant type of package was 'cloth bags' for the urban sample and gunny bags for the rural sample. Rice and pulses, when purchased in packetted form, were almost everywhere in polythene bags.

The consumers generally purchased wheat flour in 20 kg. packets. In the case of rice, 5 kg. and 1 kg. packets were most popular.

## Desire to Purchase Food Items in Packetted Form

The sample households desiring to buy various food items in a packetted form have been analysed in terms of their income and educational characteristics on the following basis.

a) Percentage shares of sample households desiring to purchase different food items in packetted form; classified by :

- Income groups for urban, rural and total samples. (Table 6.22)
- Educational level groups for urban, rural and total samples. (Table 6.23).

b) Percentage shares of households desring to purchase packetted food by types of package; classified by:

- Income groups, separately for urban, rural and total samples. (Tables 6.24, 6.25 and 6.26)
- Education level groups separately for urban, rural and total samples. (Tables 6.27, 6.28 and 6.29).

c) Percentage shares of sample households desiring to purchase different items of food in packetted form by size of package; classified by:

- Income groups, separately for urban, rural and total samples. (Table 6.30, 6.31 and 6.32).
- Education level groups, separately for urban, rural and total samples (Tables 6.33, 6.34 and 6.35).

The highest ratios of respondents desiring to purchase packetted food items were for gram pulse (7.29%) wheat flour (7.21%), masoor pulse (7.07%) and rice basmati (6.50%). The ratios for urban samples were significantly higher as compared to rural areas. These ratios were also directly correlated with income groups.

The position in respect of type of package preferred by those desiring to buy packetted food was generally consistent with the present pattern. Cloth and gunny bags, in that order, were preferred for wheat flour and polythene bags for rice and pulses. The general preference tendency was similar for all the groups though the extent of preference showed some variations as among various income and education level groups, between urban and rural areas.

The size of package desired by the potential users of packetted food varied with the type of the item. For items of daily or more frequent use, like wheat flour, packages of 10 to 20 kgs. were preferred as against 1 to 5 kg. for other items.

## Demand for Packetted Food

The desire for any service has to be accompanied by willingness to pay for it to become effective demand. The classifications of the households desiring to buy packetted food by their willingness to pay additional prices for urban and rural samples in terms of income and educational level groups are given in Tables 6.36 and 6.37.

It appears that none of the respondents were prepared to pay more than 5 percent of the price for packaged items. In fact for the rural sample, no one was willing to pay any aditional price on this account. For urban sample too, a significant proportion varying from 25 percent for mash pulse (unwashed) to 100 percent for rice ordinary were not inclined to pay any higher price for the packaging service. The urban sample respondents willing to pay a higher price of upto 5 percent ranged between 25 percent for rice basmati broken to 100 percent for maida . The analysis in terms of income groups and education level groups did not show any significant distinctive trends.

## 6.4 AWARENESS STATUS AND PREFERENCES FOR EXTENDED MARKETING SERVICES

Respondents were asked about their awareness of a number of semi-processed and pre-cooked food items. The awareness status varied with the type of product. It was found to be high for items which have already been introduced in the market. The ranking of these products on the basis of relative awareness is shown below:

- Brown flour
- Kheer mix
- Pakora mix
- Papari
- Canned rice
- Gonda hawa atta
- Enriched flour

The classification of sample households showing awareness of improved products by urban and rural areas and by income and education level groups are shown in Tables 6.38 and 6.39. It appears that the ratios showing awareness were highery for urban sample for all the items as compared to the rural sample. The ratios also appear to be directly correlated with income groups. Classification by education level groups, however, did not bring out any marked trend.

The classifications of the sample households by their desire to purchase improved products by income and education level groups are given in Table 6.40 and 6.41. It appear that about one half of the total respondents expressed their desire to purchase enriched flour and brown flour and about one-third for pakora mix and kheer mix. The ratios were higher for urban areas and were directly correlated with income groups though classification by education level groups, again, showed no distinct trend.

A significant share of those desiring improved products were not prepared to pay any extra price for the additional service. Their share ranged between 26% for enriched flour to 63% for 'samosa'. Willingness to pay higher price appeared to be directly correlated with income as well as educational levels. These ratios were also higher for the urban areas. (Tables 6.42 and 6.43)

## Regression Analysis for Demand for Additional Marketing Services

The demand is defined as desire for obtaining additional services coupled with willingness to pay extra price for the additional services. The additional services analysed include the following:

- Purchase of existing food items in a packetted form

- Purchase of improved food items.

The analysis is based on the folloiwng mathematical equation for a straight line:

$$Y = a + b\ x$$

Where:

X is the independent variable (income and education)

Y is the dependent variable (demand)

a and b are fixed constants.

a) **Demand for Existing Packetted Commodities:**

- Regression Co-efficient

The coefficient of regression for demand for existing packetted commodities for income and education variables are given below:

| | EDUCATION Regression Coefficient | | INCOME Regression Coefficient | |
|---|---|---|---|---|
| | a | b | a | b |
| Wheat | 1.00 | 3.50 | - 8.90 | 2.40 |
| Rice Basmati | 1.00 | 2.50 | - 1.50 | 2.40 |
| Rice Irri | - | - | - | - |
| Pulses | 11.00 | 9.50 | - 8.00 | 12.50 |

The coefficient show positive trends for income and education variables. The values of b for pulses show significantly high demand for packaging with higher income and education levels.

The above coefficients relate to urban areas only as none of the rural sample respondents expressed any demand for packetted food items.

- <u>Standard Error and T-test.</u>

The values of standard error and T-test for demand for existing packetted commodities for income and education variables are given below.

Standard Error And t-Value Of Households Who Demanded For Existing Packetted Commodities For Different Income And Education Groups

| | Education | | Income | |
|---|---|---|---|---|
| | Std.Err | t-Value | Std.Err | t-Value |
| Wheat | 0.87 | 3.46 | 1.82 | 1.73 |
| Rice Basmati | 0.87 | 3.00 | 0.91 | 2.42 |
| Rice Irri | - | - | - | - |
| Pulses | 5.20 | 3.10 | 5.49 | 2.34 |

The above values show that the differences are statistically significant except in the case of wheat for income variable at 5 percent level of significance.

b) **For Improved Food Items:**

<u>Regression Co-efficient.</u>

The coefficients of regression for improved food items on the basis of income and education level groups are given in Tables 6.44 and 6.45.

The coefficients show positive trends for income and education variables for urban areas. In the case of rural areas, however, coefficients show adverse trend for the variable of education and positive trend for income. The overall coefficient show positive trends for income for all items while adverse trends are shown for enriched flour, samosa and papari for education vairable.

## Standard Error and T-test

The values of standard error and T-test for improved food items on the basis of income and education levels are given in Tables 6.46 and 6.47.

The values of standard error and T-test show that the differences are not statistically significant in the case of brown flour, pakora mix, and gonda howa atta, samosa and paparr for urban areas for income and education variables at 5 percent level of significance. In case of rural areas the differences are statistically significant except in the case of pakora mix, and gonda howa atta for income variable. For the education variable the differences are statistically significant except in the case of gonda howa atta at 5 percent level of significance.

The overall values show that the difference are statistically significant except in the case of brown flour, gonda howa atta and paparr for income variable. For the education variable, the differences are statistically significant except for gonda howa atta, samosa and paparr at 5 percent level of significance.

TABLE - 6:1

PERCENTAGE CLASSIFICATION OF SAMPLE HOUSEHOLDSBY URBAN AND RURAL AREAS AND BY DIFFERENT INCOME GROUPS

| Province | Urban | | | | | Rural | | | | | Total | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Income Groups | | | | | Income Groups | | | | | Income Groups | | | | |
| | 1 | 2 | 3 | 4 | Total | 1 | 2 | 3 | 4 | Total | 1 | 2 | 3 | 4 | Total |
| Punjab | 21.64 | 33.25 | 27.97 | 17.14 | 100.00 | 35.40 | 37.56 | 22.49 | 4.55 | 100.00 | 28.86 | 35.51 | 25.09 | 10.54 | 100.00 |
| Sind | 27.20 | 30.00 | 22.00 | 20.80 | 100.00 | 19.24 | 46.92 | 26.15 | 7.69 | 100.00 | 24.47 | 35.79 | 23.42 | 16.32 | 100.00 |
| NWFP | 2.56 | 43.59 | 41.03 | 12.82 | 100.00 | 21.86 | 52.94 | 16.80 | 8.40 | 100.00 | 17.09 | 50.63 | 22.78 | 9.49 | 100.00 |
| Baluchistan | - | 20.00 | 55.00 | 25.00 | 100.00 | 25.00 | 22.50 | 25.00 | 27.50 | 100.00 | 16.67 | 21.67 | 35.00 | 26.67 | 100.00 |
| Pakistan | 21.79 | 32.03 | 27.85 | 18.93 | 100.00 | 29.56 | 41.02 | 22.35 | 7.07 | 100.00 | 25.71 | 36.58 | 25.07 | 12.04 | 100.00 |

Income Groups

1. Upto 1000
2. 1001 - 2000
3. 2001 - 3500
4. 3500 and above

TABLE 6.2

AVERAGE HOUSEHOLD SIZE BY URBAN AND RURAL AREAS BY DIFFERENT INCOME GROUPS

(Numbers)

| Province | Urban | | | | | Rural | | | | | Total | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Income Group | | | | | Income Group | | | | | Income Group | | | | |
| | 1 | 2 | 3 | 4 | Total | 1 | 2 | 3 | 4 | Total | 1 | 2 | 3 | 4 | Total |
| Punjab | 6.23 | 7.13 | 9.15 | 10.23 | 8.05 | 6.60 | 7.74 | 9.47 | 11.37 | 7.89 | 6.47 | 7.47 | 9.29 | 10.56 | 7.96 |
| Sind | 5.00 | 6.96 | 8.03 | 8.25 | 7.03 | 6.73 | 9.66 | 12.74 | 13.60 | 10.21 | 5.47 | 8.38 | 9.65 | 8.90 | 8.08 |
| NWFP | 5.00 | 8.94 | 9.06 | 8.60 | 8.84 | 6.47 | 8.29 | 13.20 | 10.90 | 8.94 | 6.42 | 8.43 | 11.36 | 10.13 | 8.92 |
| Baluchistan | - | 7.75 | 9.55 | 10.20 | 9.35 | 3.75 | 9.22 | 11.00 | 14.36 | 9.71 | 3.75 | 8.77 | 10.24 | 13.06 | 9.59 |
| Pakistan | 5.67 | 7.25 | 8.81 | 9.24 | 7.76 | 6.46 | 8.31 | 10.74 | 12.38 | 8.59 | 6.34 | 7.87 | 9.64 | 10.04 | 8.23 |

TABLE 6.3

PERCENTAGE CLASSIFICATION OF SAMPLE HOUSEHOLDS BY URBAN AND RURAL AREAS AND BY DIFFERENT EDUCATION GROUPS OF THE HEAD OF THE HOUSEHOLD

(%age)

| | URBAN | | | | RURAL | | | | TOTAL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | TOTAL | 1 | 2 | 3 | TOTAL | 1 | 2 | 3 | TOTAL |
| Punjab | 30 | 43 | 27 | 100 | 60 | 24 | 16 | 100 | 46 | 33 | 21 | 100 |
| Sind | 26 | 28 | 46 | 100 | 39 | 53 | 8 | 100 | 30 | 37 | 33 | 100 |
| NWFP | 21 | 58 | 21 | 100 | 56 | 35 | 9 | 100 | 48 | 40 | 12 | 100 |
| Baluchistan | 30 | 60 | 10 | 100 | 83 | 17 | - | 100 | 65 | 32 | 3 | 100 |
| Pakistan | 28 | 39 | 33 | 100 | 57 | 31 | 12 | 100 | 43 | 35 | 22 | 100 |

1: Illiterate 2: Upto Matric 3: Above Matric

TABLE 6.4

MONTHLY AVERAGE QUANTITY CONSUMED PER CAPITA BY RURAL AND URBAN SAMPLE HOUSEHOLD IN DIFFERENT INCOME GROUP

(in K.g) (Pakistan)

| | URBAN | | | | | RURAL | | | | | TOTAL | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Income Group | | | | | Income Group | | | | | Income Group | | | | |
| | 1 | 2 | 3 | 4 | T | 1 | 2 | 3 | 4 | T | 1 | 2 | 3 | 4 | T |
| A) Atta (Wheat Flour) | 7.14 | 7.79 | 7.16 | 6.95 | 7.24 | 11.83 | 12.08 | 11.04 | 9.99 | 11.22 | 11.06 | 10.46 | 9.03 | 8.34 | 9.41 |
| Maida (Baked Products) | - | 0.01 | - | - | - | - | 0.01 | - | - | - | - | 0.01 | - | - | - |
| Suji | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.03 | 0.07 | 0.04 | 0.04 | 0.01 | 0.02 | 0.04 | 0.03 | 0.03 |
| Rice Basmati Whole | 0.48 | 0.61 | 0.84 | 1.46 | 1.02 | 0.59 | 0.77 | 0.89 | 1.08 | 0.87 | 0.58 | 0.71 | 0.87 | 1.29 | 0.94 |
| Rice Basmati Broken | 0.28 | 0.22 | 0.08 | 0.12 | 0.14 | 0.08 | 0.07 | 0.08 | 0.10 | 0.08 | 0.11 | 0.13 | 0.08 | 0.11 | 0.11 |
| Rice Ordinary Whole | 0.49 | 0.30 | 0.17 | 0.15 | 0.20 | 0.66 | 0.37 | 0.45 | 0.53 | 0.63 | 0.63 | 0.63 | 0.31 | 0.32 | 0.44 |
| Rice Ordinary Broken | 0.11 | 0.01 | 0.02 | 0.01 | 0.02 | 0.23 | 0.19 | 0.01 | 0.16 | 0.14 | 0.21 | 0.13 | 0.02 | 0.08 | 0.09 |
| Gram Whole | 0.10 | 0.07 | 0.06 | 0.08 | 0.07 | 0.07 | 0.09 | 0.07 | 0.07 | 0.08 | 0.07 | 0.08 | 0.06 | 0.08 | 0.07 |
| Gram dal | 0.20 | 0.16 | 0.17 | 0.16 | 0.16 | 0.19 | 0.19 | 0.17 | 0.17 | 0.18 | 0.19 | 0.18 | 0.17 | 0.16 | 0.17 |
| Kabali Gram Whole | 0.10 | 0.08 | 0.08 | 0.10 | 0.09 | 0.08 | 0.08 | 0.08 | 0.05 | 0.07 | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 |
| Mung Whole | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.02 | 0.02 |
| Mung Dal Unwashed | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.01 | 0.02 | 0.01 | - | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Mung Dal Washed | 0.08 | 0.09 | 0.01 | 0.10 | 0.10 | 0.09 | 0.11 | 0.11 | 0.09 | 0.10 | 0.09 | 0.10 | 0.11 | 0.09 | 0.10 |
| Mash Whole | 0.03 | 0.01 | 0.01 | 0.04 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.03 | 0.02 |
| Mash Dal washed | 0.09 | 0.09 | 0.10 | 0.10 | 0.09 | 0.08 | 0.08 | 0.08 | 0.05 | 0.07 | 0.08 | 0.08 | 0.09 | 0.08 | 0.08 |
| Mash Dal Unwashed | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.02 | - | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 |
| Masoor Whole | 0.01 | 0.02 | 0.02 | 0.03 | 0.02 | 0.12 | 0.01 | 0.01 | - | 0.02 | 0.10 | 0.01 | 0.01 | 0.02 | 0.02 |
| Masoor Dal Washed | 0.08 | 0.10 | 0.11 | 0.10 | 0.10 | 0.10 | 0.12 | 0.21 | 0.12 | 0.14 | 0.09 | 0.11 | 0.16 | 0.11 | 0.12 |
| Bason | 0.04 | 0.05 | 0.07 | 0.07 | 0.06 | 0.03 | 0.02 | 0.03 | 0.02 | 0.02 | 0.08 | 0.03 | 0.05 | 0.05 | 0.04 |
| Dalya | - | - | 0.01 | 0.01 | 0.01 | 0.01 | - | 0.01 | 0.01 | 0.01 | 0.01 | - | 0.01 | 0.01 | 0.01 |
| Chapati (Nos.) | - | - | 0.01 | - | - | - | - | - | - | - | - | - | 0.01 | - | - |
| Tanduri Roti (Nos.) | 2.47 | 0.74 | 0.83 | 0.49 | 0.73 | - | - | 0.75 | 0.09 | 0.03 | 0.41 | 0.28 | 0.44 | 0.31 | 0.35 |
| Nan (Nos.) | - | 0.18 | 0.67 | 1.96 | 1.04 | - | - | - | 0.01 | - | - | 0.07 | 0.35 | 1.07 | 0.47 |
| Double Roti (Nos.) | 0.03 | 0.43 | 0.83 | 1.11 | 0.81 | 0.02 | 0.06 | 0.01 | 0.01 | 0.03 | 0.03 | 0.20 | 0.43 | 0.61 | 0.38 |

## TABLE 6.5

### CONSUMPTION OF SELECTED ITEMS

Kg./Month

| ITEMS | URBAN | | RURAL | | TOTAL | |
|---|---|---|---|---|---|---|
| | Present Survey | HI&ES Survey+ 1985-86 | Present Survey | HI&ES Survey+ 1985-86 | Present Survey | HI&ES Survey+ 1985-86 |
| Wheat and Flour | 7.24 | 8.78 | 11.22 | 11.88 | 9.41 | 10.96 |
| Rice (All varieties) | 1.38 | 1.12 | 1.72 | 1.35 | 1.58 | 1.28 |
| Pulses (Total) | 0.72 | 0.53 | 0.70 | 0.50 | 0.71 | 0.52 |

\+ Federal Bureau of Statistics, Household Income and Expenditure Survey, 1985-86, Tables,23 P.384

TABLE 6.6

COEFFICIENT OF CORRELATION BETWEEN INCOME GROUPS AND AVERAGE CONSUMPTION OF SELECTED COMMODITIES FOR URBAN, RURAL AND TOTAL SAMPLE

| COMMODITIES | URBAN | RURAL | TOTAL |
|---|---|---|---|
| Atta (Wheat Flour) | 0.65 | 0.90 | 0.98 |
| Maida (Baked Products) | - | - | - |
| Suji | - | 0.67 | - |
| Rice Basmati Whole | 0.94 | 0.99 | 0.96 |
| Rice Basmati Broken | 0.88 | 0.72 | 0.32 |
| Rice Ordinary Whole | 0.95 | 0.57 | 0.89 |
| Rice Ordinary Broken | 0.77 | 0.52 | 0.80 |
| Gram Whole | 0.53 | 0.26 | 0.14 |
| Gram dal | 0.75 | 0.89 | 1.00 |
| Kabali Gram Whole | - | 0.77 | 0.77 |
| Mung Whole | - | - | - |
| Mung Dal Unwashed | - | - | - |
| Mung Dal Washed | - | - | 0.14 |
| Mash Whole | - | - | - |
| Mash Dal washed | 0.89 | 0.77 | 0.26 |
| Mash Dal Unwashed | - | - | - |
| Masoor Whole | - | 0.82 | 0.71 |
| Masoor Dal Washed | 0.72 | 0.39 | 0.48 |
| Bason | 0.95 | - | 0.44 |
| Dalya | - | - | - |
| Chapati (Nos.) | - | - | - |
| Tanduri Roti (Nos.) | 0.84 | 0.36 | 0.24 |
| Nan (Nos.) | 0.93 | - | 0.92 |
| Double Roti (Nos.) | 0.99 | 0.44 | 1.00 |

TABLE 6.7

THE MOST IMPORTANT FREQUENCY LEVEL OF PURCHASES OF SELECTED ITEMS BY INCOME GROUP

| | URBAN | | | | RURAL | | | | TOTAL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INCOME GROUPS | | | | INCOME GROUPS | | | | INCOME GROUPS | | | |
| | I | II | III | IV | I | II | III | IV | I | II | III | IV |
| Atta (Wheat Flour) | M | M | M | M | M | M | M | M | M | M | M | M |
| Maida (Baked Products) | – | M | M | M | – | M | M | M | – | M | M | M |
| Suji | M | M | M | M | M | M | M | M | M | M | M | M |
| Rice Basmati Whole | W | M | M | M | M | M | M | M | M | M | M | M |
| Rice Basmati Broken | W | W | W | M | M | W | W | M | W | W | W | M |
| Rice Ordinary Whole | M | W | W | M | M | M | M | M | M | M | M | M |
| Rice Ordinary Broken | M | M | M | M | W | M | M | M | W | M | M | M |
| Gram Whole | W | F | M | M | M | M | M | M | F | F | M | M |
| Gram dal | W | W | M | M | F | M | W | M | F | W | M | M |
| Kabali Gram Whole | W | F | M | M | F | M | M | M | F | F | M | M |
| Mung Whole | M | F | M | M | F | M | M | M | F | F | M | M |
| Mung Dal Unwashed | M | W | M | M | F | M | W | F | M | W | W | M |
| Mung Dal Washed | F | W | M | M | F | W | W | M | F | W | W | M |
| Mash Whole | W | F | M | M | F | M | M | M | F | F | M | M |
| Mash Dal washed | M | F | M | M | F | W | W | M | F | W | W | M |
| Mash Dal Unwashed | W | F | M | M | F | F | M | M | M | F | M | M |
| Masoor Whole | M | F | F | M | F | M | M | F | M | M | M | M |
| Masoor Dal Washed | W | W | M | M | F | W | W | M | F | W | W | M |
| Bason | M | M | M | M | W | M | W | M | M | M | M | M |
| Dalya | – | M | M | M | M | M | M | M | M | M | M | M |
| Chapati (Nos.) | – | – | D | F | – | – | – | – | – | – | D | F |
| Tanduri Roti (Nos.) | D | D | D | D | – | – | D | D | D | D | D | D |
| Nan (Nos.) | – | D | D | D | – | – | – | D | – | D | D | D |
| Double Roti (Nos.) | D | D | D | D | D | D | D | D | D | D | [illegible] | D |

D= Daily. W= Weekly. F= Forthnightly M= Monthly

TABLE 6.8

AVERAGE PRICES OF SELECTED COMMODITIES ESTIMATED ON THE BASIS OF PRESENT CONSUMER AND RETAILER SURVEY AND THOSE OF FBS.

Rs./40 Kg.

| Items | Consumer Survey (1) | | | Retailer Survey(1) Total | F.B.S.Retail Prices Total (2) |
|---|---|---|---|---|---|
| | Urban | Rural | Total | | |
| Wheat | 2.72 | 2.55 | 2.57 | 2.95 | 2.40 |
| Rice Basmatti | 8.35 | 8.59 | 8.55 | 9.89 | 7.00 |
| Rice Irri | 3.91 | 4.66 | 4.56 | 4.57 | 3.50 |
| Gram Dal | 12.74 | 12.64 | 12.65 | 12.63 | 12.50 |
| Masoor Dal | 14.67 | 14.70 | 14.70 | 11.65 | 12.79 |
| Mash Washed | 14.06 | 14.71 | 14.58 | 11.45 | 16.00 |
| Mung Washed | 14.43 | 14.84 | 14.77 | 11.45 | 15.41 |

1. UCGL
2. Average Prices of Markets located near Sample Districts for the period of December, 1988.

# TABLE 6.9

## PERCENTAGE SHARES OF CONSUMERS WHO PURCHASE/OBTAIN PADDY AND WHEAT IN GRAIN FORM AND OF THOSE OBTAINING FROM THEIR OWN FARMS

| Province | URBAN | | | | RURAL | | | | TOTAL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Wheat | | Paddy | | Wheat | | Paddy | | Wheat | | Paddy | |
| | Percentage Share in total Sample (1) | Share of obtaining from own farm (2) | Percentage Share in Total Sample (1) | Share of obtaining from own Farm (2) | Percentage share in Total Sample (1) | Share of obtaining from own Farm (2) | %age share in total Sample (1) | Share of obtaining from own farm (2) | %age Share in total Sample (1) | Share of obtaining from own Farm (2) | %age share in total Sample (1) | Share of obtaining from own Farm (2) |
| Punjab | 16.89 | 19 | 3.96 | 33 | 69.38 | 80 | 18.42 | 71 | 44.12 | 69 | 11.52 | 65 |
| Sind | 3.20 | 38 | - | - | 46.15 | 70 | 20.77 | 93 | 17.89 | 65 | 7.11 | 93 |
| NWFP | 25.64 | 70 | 5.13 | 100 | 10.08 | 58 | 2.52 | 100 | 13.92 | 64 | 3.16 | 100 |
| Baluchistan. | 5.00 | - | - | - | 82.50 | 58 | 25.00 | 100 | 56.67 | 56 | 16.67 | 100 |
| Pakistan | 11.98 | 27 | 2.45 | 41 | 55.87 | 76 | 16.55 | 79 | 34.14 | 68 | 9.57 | 75 |

TABLE 6.10

PERCENTAGE OF CONSUMERS RANKING VARIOUS FACTORS/FEATURES AS NUMBER ONE AT THE TIME OF PURCHASING DIFFERENT COMMODITIES FOR DIFFERENT INCOME GROUPS

(U R B A N)

(Percentage) Pakistan

| | INCOME GROUP 1 | | | | | | | | INCOME GROUP 2 | | | | | | | | INCOME GROUP 3 | | | | | | | | INCOME GROUP 4 | | | | | | | | ALL INCOME GROUP | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Commodities | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Atta(Wheat Flour) | 92 | 8 | 0 | 0 | 0 | 0 | 0 | 100 | 87 | 5 | 5 | 0 | 0 | 0 | 3 | 100 | 77 | 10 | 5 | [illegible] | 0 | 0 | 6 | 100 | 62 | 26 | 2 | 2 | 1 | 0 | 8 | 100 | 76 | 13 | 4 | 1 | 0 | 0 | 5 | 100 |
| Maida | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 89 | 11 | 0 | 0 | 0 | 0 | 0 | 100 |
| Suji | 60 | 40 | 0 | 0 | 0 | 0 | 0 | 100 | 76 | 21 | 0 | 0 | 0 | 0 | 3 | 100 | 86 | 10 | 0 | 0 | 0 | 0 | 5 | 100 | 85 | 0 | 0 | 0 | 0 | 0 | 15 | 100 | 79 | 15 | 0 | 0 | 0 | 0 | 6 | 100 |
| Rice Basmati Whole | 70 | 20 | 10 | 0 | 0 | 0 | 0 | 100 | 86 | 7 | 1 | 1 | 0 | 1 | 3 | 100 | 79 | 12 | 0 | 2 | 1 | 0 | 6 | 100 | 62 | 28 | 0 | 1 | 1 | 2 | 6 | 100 | 74 | 17 | 1 | 1 | 1 | 1 | 5 | 100 |
| Rice Basmati Broken | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 92 | 0 | 0 | 8 | 0 | 0 | 0 | 100 | 85 | 0 | 0 | 8 | 0 | 0 | 8 | 100 | 64 | 18 | 0 | 5 | 0 | 5 | 9 | 100 | 82 | 6 | 0 | 6 | 0 | 2 | 5 | 100 |
| Rice Ordinary Whole | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 94 | 6 | 0 | 0 | 0 | 0 | 0 | 100 | 89 | 13 | 0 | 0 | 0 | 0 | 0 | 100 | 97 | 3 | 0 | 0 | 0 | 0 | 0 | 100 |
| Rice Ordinary Broken | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| Gram Whole | 79 | 21 | 0 | 0 | 0 | 0 | 0 | 100 | 94 | 2 | 0 | 0 | 2 | 0 | 1 | 100 | 84 | 10 | 0 | 7 | 2 | 0 | 3 | 100 | 64 | 25 | 0 | 1 | 2 | 0 | 8 | 100 | 80 | 14 | 0 | 1 | 2 | 0 | 4 | 100 |
| Gram Dal | 85 | 12 | 4 | 0 | 0 | 0 | 0 | 100 | 89 | 5 | 1 | 1 | 1 | 0 | 3 | 100 | 82 | 10 | 1 | 2 | 2 | 0 | 2 | 100 | 68 | 23 | 0 | 1 | 2 | 0 | 7 | 100 | 80 | 12 | 1 | 1 | 2 | 0 | 4 | 100 |
| Kabli Gram Whole | 87 | 13 | 0 | 0 | 0 | 0 | 0 | 100 | 91 | 4 | 0 | 0 | 2 | 0 | 2 | 100 | 79 | 13 | 0 | 3 | 3 | 0 | 1 | 100 | 61 | 29 | 0 | 1 | 2 | 0 | 7 | 100 | 76 | 17 | 0 | 1 | 2 | 0 | 4 | 100 |
| Mung Whole | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 93 | 0 | 0 | 0 | 0 | 0 | 7 | 100 | 89 | 5 | 0 | 5 | 0 | 0 | 0 | 100 | 62 | 34 | 0 | 0 | 2 | 0 | 2 | 100 | 77 | 18 | 0 | 1 | 1 | 0 | 3 | 100 |
| Mung Dal Unwashed | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 86 | 5 | 2 | 0 | 5 | 0 | 2 | 100 | 91 | 6 | 0 | 0 | 0 | 0 | 3 | 100 | 78 | 19 | 0 | 0 | 0 | 0 | 3 | 100 | 85 | 9 | 1 | 0 | 2 | 0 | 3 | 100 |
| Mung Dal Washed | 89 | 6 | 6 | 0 | 0 | 0 | 0 | 100 | 97 | 1 | 1 | 1 | 0 | 0 | 0 | 100 | 81 | 11 | 0 | 3 | 2 | 0 | 2 | 100 | 63 | 28 | 0 | 1 | 2 | 0 | 6 | 100 | 79 | 14 | 1 | 1 | 1 | 0 | 3 | 100 |
| Mash Whole | 80 | 20 | 0 | 0 | 0 | 0 | 0 | 100 | 96 | 4 | 0 | 0 | 0 | 0 | 0 | 100 | 93 | 7 | 0 | 0 | 0 | 0 | 0 | 100 | 63 | 34 | 0 | 0 | 3 | 0 | 0 | 100 | 79 | 20 | 0 | 0 | 1 | 0 | 0 | 100 |
| Mash Dal Washed | 88 | 12 | 0 | 0 | 0 | 0 | 0 | 100 | 89 | 6 | 1 | 1 | 0 | 0 | 4 | 100 | 78 | 13 | 1 | 2 | 5 | 0 | 1 | 100 | 65 | 26 | 0 | 1 | 2 | 0 | 7 | 100 | 77 | 15 | 1 | 1 | 2 | 0 | 4 | 100 |
| Mash Unwashed | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 93 | 0 | 0 | 0 | 7 | 0 | 0 | 100 | 88 | 8 | 0 | 0 | 0 | 0 | 4 | 100 | 80 | 15 | 0 | 0 | 0 | 0 | 5 | 100 | 89 | 7 | 0 | 0 | 3 | 0 | 3 | 100 |
| Masoor Whole | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 90 | 7 | 0 | 0 | 3 | 0 | 0 | 100 | 63 | 37 | 0 | 0 | 0 | 0 | 0 | 100 | 84 | 15 | 0 | 0 | 1 | 0 | 0 | 100 |
| Masoor Dal Washed | 95 | 5 | 0 | 0 | 0 | 0 | 0 | 100 | 92 | 4 | 1 | 0 | 2 | 0 | 1 | 100 | 89 | 7 | 0 | 1 | 3 | 0 | 0 | 100 | 65 | 27 | 0 | 1 | 1 | 0 | 6 | 100 | 82 | 13 | 0 | 1 | 2 | 0 | 2 | 100 |
| Bason | 86 | 14 | 0 | 0 | 0 | 0 | 0 | 100 | 87 | 5 | 2 | 0 | 2 | 0 | 4 | 100 | 91 | 3 | 2 | 0 | 2 | 0 | 2 | 100 | 67 | 26 | 0 | 2 | 0 | 0 | 5 | 100 | 83 | 10 | 1 | 1 | 1 | 0 | 3 | 100 |
| Dalya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 86 | 0 | 0 | 0 | 0 | 0 | 14 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 92 | 0 | 0 | 0 | 0 | 0 | 8 | 100 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| Tanduri Roti (Nos) | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 33 | 11 | 11 | 0 | 22 | 0 | 22 | 100 | 60 | 20 | 0 | 0 | 10 | 0 | 10 | 100 | 67 | 0 | 0 | 0 | 0 | 0 | 33 | 100 | 52 | 13 | 4 | 0 | 13 | 0 | 17 | 100 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 17 | 17 | 0 | 0 | 17 | 100 | 58 | 0 | 0 | 0 | 0 | 0 | 42 | 100 | 56 | 0 | 0 | 0 | 0 | 0 | 44 | 100 | 56 | 0 | 4 | 4 | 0 | 0 | 37 | 100 |
| Double Roti (Nos) | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 83 | 3 | 0 | 0 | 0 | 0 | 14 | 100 | 58 | 17 | 0 | 0 | 0 | 0 | 15 | 100 | 48 | 36 | 0 | 0 | 1 | 0 | 16 | 100 | 59 | 25 | 0 | 0 | 1 | 0 | 15 | 100 |

1=Price 2=Taste 3=Colour 4=Texture 5=Cooking 6=Odour 7=N Value 8=Total

TABLE 6 11

PERCENTAGE OF CONSUMERS RANKING VARIOUS FACTORS/FEATURES AS NUMBER ONE AT THE TIME OF PURCHASING DIFFERENT COMMODITIES FOR DIFFERENT INCOME GROUPS

(R U R A L)

(Percentage) Pakistan

| Commodities | INCOME GROUP 1 | | | | | | | | INCOME GROUP 2 | | | | | | | | INCOME GROUP 3 | | | | | | | | INCOME GROUP 4 | | | | | | | | ALL INCOME GROUP | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Atta(Wheat Flour) | 85 | 2 | 0 | 13 | 0 | 0 | 3 | 100 | 68 | 7 | 4 | 19 | 1 | 0 | 1 | 100 | 67 | 7 | 2 | 14 | 2 | 0 | 9 | 100 | 54 | 22 | 5 | 14 | 0 | 0 | 5 | 100 | 69 | 7 | 3 | 16 | 1 | 0 | 3 | 100 |
| Maida | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| Suji | 64 | 0 | 9 | 18 | 0 | 0 | 9 | 100 | 40 | 11 | 4 | 42 | 0 | 0 | 4 | 100 | 71 | 4 | 0 | 13 | 0 | 0 | 13 | 100 | 57 | 5 | 13 | 17 | 0 | 0 | 4 | 100 | 52 | 8 | 5 | 28 | 0 | 0 | 6 | 100 |
| Rice Basmati Whole | 91 | 2 | 0 | 5 | 0 | 0 | 2 | 100 | 72 | 11 | 0 | 11 | 1 | 0 | 4 | 100 | 77 | 11 | 0 | 7 | 1 | 0 | 4 | 100 | 74 | 12 | 4 | 7 | 2 | 0 | 2 | 100 | 77 | 10 | 1 | 8 | 1 | 0 | 3 | 100 |
| Rice Basmati Broken | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| Rice Ordinary Whole | 95 | 2 | 2 | 0 | 0 | 0 | 0 | 100 | 78 | 3 | 3 | 17 | 0 | 0 | 0 | 100 | 74 | 0 | 0 | 21 | 0 | 0 | 5 | 100 | 58 | 11 | 0 | 26 | 0 | 0 | 5 | 100 | 90 | 3 | 2 | 14 | 0 | 0 | 1 | 100 |
| Rice Ordinary Broken | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 91 | 0 | 0 | 9 | 0 | 0 | 0 | 100 | 75 | 0 | 0 | 25 | 0 | 0 | 0 | 100 | 67 | 33 | 0 | 0 | 0 | 0 | 0 | 100 | 88 | 4 | 0 | 8 | 0 | 0 | 0 | 100 |
| Gram Whole | 97 | 2 | 0 | 2 | 0 | 0 | 0 | 100 | 67 | 7 | 0 | 3 | 1 | 0 | 2 | 100 | 84 | 10 | 0 | 2 | 0 | 0 | 4 | 100 | 86 | 14 | 0 | 0 | 0 | 0 | 0 | 100 | 89 | 7 | 0 | 2 | 0 | 0 | 2 | 100 |
| Gram Dal | 88 | 2 | 4 | 3 | 1 | 0 | 2 | 100 | 75 | 5 | 4 | 14 | 0 | 0 | 2 | 100 | 78 | 8 | 0 | 9 | 1 | 0 | 4 | 100 | 73 | 10 | 2 | 12 | 1 | 0 | 2 | 100 | 78 | 6 | 3 | 10 | 1 | 0 | 2 | 100 |
| Kabli Gram Whole | 91 | 5 | 1 | 3 | 0 | 0 | 0 | 100 | 76 | 8 | 3 | 9 | 1 | 0 | 3 | 100 | 79 | 10 | 0 | 6 | 2 | 0 | 3 | 100 | 73 | 20 | 5 | 0 | 0 | 0 | 3 | 100 | 80 | 9 | 2 | 6 | 1 | 0 | 2 | 100 |
| Mung Whole | 80 | 5 | 0 | 5 | 0 | 0 | 10 | 100 | 75 | 14 | 0 | 4 | 4 | 0 | 4 | 100 | 75 | 13 | 0 | 6 | 6 | 0 | 0 | 100 | 60 | 20 | 10 | 10 | 0 | 0 | 0 | 100 | 74 | 12 | 1 | 5 | 3 | 0 | 2 | 100 |
| Mung Dal Unwashed | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 79 | 10 | 0 | 7 | 0 | 0 | 3 | 100 | 82 | 0 | 0 | 0 | 9 | 0 | 9 | 100 | 71 | 14 | 0 | 14 | 0 | 0 | 0 | 100 | 84 | 6 | 0 | 5 | 2 | 0 | 3 | 100 |
| Mung Dal Washed | 92 | 3 | 0 | 4 | 1 | 0 | 0 | 100 | 90 | 6 | 0 | 4 | 1 | 0 | 0 | 100 | 88 | 9 | 0 | 0 | 1 | 0 | 2 | 100 | 89 | 9 | 0 | 0 | 0 | 0 | 2 | 100 | 90 | 6 | 0 | 2 | 1 | 0 | 1 | 100 |
| Mash Whole | 86 | 7 | 0 | 7 | 0 | 0 | 0 | 100 | 79 | 17 | 0 | 0 | 3 | 0 | 0 | 100 | 67 | 22 | 0 | 0 | 11 | 0 | 0 | 100 | 80 | 20 | 0 | 0 | 0 | 0 | 0 | 100 | 79 | 16 | 0 | 2 | 4 | 0 | 0 | 100 |
| Mash Dal Washed | 89 | 4 | 4 | 3 | 0 | 0 | 1 | 100 | 73 | 7 | 2 | 16 | 1 | 0 | 1 | 100 | 73 | 10 | 0 | 11 | 1 | 0 | 5 | 100 | 60 | 16 | 6 | 12 | 2 | 0 | 4 | 100 | 74 | 8 | 3 | 12 | 1 | 0 | 2 | 100 |
| Mash Unwashed | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 84 | 11 | 0 | 5 | 0 | 0 | 0 | 100 | 80 | 0 | 0 | 0 | 10 | 0 | 10 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 88 | 5 | 0 | 2 | 2 | 0 | 2 | 100 |
| Masoor Whole | 85 | 8 | 0 | 8 | 0 | 0 | 0 | 100 | 77 | 10 | 0 | 3 | 3 | 0 | 6 | 100 | 73 | 20 | 0 | 0 | 7 | 0 | 0 | 100 | 70 | 30 | 0 | 0 | 0 | 0 | 0 | 100 | 77 | 14 | 0 | 3 | 3 | 0 | 3 | 100 |
| Masoor Dal Washed | 93 | 4 | 0 | 1 | 1 | 0 | 0 | 100 | 80 | 6 | 2 | 10 | 1 | 0 | 1 | 100 | 86 | 7 | 0 | 4 | 1 | 0 | 2 | 100 | 76 | 11 | 3 | 7 | 0 | 0 | 3 | 100 | 84 | 7 | 1 | 7 | 1 | 0 | 1 | 100 |
| Bason | 85 | 0 | 0 | 11 | 0 | 0 | 4 | 100 | 69 | 8 | 0 | 16 | 0 | 0 | 8 | 100 | 78 | 4 | 0 | 9 | 0 | 0 | 9 | 100 | 82 | 9 | 0 | 9 | 0 | 0 | 0 | 100 | 77 | 5 | 0 | 12 | 0 | 0 | 6 | 100 |
| Dalya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 50 | 0 | 0 | 50 | 100 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Double Roti (Nos) | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 78 | 11 | 11 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 88 | 6 | 6 | 0 | 0 | 0 | 0 | 100 |

1=Price 2=Taste 3=Colour 4=Texture 5=Cooking 6=Odour 7=N Value 8=Total

TABLE 6.12

PERCENTAGE OF CONSUMERS RANKING VARIOUS FACTORS/FEATURES AS NUMBER ONE AT THE TIME OF PURCHASING DIFFERENT COMMODITIES FOR DIFFERENT INCOME GROUPS

( T O T A L )

(Percentage)Pakistan

| Commodities | INCOME GROUP 1 | | | | | | | | INCOME GROUP 2 | | | | | | | | INCOME GROUP 3 | | | | | | | | INCOME GROUP 4 | | | | | | | | ALL INCOME GROUP | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Atta (Wheat Flour) | 85 | 3 | 0 | 9 | 0 | 0 | 2 | 100 | 77 | 6 | 5 | 10 | 0 | 0 | 2 | 100 | 74 | 9 | 4 | 5 | 1 | 0 | 7 | 100 | 60 | 25 | 3 | 4 | 1 | 0 | 7 | 100 | 73 | 11 | 4 | 8 | 0 | 0 | 4 | 100 |
| Maida | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 75 | 25 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 93 | 7 | 0 | 0 | 0 | 0 | 0 | 100 |
| Suji | 63 | 13 | 6 | 13 | 0 | 0 | 6 | 100 | 52 | 14 | 2 | 27 | 0 | 4 | 4 | 100 | 78 | 7 | 0 | 7 | 0 | 0 | 9 | 100 | 62 | 13 | 8 | 10 | 0 | 0 | 8 | 100 | 61 | 12 | 3 | 17 | 0 | 0 | 6 | 100 |
| Rice Basmati Whole | 87 | 6 | 0 | 6 | 0 | 0 | 2 | 100 | 79 | 9 | 0 | 6 | 0 | 0 | 3 | 100 | 78 | 12 | 0 | 4 | 1 | 0 | 5 | 100 | 66 | 23 | 1 | 3 | 1 | 2 | 5 | 100 | 75 | 14 | 0 | 5 | 1 | 1 | 4 | 100 |
| Rice Basmati Broken | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 95 | 0 | 0 | 5 | 0 | 0 | 0 | 100 | 51 | 0 | 0 | 5 | 0 | 0 | 5 | 100 | 65 | 17 | 0 | 4 | 0 | 4 | 9 | 100 | 88 | 4 | 0 | 4 | 0 | 1 | 3 | 100 |
| Rice Ordinary Whole | 96 | 2 | 2 | 0 | 0 | 0 | 0 | 100 | 84 | 2 | 2 | 12 | 0 | 0 | 0 | 100 | 83 | 3 | 0 | 11 | 0 | 0 | 3 | 100 | 67 | 11 | 0 | 19 | 0 | 0 | 4 | 100 | 85 | 3 | 1 | 10 | 0 | 0 | 1 | 100 |
| Rice Ordinary Broken | 100 | 0 | 0 | 0 | 1 | 0 | 0 | 100 | 92 | 0 | 0 | 8 | 0 | 0 | 0 | 100 | 86 | 0 | 0 | 14 | 0 | 0 | 0 | 100 | 67 | 33 | 0 | 0 | 0 | 0 | 0 | 100 | 91 | 3 | 0 | 6 | 0 | 0 | 0 | 100 |
| Gram Whole | 93 | 5 | 0 | 1 | 0 | 0 | 0 | 100 | 90 | 5 | 0 | 2 | 2 | 2 | 2 | 100 | 84 | 10 | 0 | 2 | 1 | 0 | 4 | 100 | 70 | 22 | 0 | 1 | 2 | 0 | 6 | 100 | 84 | 11 | 0 | 1 | 1 | 0 | 3 | 100 |
| Gram Dal | 87 | 4 | 3 | 3 | 1 | 0 | 1 | 100 | 80 | 5 | 3 | 9 | 1 | 0 | 2 | 100 | 80 | 9 | 0 | 6 | 2 | 0 | 3 | 100 | 70 | 18 | 1 | 5 | 1 | 0 | 5 | 100 | 79 | 9 | 2 | 7 | 1 | 0 | 3 | 100 |
| Kabli Gram Whole | 90 | 7 | 1 | 2 | 0 | 0 | 0 | 100 | 82 | 6 | 2 | 5 | 1 | 0 | 3 | 100 | 79 | 12 | 0 | 5 | 2 | 0 | 2 | 100 | 64 | 27 | 1 | 1 | 1 | 0 | 6 | 100 | 78 | 13 | 1 | 3 | 1 | 0 | 3 | 100 |
| Mung Whole | 83 | 4 | 0 | 4 | 0 | 0 | 9 | 100 | 84 | 7 | 0 | 2 | 2 | 0 | 5 | 100 | 83 | 9 | 0 | 6 | 3 | 0 | 0 | 100 | 62 | 32 | 2 | 2 | 2 | 0 | 2 | 100 | 76 | 15 | 1 | 3 | 2 | 0 | 3 | 100 |
| Mung Dal Unwashed | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 83 | 7 | 1 | 3 | 3 | 0 | 3 | 100 | 89 | 5 | 0 | 0 | 2 | 0 | 5 | 100 | 77 | 18 | 0 | 3 | 0 | 0 | 3 | 100 | 85 | 8 | 1 | 2 | 2 | 0 | 3 | 100 |
| Mung Dal Washed | 92 | 3 | 0 | 4 | 1 | 0 | 0 | 100 | 93 | 4 | 0 | 3 | 0 | 0 | 0 | 100 | 85 | 10 | 0 | 2 | 2 | 0 | 2 | 100 | 71 | 22 | 0 | 1 | 1 | 0 | 5 | 100 | 85 | 10 | 0 | 2 | 1 | 0 | 2 | 100 |
| Mash Whole | 84 | 11 | 0 | 5 | 0 | 0 | 0 | 100 | 87 | 11 | 0 | 0 | 2 | 0 | 0 | 100 | 83 | 13 | 0 | 0 | 4 | 0 | 0 | 100 | 65 | 33 | 0 | 0 | 2 | 0 | 0 | 100 | 79 | 18 | 0 | 1 | 2 | 0 | 0 | 100 |
| Mash Dal Washed | 89 | 5 | 3 | 2 | 0 | 0 | 1 | 100 | 79 | 6 | 2 | 10 | 0 | 2 | 2 | 100 | 76 | 11 | 1 | 7 | 3 | 0 | 3 | 100 | 63 | 23 | 2 | 4 | 2 | 0 | 6 | 100 | 76 | 11 | 2 | 7 | 1 | 0 | 3 | 100 |
| Mash Unwashed | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 90 | 4 | 0 | 2 | 4 | 0 | 0 | 100 | 85 | 6 | 0 | 0 | 3 | 0 | 6 | 100 | 82 | 14 | 0 | 0 | 0 | 0 | 5 | 100 | 88 | 6 | 0 | 1 | 3 | 0 | 3 | 100 |
| Masoor Whole | 88 | 6 | 0 | 6 | 0 | 0 | 0 | 100 | 90 | 4 | 0 | 1 | 1 | 0 | 3 | 100 | 84 | 11 | 0 | 0 | 5 | 0 | 0 | 100 | 65 | 35 | 0 | 0 | 0 | 0 | 0 | 100 | 81 | 15 | 0 | 1 | 2 | 0 | 1 | 100 |
| Masoor Dal Washed | 94 | 5 | 0 | 1 | 1 | 0 | 0 | 100 | 85 | 5 | 1 | 6 | 1 | 0 | 1 | 100 | 87 | 7 | 0 | 3 | 2 | 0 | 1 | 100 | 69 | 21 | 1 | 3 | 1 | 0 | 5 | 100 | 83 | 9 | 1 | 4 | 1 | 0 | 2 | 100 |
| Basan | 85 | 3 | 0 | 9 | 0 | 0 | 3 | 100 | 80 | 6 | 1 | 6 | 1 | 0 | 5 | 100 | 88 | 4 | 1 | 2 | 1 | 0 | 4 | 100 | 70 | 22 | 0 | 4 | 0 | 0 | 4 | 100 | 81 | 8 | 1 | 5 | 1 | 0 | 4 | 100 |
| Dalya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 88 | 0 | 0 | 0 | 0 | 0 | 13 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 93 | 0 | 0 | 0 | 0 | 0 | 7 | 100 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| Tandoori Roti (Nos) | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 33 | 11 | 11 | 0 | 22 | 0 | 22 | 100 | 55 | 18 | 0 | 9 | 9 | 0 | 9 | 100 | 50 | 0 | 0 | 0 | 0 | 0 | 50 | 100 | 43 | 12 | 4 | 4 | 12 | 0 | 20 | 100 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 17 | 17 | 0 | 0 | 17 | 100 | 54 | 0 | 8 | 0 | 0 | 0 | 33 | 100 | 56 | 0 | 0 | 0 | 0 | 0 | 44 | 100 | 54 | 0 | 7 | 4 | 0 | 0 | 36 | 100 |
| Double Roti (Nos) | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 82 | 5 | 3 | 0 | 0 | 0 | 11 | 100 | 69 | 16 | 0 | 0 | 0 | 0 | 14 | 100 | 49 | 35 | 0 | 0 | 1 | 0 | 15 | 100 | 62 | 23 | 1 | 0 | 1 | 0 | 14 | 100 |

1=Price 2=Taste 3=Colour 4=Texture 5=Cooking 6=Odour 7=N Value 8=Total

# TABLE 6.13

CLASSIFICATION OF HOUSEHOLD BY PLACE OF BUYING SELECTED ITEMS (%AGE) (PAKISTAN)

| Commodities | Urban | | | | | Rural | | | | | Total | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | Total | 1 | 2 | 3 | 4 | Total | 1 | 2 | 3 | 4 | Total |
| A) Atta (Wheat Flour) | 27 | 62 | 3 | 8 | 100 | 40 | 48 | 1 | 11 | 100 | 31 | 57 | 2 | 10 | 100 |
| Maida | 13 | 50 | 25 | 12 | 100 | 60 | 40 | - | - | 100 | 31 | 46 | 15 | 8 | 100 |
| Suji | 40 | 55 | 5 | - | 100 | 50 | 42 | 2 | 6 | 100 | 46 | 48 | 3 | 3 | 100 |
| Rice Basmati Whole | 27 | 62 | 6 | 5 | 100 | 44 | 46 | 2 | 8 | 100 | 34 | 56 | 4 | 6 | 100 |
| Rice Basmati Broken | 23 | 72 | 2 | 3 | 100 | 26 | 74 | - | - | 100 | 24 | 73 | 1 | 2 | 100 |
| Rice Ordinary Whole | 12 | 83 | 4 | 1 | 100 | 37 | 54 | 1 | 8 | 100 | 29 | 64 | 2 | 5 | 100 |
| Rice Ordinary Broken | - | 100 | - | - | 100 | 38 | 62 | - | - | 100 | 28 | 72 | - | - | 100 |
| Gram Whole | 18 | 69 | 7 | 6 | 100 | 31 | 54 | 1 | 14 | 100 | 24 | 62 | 4 | 10 | 100 |
| Gram dal | 21 | 67 | 5 | 7 | 100 | 33 | 57 | 1 | 9 | 100 | 27 | 62 | 3 | 8 | 100 |
| Kabali Gram Whole | 19 | 66 | 5 | 10 | 100 | 30 | 58 | - | 12 | 100 | 24 | 63 | 3 | 10 | 100 |
| Mung Whole | 22 | 63 | 2 | 13 | 100 | 30 | 65 | - | 5 | 100 | 25 | 64 | 2 | 11 | 100 |
| Mung Dal Unwashed | 13 | 76 | 3 | 8 | 100 | 21 | 63 | - | 16 | 100 | 16 | 72 | 2 | 10 | 100 |
| Mung Dal Washed | 20 | 68 | 6 | 6 | 100 | 34 | 57 | 1 | 8 | 100 | 26 | 62 | 4 | 8 | 100 |
| Mash Whole | 35 | 59 | - | 6 | 100 | 35 | 63 | 2 | - | 100 | 35 | 60 | 1 | 4 | 100 |
| Mash Dal washed | 18 | 68 | 7 | 7 | 100 | 31 | 55 | 1 | 13 | 100 | 25 | 62 | 4 | 9 | 100 |
| Mash Dal Unwashed | 8 | 82 | 5 | 5 | 100 | 24 | 65 | - | 11 | 100 | 13 | 76 | 3 | 8 | 100 |
| Masoor Whole | 21 | 72 | 2 | 5 | 100 | 32 | 61 | 3 | 4 | 100 | 24 | 68 | 2 | 6 | 100 |
| Masoor Dal Washed | 21 | 67 | 6 | 6 | 100 | 35 | 54 | 1 | 10 | 100 | 28 | 60 | 4 | 8 | 100 |
| Bason | 18 | 71 | 8 | 3 | 100 | 26 | 55 | 1 | 18 | 100 | 20 | 66 | 6 | 8 | 100 |
| Dalya | 15 | 65 | 15 | 5 | 100 | 50 | 30 | - | 20 | 100 | 27 | 53 | 10 | 10 | 100 |
| Chapati (Nos.) | - | 100 | - | - | 100 | - | - | - | - | - | - | 100 | - | - | 100 |
| Tanduri Roti (Nos.) | 3 | 94 | - | - | 100 | - | 100 | - | - | 100 | 3 | 94 | - | 3 | 100 |
| Nan (Nos.) | 6 | 94 | - | - | 100 | - | - | - | 100 | 100 | 6 | 92 | - | 2 | 100 |
| Double Roti (Nos.) | 12 | 84 | 2 | 2 | 100 | 46 | 54 | - | - | 100 | 15 | 81 | 2 | 2 | 100 |

1. Whole Sale Market 2. Mohala Shop 3. Utility Store 4. Anyother.

## TABLE 6.14

PERCENTAGE CLASSIFICATION OF HOUSEHOLDS BY REASON FOR SELECTING PLACE OF BUYING ( PAKISTAN) (Percentage)

| Commodities | Urban | | | | | | Rural | | | | | | Total | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| A) Atta (Wheat Flour) | 36 | 54 | 8 | 1 | 1 | 100 | 37 | 45 | 9 | 3 | 6 | 100 | 32 | 54 | 11 | - | 3 | 100 |
| Maida | 50 | 25 | 25 | - | - | 100 | 43 | 43 | 14 | - | - | 100 | 25 | 50 | 25 | - | - | 100 |
| Suji | 41 | 42 | 10 | 5 | 2 | 100 | 43 | 38 | 14 | 4 | 1 | 100 | 20 | 60 | 20 | - | - | 100 |
| Rice Basmati Whole | 36 | 51 | 11 | 1 | 1 | 100 | 37 | 45 | 13 | 4 | 1 | 100 | 31 | 47 | 20 | - | 2 | 100 |
| Rice Basmati Broken | 24 | 64 | 10 | 1 | 1 | 100 | 6 | 69 | 9 | - | 16 | 100 | 18 | 63 | 12 | - | 7 | 100 |
| Rice Ordinary Whole | 20 | 72 | 7 | - | 1 | 100 | 20 | 57 | 17 | 1 | 5 | 100 | 17 | 60 | 22 | - | 1 | 100 |
| Rice Ordinary Broken | 30 | 70 | | | | 100 | 4 | 66 | 17 | 9 | 4 | 100 | 7 | 52 | 27 | 7 | 7 | 100 |
| Gram Whole | 29 | 59 | 9 | 1 | 2 | 100 | 33 | 52 | 12 | 4 | - | 100 | 26 | 48 | 24 | 1 | 1 | 100 |
| Gram dal | 30 | 58 | 10 | 1 | 1 | 100 | 26 | 56 | 12 | 3 | 3 | 100 | 20 | 55 | 20 | 1 | 4 | 100 |
| Kabali Gram Whole | 31 | 56 | 12 | 1 | - | 100 | 34 | 55 | 9 | 1 | 1 | 100 | 27 | 48 | 23 | 1 | 1 | 100 |
| Mung Whole | 24 | 56 | 18 | 1 | 1 | 100 | 26 | 64 | 9 | 1 | - | 100 | 29 | 36 | 32 | 2 | 2 | 100 |
| Mung Dal Unwashed | 25 | 66 | 6 | 1 | 2 | 100 | 30 | 63 | 3 | 4 | - | 100 | 24 | 53 | 17 | 4 | 2 | 100 |
| Mung Dal Washed | 26 | 59 | 12 | 2 | 1 | 100 | 24 | 53 | 17 | 3 | 3 | 100 | 21 | 55 | 20 | 1 | 3 | 100 |
| Mash Whole | 26 | 52 | 18 | 1 | 3 | 100 | 30 | 60 | 8 | 2 | | 100 | 30 | 40 | 28 | - | 2 | 100 |
| Mash Dal washed | 31 | 56 | 11 | 1 | 1 | 100 | 31 | 56 | 8 | 3 | 2 | 100 | 26 | 55 | 18 | - | 1 | 100 |
| Mash Dal Unwashed | 25 | 67 | 5 | 1 | 2 | 100 | 30 | 60 | 6 | - | 4 | 100 | 23 | 45 | 19 | 3 | 10 | 100 |
| Masoor Whole | 25 | 61 | 12 | 1 | 1 | 100 | 32 | 56 | 9 | 3 | 2 | 100 | 26 | 52 | 18 | 2 | 2 | 100 |
| Masoor Dal Washed | 29 | 58 | 10 | 2 | 1 | 100 | 28 | 52 | 14 | 4 | 2 | 100 | 22 | 56 | 19 | 1 | 2 | 100 |
| Bason | 33 | 59 | 6 | 1 | 1 | 100 | 42 | 50 | 5 | 2 | 1 | 100 | 32 | 57 | 10 | - | 1 | 100 |
| Dalva | 43 | 35 | 18 | 4 | - | 100 | 36 | 35 | 18 | 9 | - | 100 | 41 | 35 | 18 | 6 | - | 100 |
| Chapati (Nos.) | - | 100 | - | - | - | 100 | - | - | - | - | - | 100 | - | 100 | - | - | - | 100 |
| Tanduri Roti (Nos.) | 31 | 60 | 6 | - | 3 | 100 | - | 100 | - | - | - | 100 | 12 | 88 | - | - | - | 100 |
| Nan (Nos.) | 24 | 76 | | | | 100 | 100 | - | - | - | - | 100 | 31 | 69 | - | - | - | 100 |
| Double Roti (Nos.) | 22 | 73 | 4 | - | 1 | 100 | 25 | 55 | 15 | 5 | - | 100 | 14 | 80 | 5 | - | 1 | 100 |

1. Best Quality. 2. Location 3. Cheeper 4. Correct Weight. 5. Any Other 6. Total.

TABLE 6.15

PERCENTAGE OF HOUSEHOLDS WHO DO PURCHASE THE COMMODITIES IN THE PACKETTED FROM BY URBAN AND RURAL AREAS IN DIFFERENT INCOME GROUPS

(P A K I S T A N)

PERCENTAGE

| Commodities | URBAN | | | | | RURAL | | | | | TOTAL | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | T | 1 | 2 | 3 | 4 | T | 1 | 2 | 3 | 4 | T |
| Atta(Wheat Flour) | 0.00 | 7.43 | 11.92 | 12.24 | 8.08 | 0.00 | 0.34 | 0.63 | 0.00 | 0.28 | 0.00 | 3.25 | 6.84 | 9.14 | 4.14 |
| Maida (Backed Prod.) | 0.00 | 0.00 | 0.52 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.28 | 0.00 | 0.07 |
| Suji | 0.00 | 0.99 | 2.59 | 2.04 | 1.44 | 0.00 | 0.00 | 0.63 | 0.00 | 0.14 | 0.00 | 0.41 | 1.71 | 1.52 | 0.79 |
| Rice Basmati Whole | 0.00 | 1.93 | 7.77 | 14.97 | 5.92 | 0.00 | 1.38 | 0.63 | 2.00 | 0.85 | 0.00 | 2.24 | 4.56 | 11.68 | 3.57 |
| Rice Basmati Broken | 0.00 | 0.59 | 2.07 | 0.00 | 0.87 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.41 | 1.14 | 0.00 | 0.43 |
| Rice Ordinary Whole | 0.00 | 0.50 | 1.04 | 0.68 | 0.58 | 0.00 | 0.34 | 0.63 | 0.00 | 0.28 | 0.00 | 0.61 | 0.85 | 0.51 | 0.50 |
| Rice Ordinary Broken | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 0.00 | 0.00 | 0.14 | 0.00 | 0.20 | 0.00 | 0.00 | 0.07 |
| Gram Whole | 0.00 | 1.98 | 2.59 | 11.56 | 3.75 | 0.00 | 0.69 | 0.00 | 2.00 | 0.42 | 0.00 | 1.63 | 1.42 | 9.14 | 2.21 |
| Gram Dal | 0.00 | 2.48 | 10.36 | 17.01 | 7.22 | 0.00 | 1.38 | 1.27 | 2.00 | 0.99 | 0.00 | 2.24 | 6.27 | 13.20 | 4.21 |
| Kabli Gram Whole | 0.00 | 0.50 | 5.70 | 13.61 | 4.62 | 0.00 | 1.03 | 0.00 | 0.00 | 0.42 | 0.00 | 1.02 | 3.13 | 10.15 | 2.57 |
| Mung Whole | 0.00 | 0.00 | 1.04 | 2.04 | 0.72 | 0.00 | 0.34 | 0.00 | 0.00 | 0.14 | 0.00 | 0.41 | 0.57 | 1.52 | 0.50 |
| Mung Dal Unwashed | 0.00 | 0.00 | 2.07 | 2.04 | 1.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.14 | 1.52 | 0.50 |
| Mung Dal Washed | 0.00 | 1.98 | 7.77 | 12.93 | 5.48 | 0.00 | 1.38 | 0.00 | 0.00 | 0.57 | 0.00 | 2.24 | 4.27 | 9.64 | 3.21 |
| Mash Whole | 0.00 | 0.00 | 0.00 | 0.68 | 0.14 | 0.00 | 0.34 | 0.00 | 2.00 | 0.28 | 0.00 | 0.41 | 0.00 | 1.02 | 0.29 |
| Mash Dal Washed | 0.00 | 2.97 | 6.22 | 14.97 | 5.77 | 0.00 | 1.38 | 1.27 | 0.00 | 0.85 | 0.00 | 2.44 | 3.99 | 11.17 | 3.43 |
| Mash Dal Unwashed | 0.00 | 0.00 | 3.11 | 2.04 | 1.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.71 | 1.52 | 0.64 |
| Masoor Whole | 0.00 | 0.00 | 0.52 | 1.36 | 0.43 | 0.00 | 0.65 | 0.00 | 2.00 | 0.42 | 0.00 | 0.81 | 0.28 | 1.52 | 0.57 |
| Masoor Dal | 0.00 | 1.98 | 8.81 | 17.01 | 6.64 | 0.00 | 1.03 | 0.63 | 0.00 | 0.57 | 0.00 | 2.03 | 5.13 | 12.69 | 3.79 |
| Bason | 0.00 | 1.49 | 5.18 | 10.88 | 4.18 | 0.00 | 0.34 | 0.00 | 0.00 | 0.14 | 0.00 | 0.81 | 2.85 | 8.12 | 2.14 |
| Dalya | 0.00 | 0.00 | 2.59 | 0.00 | 0.72 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.42 | 0.00 | 0.36 |
| Chapati (Nos) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Tanduri Roti (Nos) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Nan (Nos) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Double Roti (Nos) | 0.00 | 2.48 | 2.59 | 4.08 | 2.31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.02 | 1.42 | 3.05 | 1.14 |

Income Groups: 1 Upto 1000
2 1001 to 2000
3 2001 to 3500
4 3500 and above

TABLE 6.16

## CALSSIFICATION OF HOUSEHOLD WHO PURCHASE COMMODITIES IN PACKTTED FORM BY TYPE OF PACKAGE IN DIFFERENT INCOME GROUPS

( U R B A N )

| Commodities | INCOME GROUP 1 | | | | | | INCOME GROUP 2 | | | | | | INCOME GROUP 3 | | | | | | INCOME GROUP 4 | | | | | | ALL INCOME GROUP | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| Atta(Wheat Flour) | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 80 | 0 | 0 | 0 | 100 | 9 | 87 | 4 | 0 | 0 | 100 | 6 | 94 | 0 | 0 | 0 | 100 | 14 | 84 | 2 | 0 | 0 | 100 |
| Maida (Backed Prod.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Suji | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 33 | 0 | 0 | 67 | 0 | 100 | 10 | 0 | 0 | 90 | 0 | 100 |
| Rice Basmati Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 4 | 6 | 0 | 90 | 0 | 100 | 2 | 5 | 0 | 93 | 0 | 100 |
| Rice Basmati Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 25 | 0 | 75 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 83 | 0 | 100 |
| Rice Ordinary Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gram Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Gram Dal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Kabli Gram Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mung Dal Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mung Dal Washed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mash Dal Washed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 83 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 2 | 0 | 98 | 0 | 100 |
| Mash Dal Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Masoor Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Masoor Dal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 75 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | [illegible] | [illegible] | 0 | 100 |
| Bason | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 67 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 3 | 97 | 0 | 100 |
| Dalya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Double Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |

1=Gunny Bag [illegible]th Bag 3=Car[illegible] 4=Polytheline Bag 5=Any other 6=T[illegible]

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TABLE 6 17

CALSSIFICATION OF HOUSEHOLD WHO PURCHASE COMMODITIES IN PACKTTED FORM
BY TYPE OF PACKAGE IN DIFFERENT INCOME GROUPS

( R U R A L )

| | INCOME GROUP 1 | | | | | | INCOME GROUP 2 | | | | | | INCOME GROUP 3 | | | | | | INCOME GROUP 4 | | | | | | ALL INCOME GROUP | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Commodities | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| Atta(Wheat Flour) | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 40 | 0 | 0 | 0 | 100 | 70 | 30 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 33 | 0 | 0 | 0 | 100 |
| Maida | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sujji | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Rice Basmati Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Rice Basmati Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rice Ordinary Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Gram Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Gram Dal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Kabli Gram Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mung Dal Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mung Dal Washed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mash Dal Washed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mash Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Masoor Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Masoor Dal washed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Bason | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Dalya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Double Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1=Gunny Bag 2=Cloth Bag 3=Card Box 4=Polythene Bag 5=Any other 6=Total

## TABLE 6.18

CLASSIFICATION OF HOUSEHOLD WHO PURCHASE COMMODITIES IN PACKED FORM
BY TYPE OF PACKAGE IN DIFFERENT INCOME GROUPS
( T O T A L )

| | INCOME GROUP 1 | | | | | | INCOME GROUP 2 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| ATTA (WHEAT FLOUR) | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 75 | 0 | 0 | 0 | 100 |
| MAIDA (BAKED PROD) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SUJI | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| RICE BASMATI WHOLE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 91 | 0 | 100 |
| RICE BASMATI BROKEN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| RICE ORDINARY WHOLE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| RICE ORDINARY BROKEN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| GRAM WHOLE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| GRAM DAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| KABLI GRAM WHOLE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| MUNG WHOLE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| MUNG DAL UNWASHED | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MUNG DAL WASHED | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| MASH WHOLE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| MASH DAL WASHED | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 92 | 0 | 100 |
| MASH DAL UNWASHED | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MASOOR WHOLE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| MASOOR DAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 90 | 0 | 100 |
| BASON | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 75 | 0 | 100 |
| DAILYA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAPATI (NOS) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TANDURI ROTI (NOS) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NAN (NOS) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DOUBLE ROTI (NOS) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |

| | INCOME GROUP 3 | | | | | | INCOME GROUP 4 | | | | | | ALL INCOME GROUP | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| ATTA (WHEAT FLOUR) | 13 | 83 | 4 | 0 | 0 | 100 | 6 | 94 | 0 | 0 | 0 | 100 | 16 | 82 | 2 | 0 | [illegible] | [illegible] |
| MAIDA (BAKED PROD) | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | [illegible] |
| SUJI | 0 | 0 | 0 | 100 | 0 | 100 | 33 | 0 | 0 | 67 | 0 | 100 | 10 | 0 | 0 | 90 | 0 | [illegible] |
| RICE BASMATI WHOLE | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 4 | 0 | 96 | 0 | 100 | 0 | 3 | 0 | 97 | [illegible] | [illegible] |
| RICE BASMATI BROKEN | 0 | 15 | 0 | 85 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 92 | [illegible] | [illegible] |
| RICE ORDINARY WHOLE | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | [illegible] | [illegible] |
| RICE ORDINARY BROKEN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | [illegible] |
| GRAM WHOLE | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | [illegible] |
| GRAM DAL | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| KABLI GRAM WHOLE | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| MUNG WHOLE | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | [illegible] |
| MUNG DAL UNWASHED | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | [illegible] |
| MUNG DAL WASHED | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| MASH WHOLE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | [illegible] |
| MASH DAL WASHED | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 1 | 0 | 99 | 0 | [illegible] |
| MASH DAL UNWASHED | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | [illegible] | [illegible] |
| MASOOR WHOLE | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | [illegible] | [illegible] | [illegible] | [illegible] |
| MASOOR DAL | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 1 | 99 | 0 | [illegible] |
| BASON | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 2 | 98 | 0 | [illegible] |
| DAILYA | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | [illegible] |
| CHAPATI (NOS) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 0 | 0 |
| TANDURI ROTI (NOS) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NAN (NOS) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DOUBLE ROTI (NOS) | 0 | 0 | 0 | 100 | 0 | 100 | [illegible] | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | [illegible] | [illegible] |

1-[illegible] 2-CLOTH BAG 3-HARD BOX 4-[illegible] BAG 5-ANY OTHER 6-TOTAL

TABLE 6.19

CLASSIFICATION OF HOUSEHOLD WHO PURCHASE COMMODITIES IN PACKTTED FORM BY SIZE OF PACKAGE IN DIFFERENT INCOME GROUPS

( U R B A N )

| | INCOME GROUP 1 | | | | | | | INCOME GROUP 2 | | | | | | | INCOME GROUP 3 | | | | | | | INCOME GROUP 4 | | | | | | | ALL INCOME GROUP | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Commodities | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Atta(Wheat Flour) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 23 | 77 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 4 | 96 | [illegible] |
| Maida (Backed Prod.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | [illegible] |
| Suji | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 11 | 89 | 0 | 0 | 0 | 0 | [illegible] |
| Rice Basmati Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 20 | 20 | 0 | 100 | 0 | 87 | 0 | 13 | 0 | 0 | 100 | 0 | 77 | 9 | 14 | 0 | 0 | 100 | 0 | 79 | 5 | 14 | 2 | 0 | [illegible] |
| Rice Basmati Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 0 | 25 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 0 | 25 | 0 | 0 | [illegible] |
| Rice Ordinary Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 50 | 0 | 0 | 50 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 25 | 50 | 0 | 25 | 0 | 0 | [illegible] |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gram Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 75 | 0 | 0 | 0 | 0 | 100 | 20 | 80 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 8 | 92 | 0 | 0 | 0 | 0 | [illegible] |
| Gram Dal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 80 | 0 | 0 | 0 | 0 | 100 | 10 | 90 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 6 | 94 | 0 | 0 | 0 | 0 | [illegible] |
| Kabli Gram Whole | 0 | 0 | 0 | 0 | 0 | 0- | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 9 | 91 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 3 | 97 | 0 | 0 | 0 | 0 | [illegible] |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 20 | 80 | 0 | 0 | 0 | 0 | [illegible] |
| Mung Dal Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | [illegible] |
| Mung Dal Washed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 75 | 0 | 0 | 0 | 0 | 100 | 13 | 87 | 0 | 0 | 0 | 0 | 100 | 5 | 95 | 0 | 0 | 0 | 0 | 100 | 11 | 89 | 0 | 0 | 0 | 0 | [illegible] |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | [illegible] |
| Mash Dal Washed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 75 | 0 | 0 | 0 | 0 | 100 | 17 | 83 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 8 | 92 | 0 | 0 | 0 | 0 | [illegible] |
| Mash Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | [illegible] |
| Masoor Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | [illegible] |
| Masoor Dal Washed | 0 | 0 | 0 | 0 | 0 | 0. | 0 | 25 | 75 | 0 | 0 | 0 | 0 | 100 | 12 | 88 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 7 | 93 | 0 | 0 | 0 | 0 | [illegible] |
| Bason | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 67 | 0 | 0 | 0 | 0 | 100 | 20 | 80 | 0 | 0 | 0 | 0 | 100 | 19 | 81 | 0 | 0 | 0 | 0 | 100 | 21 | 79 | 0 | 0 | 0 | 0 | [illegible] |
| Dalya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | [illegible] |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] |
| Double Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 60 | 40 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 83 | 17 | 0 | 0 | 0 | 0 | [illegible] |

1= 5 K G 2=1 K G 3=2 K G 4=5 K.G 5=10 K G 6=20 K.G & ABOVE 7=TOTAL

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TABLE 6.20

COASSIFICATION OF HOUSEHOLD WHO PURCHASE COMMODITES IN PACKTTED FORM BY SIZE OF PACKAGE IN DIFFERENT INCOME GROUPS

( R U R A L )

| Commodities | INCOME GROUP 1 | | | | | | | INCOME GROUP 2 | | | | | | | INCOME GROUP 3 | | | | | | | INCOME GROUP 4 | | | | | | | ALL INCOME GROUP | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Atta(Wheat Flour) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 90 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 98 | 100 |
| Maida (Backed Prod.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Suji | 0 | 0 | 0 | 0 | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Rice Basmati Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 25 | 50 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 50 | 17 | 33 | 0 | 0 | 100 |
| Rice Basmeti Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 100 |
| Rice Ordinary Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 100 |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Gram Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 33 | 67 | 0 | 0 | 0 | 0 | 100 |
| Gram Dal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 75 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 14 | 86 | 0 | 0 | 0 | 0 | 100 |
| Kabli Gram Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Mung Dal Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mung Dal Washed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Mash Dal Washed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 75 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 83 | 0 | 0 | 0 | 0 | 100 |
| Mash Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Masoor Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 23 | 67 | 0 | 0 | 0 | 0 | 100 |
| Masoor Dal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 33 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 |
| Bason | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Dalya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Double Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1=5 K.G 2=1 [illegible] 3=2 K.G 4=5 K.G 5=10 K.G 6=20 K.G & ABOVE 7=TOTLA

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TABLE 6.21

CLASSIFICATION OF HOUSEHOLD WHO PURCHASE COMMODITIES IN PACKTTED FORM
BY SIZE OF PACKAGE IN DIFFERENT INCOME GROUPS

( T O T A L )

| Commodities | INCOME GROUP 1 | | | | | | | INCOME GROUP 2 | | | | | | | INCOME GROUP 3 | | | | | | | INCOME GROUP 4 | | | | | | | ALL INCOME GROUP | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Atta(Wheat Flour) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 10 | 90 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 3 | 97 | 100 |
| Maida (Backed Prod ) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Suji | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | [illegible] | 50 | 0 | 0 | 0 | 0 | 100 |
| Rice Basmati Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 18 | 36 | 9 | 0 | 100 | 0 | 88 | 0 | 13 | 0 | 0 | 100 | 0 | 78 | 9 | 13 | 0 | 0 | 100 | [illegible] | 75 | 6 | 17 | 2 | 0 | 100 |
| Rice Basmati Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 0 | 25 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 0 | 25 | 0 | 0 | 100 |
| Rice Ordinary Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 67 | 0 | 0 | 100 | 33 | 0 | 0 | 67 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 17 | 33 | 0 | 50 | 0 | 0 | 100 |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Gram Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 63 | 0 | 0 | 0 | 0 | 100 | 20 | 80 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | [illegible] | [illegible] | 0 | 0 | 0 | 0 | 100 |
| Gram Dal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 73 | 0 | 0 | 0 | 0 | 100 | 9 | 91 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 7 | 93 | 0 | 0 | 0 | 0 | 100 |
| Kabli Gram Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 9 | 91 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 3 | 97 | 0 | 0 | 0 | 0 | 100 |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 17 | 83 | 0 | 0 | 0 | 0 | 100 |
| Mung Dal Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Mung Dal Washed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 55 | 0 | 0 | 0 | 0 | 100 | 13 | 87 | 0 | 0 | 0 | 0 | 100 | 5 | 95 | 0 | 0 | 0 | 0 | 100 | 14 | 86 | 0 | 0 | 0 | 0 | 100 |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Mash Dal Washed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 70 | 0 | 0 | 0 | 0 | 100 | 14 | 86 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 9 | 91 | 0 | 0 | 0 | 0 | 100 |
| Mash Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Masoor Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 17 | 83 | 0 | 0 | 0 | 0 | 100 |
| Masoor Dal Washed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 11 | 89 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | [illegible] | 90 | 0 | 0 | 0 | 0 | 100 |
| Bason | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 75 | 0 | 0 | 0 | 0 | 100 | 20 | 80 | 0 | 0 | 0 | 0 | 100 | 19 | 81 | 0 | 0 | 0 | 0 | 100 | 20 | 80 | 0 | 0 | 0 | 0 | 100 |
| Dalya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Double Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | | | 0 | 0 | 0 | 100 | 60 | 40 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | [illegible] | [illegible] | 17 | 0 | 0 | 0 | 0 | 100 |

1= 5 K G 2=1 K G 3=2 K G 4=5 K G 5=10 K G 6=[illegible] K G & ABOVE 7=TOTAL

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TABLE 6.22

**PERCENTAGE OF HOUSEHOLDS WHO WOULD LIKE TO PURCHASE THE COMMODITIES IN PACKETTED FORM BY URBAN AND RURAL AREAS IN DIFFERENT INCOME GROUPS**

**(P A K I S T A N)**

PERCENTAGES

| | URBAN | | | | | RURAL | | | | | TOTAL | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | T | 1 | 2 | 3 | 4 | T | 1 | 2 | 3 | 4 | T |
| ATTA (WHEAT FLOUR) | 2.65 | 12.87 | 19.69 | 18.37 | 13.71 | 0.96 | 0.34 | 0.63 | 0.00 | 0.57 | 2.22 | 5.49 | 11.11 | 13.71 | 7.21 |
| MAIDA (BAKED PROD) | 1.32 | 0.00 | 1.55 | 0.00 | 0.72 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.56 | 0.00 | 0.85 | 0.00 | 0.36 |
| SUJI | 1.32 | 2.97 | 6.74 | 2.04 | 3.46 | 0.00 | 0.00 | 0.63 | 0.00 | 0.14 | 0.56 | 1.22 | 3.99 | 1.52 | 1.79 |
| RICE BASKATI WHOLE | 0.00 | 6.44 | 16.06 | 22.45 | 11.11 | 0.48 | 2.07 | 0.63 | 2.00 | 1.27 | 0.56 | 4.67 | 9.12 | 17.26 | 6.55 |
| RICE BASKATI BROKEN | 0.00 | 1.98 | 4.15 | 0.00 | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.81 | 2.28 | 0.00 | 0.8[illegible] |
| RICE ORDINARY WHOLE | 0.00 | 0.99 | 1.55 | 0.68 | 0.87 | 0.00 | 0.69 | 0.63 | 0.00 | 0.42 | 0.00 | 1.22 | 1.14 | 0.51 | 0.7[illegible] |
| RICE ORDINARY BROKEN | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 0.00 | 0.00 | 0.14 | 0.00 | 0.20 | 0.00 | 0.00 | 0.07 |
| GRAM WHOLE | 1.32 | 3.47 | 6.74 | 15.65 | 6.49 | 0.48 | 1.38 | 0.00 | 2.00 | 0.85 | 1.11 | 3.05 | 3.70 | 12.18 | 4.[illegible] |
| GRAM DAL | 1.32 | 7.43 | 18.05 | 23.13 | 12.55 | 0.48 | 2.07 | 1.27 | 2.00 | 1.41 | 1.11 | 5.08 | 10.83 | 17.77 | 7.29 |
| KABLI GRAM WHOLE | 1.32 | 3.47 | 10.36 | 20.41 | 8.51 | 0.48 | 1.38 | 0.00 | 0.00 | 0.71 | 1.11 | 2.04 | 5.70 | 15.23 | 4.79 |
| MUNG WHOLE | 0.00 | 0.00 | 2.07 | 3.40 | 1.30 | 0.00 | 0.69 | 0.00 | 0.00 | 0.28 | 0.00 | 0.81 | 1.14 | 2.54 | 0.9[illegible] |
| MUNG DAL UNWASHED | 0.00 | 0.00 | 4.15 | 2.72 | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.28 | 2.03 | 0.5[illegible] |
| MUNG DAL WASHED | 1.32 | 3.96 | 13.99 | 17.69 | 9.09 | 0.48 | 2.41 | 0.00 | 0.00 | 1.13 | 1.11 | 4.27 | 7.69 | 13.20 | 5.[illegible] |
| MASH WHOLE | 0.00 | 0.99 | 0.52 | 0.68 | 0.56 | 0.00 | 0.69 | 0.00 | 2.00 | 0.42 | 0.00 | 1.22 | 0.28 | 1.02 | 0.[illegible] |
| MASH DAL WASHED | 1.32 | 8.42 | 12.95 | 21.09 | 10.82 | 0.48 | 2.07 | 1.27 | 0.00 | 1.27 | 1.11 | 5.49 | 7.69 | 15.74 | [illegible] |
| MASH DAL UNWASHED | 0.00 | 0.00 | 4.66 | 2.72 | 1.88 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.56 | 2.03 | 0.9[illegible] |
| MASOOR WHOLE | 0.00 | 0.00 | 2.07 | 2.04 | 1.01 | 0.00 | 1.38 | 0.00 | 2.00 | 0.71 | 0.00 | 1.63 | 1.14 | 2.03 | 1.14 |
| MASOOR DAL | 1.32 | 6.93 | 17.10 | 23.81 | 12.12 | 0.48 | 2.07 | 0.63 | 0.00 | 1.13 | 1.11 | 5.28 | 9.69 | 17.77 | 7.07 |
| BASON | 0.00 | 4.46 | 10.88 | 14.97 | 7.50 | 0.00 | 0.34 | 0.00 | 0.00 | 0.14 | 0.00 | 2.03 | 5.98 | 11.17 | 3.79 |
| DAILYA | 0.00 | 0.00 | 5.18 | 0.00 | 1.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.85 | 0.00 | 0.71 |
| CHAPATI (NOS) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TANDURI ROTI (NOS) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NAN (NOS) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DOBULE ROTI (NOS) | 0.00 | 2.97 | 5.70 | 7.48 | 4.04 | 0.48 | 0.00 | 0.00 | 0.00 | 0.14 | 0.56 | 1.22 | 3.13 | 5.58 | 2.14 |

INCOME GROUPS 1=UP TO 1000 2=1001-2000 3=2001-3500 4=3500 & ABOVE

## TABLE 6.23

PERCENTAGES OF HOUSEHOLDS WHO WOULD LIKE TO PURCHASE COMMODITIES IN [illegible] PREPARED PACKETTED FORM BY URBAN AND RURAL IN DIFFERENT EDUCATION GROUPS
(P A K I S T A N)

PERCENTAGES

| | URBAN | | | | RURAL | | | | TOTAL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | T | 1 | 2 | 3 | T | 1 | 2 | 3 | T |
| ATTA (WHEAT FLOUR) | 9.95 | 14.72 | 16.44 | 13.95 | 0.50 | 0.46 | 1.12 | 0.57 | [illegible] | [illegible] | [illegible] | [illegible] |
| MAIDA (BAKED PROD) | 1.05 | 0.00 | 1.33 | 0.73 | 0.00 | 0.00 | 0.00 | 0.00 | [illegible] | [illegible] | [illegible] | [illegible] |
| SUJI | 3.66 | 3.40 | 3.56 | 3.62 | 0.00 | 0.46 | 0.00 | 0.14 | [illegible] | [illegible] | [illegible] | [illegible] |
| RICE BASMATI WHOLE | 5.34 | 10.24 | 16.44 | 11.16 | 1.25 | 0.92 | 2.25 | 1.27 | [illegible] | [illegible] | [illegible] | [illegible] |
| RICE BASMATI BROKEN | 0.00 | 3.40 | 1.33 | 1.76 | 0.00 | 0.00 | 0.00 | 0.00 | [illegible] | [illegible] | [illegible] | [illegible] |
| RICE ORDINARY WHOLE | 1.57 | 0.00 | 1.33 | 0.66 | 0.00 | 0.46 | 2.25 | 0.42 | [illegible] | [illegible] | [illegible] | [illegible] |
| RICE ORDINARY BROKEN | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.12 | 0.14 | [illegible] | [illegible] | [illegible] | [illegible] |
| GRAM WHOLE | [illegible] | 4.15 | 9.33 | 6.46 | 0.75 | 0.46 | 2.25 | 0.85 | [illegible] | [illegible] | [illegible] | [illegible] |
| GRAM DAL | 7.33 | 10.95 | 15.56 | 12.63 | 0.75 | 0.92 | 5.62 | 1.42 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] WHOLE | 5.76 | [illegible] | 13.33 | 8.66 | 0.25 | 0.00 | 4.49 | 0.71 | [illegible] | [illegible] | [illegible] | [illegible] |
| MUNG WHOLE | 0.00 | 0.75 | 3.11 | 1.32 | 0.00 | 0.00 | 2.25 | 0.28 | [illegible] | [illegible] | [illegible] | [illegible] |
| MUNG DAL UNWASHED | 1.05 | 1.89 | 1.78 | 1.62 | 0.00 | 0.00 | 0.00 | 0.00 | [illegible] | [illegible] | [illegible] | [illegible] |
| MUNG DAL WASHED | 5.76 | 7.92 | 13.78 | 9.25 | 1.25 | 0.00 | 3.37 | 1.13 | [illegible] | [illegible] | [illegible] | [illegible] |
| MASH WHOLE | 0.00 | [illegible] | 0.89 | 0.59 | 0.00 | 0.46 | 2.25 | 0.42 | [illegible] | [illegible] | [illegible] | [illegible] |
| MASH DAL WASHED | 6.81 | [illegible] | 14.67 | 10.67 | 0.75 | 0.46 | 5.62 | 1.27 | [illegible] | [illegible] | [illegible] | [illegible] |
| MASH DAL UNWASHED | 1.57 | 1.13 | 2.67 | 1.76 | 0.00 | 0.00 | 0.00 | 0.00 | [illegible] | [illegible] | [illegible] | [illegible] |
| MASOOR WHOLE | 0.00 | 1.13 | 1.78 | 1.03 | 0.50 | 0.46 | 2.25 | 0.71 | [illegible] | [illegible] | [illegible] | [illegible] |
| MASOOR DAL | 7.33 | 12.08 | 16.00 | 12.19 | 1.25 | 0.00 | 3.37 | 1.13 | [illegible] | [illegible] | [illegible] | [illegible] |
| BESAN | 6.81 | 6.04 | 9.78 | 7.49 | 0.00 | 0.00 | 1.12 | 0.14 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 1.05 | 1.51 | 1.78 | 1.47 | 0.00 | 0.00 | 0.00 | 0.00 | [illegible] | [illegible] | [illegible] | [illegible] |
| CHAPATI (NOS) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] ROTI (NOS) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 4.11 | 0.25 | 0.00 | [illegible] | 0.14 | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible] MATRIC

TABLE 6.24

CLSSIFICATION OF HOUSEHOLD WHO WOULD LIKE TO PURCHASE IN PACKTTED FORM
BY TYPE OF PACKAGE IN DIFFERENT INCOME FFROUPS

( U R B A N )

(Percentage) Pakistan

| Commodities | INCOME GROUP 1 | | | | | | INCOME GROUP 2 | | | | | | INCOME GROUP 3 | | | | | | INCOME GROUP 4 | | | | | | ALL INCOME GROUP | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| Atta(Wheat Flour) | 75 | 25 | 0 | 0 | 0 | 100 | 23 | 77 | 0 | 0 | 0 | 100 | 16 | 82 | 3 | 0 | 0 | 100 | 7 | 89 | 0 | 4 | 0 | 100 | 16 | 80 | 1 | 1 | 0 | |
| Maida (Backed Prod.) | 0 | 50 | 0 | 50 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 67 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 60 | 0 | |
| Suji | 0 | 50 | 0 | 50 | 0 | 100 | 0 | 17 | 0 | 83 | 0 | 100 | 0 | 15 | 0 | 85 | 0 | 100 | 33 | 0 | 0 | 67 | 0 | 100 | 4 | 17 | 0 | 79 | 0 | |
| Rice Basmati Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 69 | 0 | 100 | 0 | 10 | 0 | 90 | 0 | 100 | 3 | 9 | 0 | 88 | 0 | 100 | 1 | 13 | 0 | 86 | 0 | |
| Rice Basmati Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 25 | 0 | 75 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 83 | 0 | |
| Rice Ordinary Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Gram Whole | 0 | 50 | 0 | 50 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 8 | 0 | 92 | 0 | 100 | 4 | 0 | 0 | 96 | 0 | 100 | 2 | 4 | 0 | 93 | 0 | |
| Gram Dal | 0 | 50 | 0 | 50 | 0 | 100 | 7 | 13 | 0 | 80 | 0 | 100 | 0 | 8 | 0 | 92 | 0 | 100 | 3 | 0 | 0 | 97 | 0 | 100 | 2 | 7 | 0 | 91 | 0 | |
| Kabli Gram Whole | 0 | 50 | 0 | 50 | 0 | 100 | 0 | 29 | 0 | 71 | 0 | 100 | 0 | 10 | 0 | 90 | 0 | 100 | 3 | 0 | 0 | 97 | 0 | 100 | 2 | 6 | 0 | 90 | 0 | |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | |
| Mung Dal Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | |
| Mung Dal Washed | 0 | 50 | 0 | 50 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 7 | 0 | 93 | 0 | 100 | 4 | 0 | 0 | 96 | 0 | 100 | 2 | 5 | 0 | 94 | 0 | |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 50 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 25 | 0 | 75 | 0 | |
| Mash Dal Washed | 0 | 50 | 0 | 50 | 0 | 100 | 5 | 13 | 0 | 76 | 0 | 100 | 0 | 8 | 0 | 92 | 0 | 100 | 3 | 0 | 0 | 97 | 0 | 100 | 3 | 8 | 0 | 89 | 0 | |
| Mash Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | |
| Masoor Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 75 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 14 | 0 | 86 | 0 | |
| Masoor Dal Washed | 0 | 50 | 0 | 50 | 0 | 100 | 7 | 14 | 7 | 71 | 0 | 100 | 0 | 9 | 0 | 91 | 0 | 100 | 3 | 0 | 0 | 97 | 0 | 100 | 2 | 7 | 1 | 89 | 0 | |
| Bason | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 11 | 78 | 0 | 100 | 0 | 10 | 0 | 90 | 0 | 100 | 5 | 0 | 0 | 95 | 0 | 100 | 2 | 6 | 2 | 90 | 0 | |
| Dalya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 90 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 90 | 0 | |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Double Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 67 | 0 | 100 | 9 | 0 | 0 | 91 | 0 | 100 | 0 | 9 | 0 | 91 | 0 | 100 | 11 | 4 | [illegible] | [illegible] | 0 | |

1=GUNNY BAG 2=CLTH BAG 3=CARD BOX 4=POLYTHELINE BAG 5=ANY OTHER 6=TOTAL

TABLE A.25

CLASSIFICATION OF HOUSEHOLD WHO WOULD LIKE TO PURCHASE IN PACKTTED FORM
BY TYPE OF PACKAGE IN DIFFERENT INCOME GROUPS

(R U R A L)

(Percentages Pakistan

| Commodities | INCOME GROUP 1 | | | | | | INCOME GROUP 2 | | | | | | INCOME GROUP 3 | | | | | | INCOME GROUP 4 | | | | | | ALL INCOME GROUP | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| Atta(Wheat Flour) | 0 | 100 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 100 |
| Maida (Backed PRod ) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Suji | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Rice Basmati Whole | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Rice Basmati Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rice Ordinary Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -100 | 0 | 100 |
| Gram Whole | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Gram Dal | 0 | 0 | 0 | -100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Kabli Gram Whole | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mung Dal Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mung Dal Washed | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mash Dal Washed | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mash Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Masoor Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Masoor Dal Washed | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Bason | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Dalva | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Double Roti (Nos) | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |

1=GUNNY BAG 2=CLOTH BAG 3=CARD BOX 4=POLYTHELINE BAG 5=ANY OTHER 6=TOTAL

-111-

377

TABLE 6.26

CLSSIFICATION OF HOUSEHOLD WHO WOULD LIKE TO PURCHASE IN PACKTTED FORM
BY TYPE OF PACKAGE IN DIFFERENT INCOME GROUPS
(T O T A L)

(Percentages) Pakistan

| Commodities | INCOME GROUP 1 | | | | | | INCOME GROUP 2 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| Atta(Wheat Flour) | 36 | 63 | 0 | 0 | 0 | 100 | 26 | 74 | 0 | 0 | 0 | 100 |
| Maida(Baked Prod.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Suji | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rice Basmati Whole | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 17 | 0 | 83 | 0 | 100 |
| Rice Basmati Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rice Ordinary Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Gram Whole | 0 | 25 | 0 | 75 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Gram Dal | 0 | 25 | 0 | 75 | 0 | 100 | 4 | 8 | 0 | 88 | 0 | 100 |
| Kabli Gram Whole | 0 | 25 | 0 | 75 | 0 | 100 | 0 | 15 | 0 | 85 | 0 | 100 |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mung Dal Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mung Dal Washed | 0 | 25 | 0 | 75 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 83 | 0 | 100 |
| Mash Dal Washed | 0 | 25 | 0 | 75 | 0 | 100 | 4 | 11 | 0 | 85 | 0 | 100 |
| Mash Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Masoor Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Masoor Dal Washed | 0 | 25 | 0 | 75 | 0 | 100 | 4 | 8 | 4 | 85 | 0 | 100 |
| Bason | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 | 80 | 0 | 100 |
| Dalya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Double Roti (Nos) | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 |

| Commodities | INCOME GROUP 3 | | | | | | INCOME GROUP 4 | | | | | | ALL INCOME GROUP | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| Atta(Wheat Flour) | 18 | 79 | 3 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 79 | 1 | 1 | 0 | 100 |
| Maida(Baked Prod.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Suji | 0 | 14 | 0 | 86 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 16 | 0 | 80 | 1 | 100 |
| Rice Basmati Whole | 0 | 9 | 0 | 91 | 0 | 100 | 3 | 9 | 0 | 88 | 0 | 100 | 1 | 11 | 0 | 88 | 0 | 100 |
| Rice Basmati Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rice Ordinary Whole | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Gram Whole | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 96 | 0 | 100 | 2 | 4 | 0 | 95 | 0 | 100 |
| Gram Dal | 0 | 8 | 0 | 92 | 0 | 100 | 3 | 0 | 0 | 97 | 0 | 100 | 2 | 6 | 0 | 92 | 0 | 100 |
| Kabli Gram Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 0 | 91 | 0 | 100 |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mung Dal Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mung Dal Washed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 95 | 0 | 100 |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 11 | 0 | 89 | 0 | 100 |
| Mash Dal Washed | 0 | 7 | 0 | 93 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 0 | 91 | 0 | 100 |
| Mash Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Masoor Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 6 | 0 | 94 | 0 | 100 |
| Masoor Dal Washed | 0 | 9 | 0 | 91 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 1 | 91 | 0 | 100 |
| Bason | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 2 | 91 | 0 | 100 |
| Dalya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Double Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | [illegible] | 0 | 87 | 0 | 100 |

1=GUNNY BAG 2=CLOTH BAG 3=CARD BOX 4=POLYTHELINE BAG 5=ANY OTHER 6= TOTAL

TABLE 6.27

CLSSIFICATION OF HOUSEHOLD WHO WOULD LIKE TO PURCHASE IN PACKTTED FORM
BY TYPE OF PACKAGE IN DIFFERENT INCOME GROUPS
(T O T A L)

| Commodities | ILLETRATE | | | | | | MATRIC | | | | | | ABOVE MATRIC | | | | | | TOTAL | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| Atta(Wheat Flour) | 26 | 74 | 0 | 0 | 0 | 100 | 21 | 77 | 3 | 0 | 0 | 100 | 11 | 86 | 0 | 3 | 0 | 100 | 13 | 80 | 1 | 1 | 0 | 100 |
| Maida (Baker Food) | 0 | 50 | 0 | 50 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 67 | 0 | 100 | 0 | 40 | 0 | 60 | 0 | 100 |
| Suji | 0 | 14 | 0 | 86 | 0 | 100 | 0 | 22 | 0 | 78 | 0 | 100 | 13 | 13 | 0 | 75 | 0 | 100 | 4 | 17 | 0 | 79 | 0 | 100 |
| Rice Basmati Whole | 0 | 20 | 0 | 80 | 0 | 100 | 0 | 10 | 0 | 90 | 0 | 100 | 3 | 14 | 0 | 84 | 0 | 100 | 1 | 13 | 0 | 86 | 0 | 100 |
| Rice Basmati Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 89 | 0 | 100 | 0 | 33 | 0 | 67 | 0 | 100 | 0 | 17 | 0 | 83 | 0 | 100 |
| Rice Ordinary Whole | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gram Whole | 0 | 8 | 0 | 92 | 0 | 100 | 0 | 9 | 0 | 91 | 0 | 100 | 5 | 0 | 0 | 95 | 0 | 100 | 2 | 5 | 0 | 93 | 0 | 100 |
| Gram Dal | 0 | 14 | 0 | 86 | 0 | 100 | 3 | 8 | 0 | 89 | 0 | 100 | 3 | [illegible] | 0 | 94 | 0 | 100 | 2 | 7 | 0 | 91 | 0 | 100 |
| Kabli Gram Whole | 0 | 29 | 0 | 71 | 0 | 100 | 0 | 9 | 0 | 91 | 0 | 100 | 3 | [illegible] | 0 | 93 | 0 | 100 | 2 | 8 | 0 | 90 | 0 | 100 |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mung Dal Unwashed | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mung Dal Washed | 0 | 9 | 0 | 91 | 0 | 100 | 0 | 5 | 0 | 95 | 0 | 100 | 3 | 3 | 0 | 94 | 0 | 100 | 2 | 5 | 0 | 94 | 0 | 100 |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 50 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 25 | 0 | 75 | 0 | 100 |
| Mash Dal Washed | 0 | 23 | 0 | 77 | 0 | 100 | 4 | 7 | 0 | 89 | 0 | 100 | 3 | 3 | 0 | 94 | 0 | 100 | 3 | 8 | 0 | 89 | 0 | 100 |
| Mash Unwashed | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Masoor Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 67 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 14 | 0 | 86 | 0 | 100 |
| Masoor Dal Washed | 0 | 13 | 7 | 80 | 0 | 100 | 3 | 9 | 0 | 88 | 0 | 100 | 3 | 3 | 0 | 94 | 0 | 100 | 2 | 7 | 1 | 89 | 0 | 100 |
| Besan | 0 | 8 | 8 | 85 | 0 | 100 | 0 | 6 | 0 | 94 | 0 | 100 | 5 | 5 | 0 | 91 | 0 | 100 | 2 | 6 | 2 | 90 | 0 | 100 |
| Dalya | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 25 | 0 | 75 | 0 | 100 | 0 | 10 | 0 | 90 | 0 | 100 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Double Roti (Nos) | 25 | 0 | 0 | 75 | 0 | 100 | 11 | 0 | 0 | 89 | 0 | 100 | 7 | 7 | 0 | 87 | 0 | 100 | 11 | 4 | 0 | 86 | 0 | 100 |

[illegible]NY BAG [illegible] BAG [illegible]CARD BOX 4=POLYTHELINE BAG 5=ANY OTHER 6= TOTAL

TABLE 6.28

CLASSIFICATION OF HOUSEHOLDS WHO WOULD LIKE TO PURCHASE THE COMMODITIES IN PACKETTED FORM BY THE TYPE OF PACKAGE FOR EDUCATION GROUPS

(RURAL)

| Commodities | ILLETRATE | | | | | | MATRIC | | | | | | ABOVE MATRIC | | | | | | TOTAL | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| Atta(Wheat Flour) | 0 | 100 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 100 |
| Maida (Baked Prod.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Suji | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 |
| Rice Basmati Whole | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Rice Basmati Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rice Ordinary Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Gram Whole | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Gram Dal | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Kabli Gram Whole | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mung Dal Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mung Dal Washed | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mash Dal Washed | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Mash Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Masoor Whole | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Masoor Dal Washed | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Bason | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 |
| Dalya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Double Roti (Nos) | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 1[illegible] |

1=[illegible] 2=CLOTH BAG 3=CARD BOX 4=POLYTHELINE BAG 5=ANY OTHER & 6= T[illegible]

TABLE 6.29

CLASSIFICATION OF HOUSEHOLDS WHO WOULD LIKE TO PURCHASE THE COMMODI-TIES IN PACKETTED FORM BY THE TYPE OF PACKAGE FOR EDUCATION GROUPS

(PAKISTAN)

| | ILLETRATE | | | | | | MATRIC | | | | | | ABOVE MATRIC | | | | | | TOTAL | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| ATTA WHEAT FLOUR | 22 | 78 | 0 | 0 | 0 | 100 | 23 | 75 | 3 | 0 | [illegible] | [illegible] | 13 | 84 | 0 | 3 | 0 | 100 | 19 | 75 | 1 | 1 | 0 | 100 |
| [illegible] | 0 | 50 | 0 | 50 | 0 | 100 | 0 | 0 | 0 | 0 | [illegible] | [illegible] | [illegible] | 33 | 0 | 67 | 0 | 100 | 0 | [illegible] | 0 | 60 | 0 | 100 |
| [illegible] | 0 | 14 | [illegible] | 86 | 0 | 100 | 0 | 20 | 0 | 80 | [illegible] | [illegible] | 13 | 13 | [illegible] | 75 | 0 | 100 | 4 | 15 | 0 | 80 | 0 | 100 |
| [illegible] | 0 | 10 | 0 | [illegible] | 0 | 100 | 0 | 10 | 0 | 90 | [illegible] | [illegible] | 3 | 13 | [illegible] | 85 | 0 | 100 | 1 | 11 | 0 | 88 | 0 | 100 |
| [illegible] | 0 | [illegible] | [illegible] | [illegible] | 0 | 0 | 0 | 11 | 0 | 89 | [illegible] | [illegible] | 0 | 33 | [illegible] | 67 | 0 | 100 | 0 | 17 | 0 | 83 | 0 | 100 |
| [illegible] | 0 | 0 | [illegible] | [illegible] | 0 | [illegible] | 0 | 0 | 0 | 100 | [illegible] | [illegible] | 0 | 0 | 0 | 100 | 0 | 100 | [illegible] | [illegible] | [illegible] | 100 | 0 | 100 |
| [illegible] | 0 | 0 | [illegible] | [illegible] | 0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 0 | [illegible] | 0 | 100 | 0 | 100 | [illegible] | [illegible] | [illegible] | 100 | 0 | 100 |
| [illegible] | [illegible] | 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3 | 0 | 97 | [illegible] | [illegible] | [illegible] | [illegible] | 0 | 95 | 0 | 100 | 2 | [illegible] | [illegible] | 95 | 0 | 100 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 0 | 100 | [illegible] | 6 | 0 | 94 | [illegible] | [illegible] | 2 | 2 | 0 | 95 | 0 | 100 | 2 | [illegible] | [illegible] | 92 | 0 | 100 |
| [illegible] | [illegible] | 11 | [illegible] | 75 | 0 | [illegible] | [illegible] | 9 | 0 | 91 | [illegible] | [illegible] | 3 | 3 | 0 | 94 | 0 | 100 | 1 | [illegible] | [illegible] | 91 | [illegible] | 100 |
| [illegible] | 0 | 7 | [illegible] | [illegible] | 0 | [illegible] | [illegible] | [illegible] | 0 | 100 | [illegible] | [illegible] | [illegible] | 0 | 0 | 100 | [illegible] | 100 | 0 | [illegible] | 0 | 100 | [illegible] | 100 |
| [illegible] | 0 | [illegible] | 0 | 100 | 0 | [illegible] | 0 | 0 | 0 | 100 | [illegible] | [illegible] | [illegible] | 0 | 0 | 100 | 0 | 100 | [illegible] | [illegible] | 0 | 100 | 0 | 100 |
| [illegible] | [illegible] | 5 | [illegible] | 95 | 0 | 100 | [illegible] | 5 | 0 | 95 | [illegible] | [illegible] | 3 | 3 | 0 | 94 | 0 | 100 | 1 | [illegible] | [illegible] | 95 | 0 | 100 |
| [illegible] | [illegible] | 0 | [illegible] | [illegible] | 0 | 0 | 0 | 33 | 0 | 67 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | [illegible] | 0 | 89 | 0 | 100 |
| [illegible] | 0 | [illegible] | [illegible] | 91 | 0 | 100 | [illegible] | 7 | 0 | 93 | 0 | 100 | 3 | 3 | 0 | 95 | 0 | 100 | [illegible] | [illegible] | 0 | 91 | 0 | 100 |
| [illegible] | [illegible] | 0 | [illegible] | 100 | 0 | 100 | 0 | 0 | 0 | 100 | [illegible] | 100 | 0 | 0 | 0 | 100 | 0 | 100 | [illegible] | [illegible] | 0 | 100 | 0 | 100 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 0 | 100 | [illegible] | 25 | 0 | 75 | [illegible] | [illegible] | 0 | 0 | [illegible] | 100 | 0 | 100 | [illegible] | [illegible] | 0 | 91 | 0 | 100 |
| [illegible] | [illegible] | 3 | [illegible] | 93 | 0 | 100 | [illegible] | 7 | 0 | 93 | [illegible] | [illegible] | 2 | 2 | 0 | 96 | 0 | 100 | 2 | [illegible] | 1 | 91 | 0 | 100 |
| [illegible] | [illegible] | 8 | [illegible] | 88 | 0 | 100 | [illegible] | [illegible] | 0 | 94 | [illegible] | [illegible] | 4 | 4 | 0 | [illegible] | 0 | 100 | [illegible] | [illegible] | 2 | 90 | 0 | 100 |
| [illegible] | [illegible] | 0 | [illegible] | 100 | 0 | 100 | 0 | 0 | 0 | 100 | [illegible] | [illegible] | 0 | 25 | 0 | 75 | 0 | 100 | [illegible] | [illegible] | 0 | 90 | 0 | 100 |
| [illegible] | 0 | 0 | [illegible] | [illegible] | 0 | [illegible] | [illegible] | [illegible] | 0 | 0 | [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | [illegible] | [illegible] | 0 | 0 | 0 |
| [illegible] | [illegible] | [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | [illegible] | 0 | 0 | 0 | 0 |
| [illegible] | [illegible] | [illegible] | [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | [illegible] | [illegible] | 0 | 0 | 0 |
| [illegible] | 10 | 0 | [illegible] | 88 | 0 | 100 | 11 | [illegible] | 0 | 89 | [illegible] | [illegible] | 7 | 7 | [illegible] | 87 | 0 | 100 | 10 | 3 | 0 | 87 | 0 | 100 |

[illegible] 5-ANY OTHER 6-TOTAL

## TABLE 6.30

[illegible] OF HOUSEHOLD WHO WOULD LIKE TO PURCHASE IN PACKED FORM
BY SIZE OF PACKAGE IN DIFFERENT INCOME GROUPS
( U R B A N )

(Percentages)Pakistan

| | INCOME GROUP 1 | | | | | | | INCOME GROUP 2 | | | | | | | INCOME GROUP 3 | | | | | | | INCOME GROUP 4 | | | | | | | ALL INCOME GROUPS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ATTA (WHEAT FLOUR) | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | [illegible] | 100 | 100 | 0 | 0 | 0 | [illegible] | 40 | 60 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 24 | [illegible] | 100 |
| MAIDA [illegible] | 0 | [illegible] | [illegible] | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | [illegible] | 0 | 0 | 100 | 0 | [illegible] | 0 | [illegible] | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | [illegible] | 100 |
| [illegible] | 100 | [illegible] | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | [illegible] | 100 | 0 | 100 | 0 | [illegible] | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | [illegible] | 100 | 15 | [illegible] | [illegible] | [illegible] | 0 | [illegible] | 100 |
| RICE BASMATI WHOLE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 56 | 0 | 11 | 22 | 0 | 100 | [illegible] | 76 | 0 | 11 | 4 | 0 | 100 | 0 | 75 | 5 | 15 | 5 | 0 | 100 | 5 | 73 | 4 | 12 | 6 | [illegible] | [illegible] |
| RICE BASMATI BROKEN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 0 | 33 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 0 | 33 | [illegible] | [illegible] | 100 |
| RICE [illegible] WHOLE | 0 | [illegible] | 0 | 0 | 0 | 0 | [illegible] | 50 | 50 | 0 | 0 | 0 | [illegible] | 100 | 33 | [illegible] | 0 | 33 | 33 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | [illegible] | 100 | 33 | 33 | 0 | 17 | 17 | [illegible] | 100 |
| RICE [illegible] BROKEN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 0 | 0 | 0 | [illegible] | 0 |
| GRAM WHOLE | [illegible] | [illegible] | 0 | 0 | [illegible] | 100 | 100 | [illegible] | 67 | 0 | 0 | 0 | 0 | [illegible] | [illegible] | 75 | 0 | [illegible] | 0 | 0 | 100 | 0 | 33 | [illegible] | 0 | 0 | 0 | 100 | 20 | 75 | 2 | [illegible] | 0 | [illegible] | [illegible] |
| GRAM DAL | [illegible] | [illegible] | 0 | 0 | [illegible] | 100 | [illegible] | [illegible] | 60 | 0 | 0 | 0 | 0 | 100 | [illegible] | 83 | 0 | [illegible] | 0 | 0 | 100 | 6 | 51 | 3 | 0 | 0 | [illegible] | 100 | 15 | 83 | 2 | [illegible] | 0 | [illegible] | [illegible] |
| [illegible] WHOLE | [illegible] | [illegible] | 0 | 0 | [illegible] | 100 | 100 | [illegible] | 67 | 0 | 0 | 0 | 0 | 100 | 19 | 81 | 0 | [illegible] | 0 | 0 | 100 | 10 | 56 | 3 | 0 | 0 | [illegible] | 100 | 14 | 84 | 2 | 0 | 0 | [illegible] | [illegible] |
| [illegible] WHOLE | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 0 | [illegible] | 0 | [illegible] | [illegible] | 75 | 25 | 0 | [illegible] | [illegible] | [illegible] | 100 | 20 | 50 | 0 | 0 | 0 | 0 | 100 | 44 | 56 | 0 | 0 | 0 | [illegible] | 100 |
| [illegible] DAL UNWASHED | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 0 | 0 | [illegible] | [illegible] | [illegible] | [illegible] | 29 | 71 | 0 | [illegible] | [illegible] | [illegible] | 100 | 25 | 75 | 0 | 0 | 0 | 0 | 100 | 27 | 73 | 0 | 0 | 0 | [illegible] | 0 |
| [illegible] DAL WASHED | 50 | 50 | 0 | 0 | 0 | 100 | 200 | 33 | 33 | 0 | [illegible] | [illegible] | [illegible] | [illegible] | 22 | 78 | 0 | [illegible] | 0 | 0 | 100 | 16 | 80 | 4 | 0 | 0 | 0 | 100 | 21 | 77 | 2 | 0 | 0 | [illegible] | [illegible] |
| [illegible] WHOLE | [illegible] | 0 | 0 | 0 | 0 | 0 | [illegible] | [illegible] | 0 | 0 | 0 | 0 | [illegible] | [illegible] | 100 | 0 | 0 | [illegible] | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | [illegible] | [illegible] |
| [illegible] DAL WASHED | 0 | 100 | 0 | 0 | 0 | 100 | 200 | 44 | 56 | 0 | 0 | 0 | [illegible] | [illegible] | 33 | 67 | 0 | [illegible] | 0 | 0 | 100 | 10 | 87 | 3 | 0 | 0 | 0 | 100 | 23 | 75 | 2 | 0 | 0 | 0 | 100 |
| [illegible] DAL UNWASHED | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 0 | 0 | 0 | [illegible] | [illegible] | [illegible] | 22 | 78 | [illegible] | [illegible] | 0 | [illegible] | 100 | 25 | 75 | 0 | 0 | 0 | [illegible] | 100 | 23 | 77 | 0 | 0 | 0 | [illegible] | 100 |
| [illegible] WHOLE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | [illegible] | [illegible] | 50 | 50 | 0 | [illegible] | 0 | 0 | 100 | 33 | 67 | 0 | 0 | 0 | 0 | 100 | 40 | 60 | 0 | 0 | 0 | [illegible] | [illegible] |
| [illegible] DAL | 50 | 50 | 0 | 0 | 0 | 100 | 200 | 33 | 33 | 0 | 0 | 0 | [illegible] | [illegible] | 22 | 78 | 0 | [illegible] | 0 | [illegible] | 100 | 9 | 88 | 3 | 0 | 0 | 0 | 100 | 15 | 80 | 1 | 0 | [illegible] | [illegible] | [illegible] |
| [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | [illegible] | [illegible] | 25 | [illegible] | 0 | [illegible] | [illegible] | [illegible] | 100 | 15 | 81 | 0 | 0 | 0 | 0 | 100 | 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| DAL [illegible] | [illegible] | 0 | 0 | 0 | 0 | 0 | [illegible] | [illegible] | 0 | 0 | 0 | [illegible] | [illegible] | [illegible] | [illegible] | 100 | 0 | [illegible] | 0 | [illegible] | 100 | 0 | 0 | 0 | 0 | 0 | [illegible] | 0 | 0 | 100 | [illegible] | 0 | 0 | [illegible] | [illegible] |
| CHAPATI (NOS) | [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 0 | 0 | [illegible] | [illegible] | [illegible] | [illegible] | 0 | 0 | 0 | [illegible] | 0 | [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | [illegible] |
| [illegible] ROTI (NOS) | [illegible] | 0 | 0 | 0 | [illegible] | 0 | 0 | [illegible] | 0 | 0 | [illegible] | [illegible] | [illegible] | [illegible] | 0 | 0 | 0 | [illegible] | 0 | [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 0 | 0 | [illegible] | 0 | 0 | 0 | [illegible] | [illegible] |
| NAN (NOS) | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | [illegible] | 0 | 0 | 0 | [illegible] | [illegible] | [illegible] | 0 | 0 | 0 | [illegible] | 0 | [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 0 | 0 | [illegible] | 0 | 0 | 0 | [illegible] | [illegible] |
| DOUBLE ROTI (NOS) | 0 | [illegible] | 0 | 0 | 0 | 0 | [illegible] | [illegible] | 0 | 0 | 0 | [illegible] | 0 | 100 | 71 | 29 | 0 | [illegible] | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 87 | 13 | 0 | 0 | 0 | [illegible] | [illegible] |

[illegible] 1 KG  2-KG  [illegible] KG  [illegible]5 KG  [illegible]10 KG  [illegible]20 KG  [illegible] TOTAL

## TABLE 6.31

CLASSIFICATION OF HOUSEHOLD WHO WOULD LIKE TO PURCHASE IN PACKETED FORM
BY SIZE OF PACKAGE IN DIFFERENT INCOME GROUPS
( R U R A L )

Percentages (Pakistan)

| | INCOME GROUP 1 | | | | | | | INCOME GROUP 2 | | | | | | | INCOME GROUP 3 | | | | | | | INCOME GROUP 4 | | | | | | | ALL INCOME GROUPS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ATTA WHEAT FLOUR | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 30 | 70 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 0 | 0 | 0 | 20 | [illegible] | [illegible] |
| [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 0 |
| [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 100 | 0 | 0 | 0 | 0 | 100 |
| RICE BASMATI WHOLE | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 17 | 17 | 33 | 33 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 22 | 33 | 22 | 22 | 0 | 0 | 100 |
| RICE BASMATI BROKEN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RICE ORDINARY WHOLE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 100 |
| RICE ORDINARY BROKEN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| GRAM WHOLE | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 75 | 25 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | [illegible] | 33 | 0 | 0 | 0 | 0 | 100 |
| GRAM DAL | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | [illegible] | [illegible] | 0 | 0 | 0 | 0 | 100 |
| [illegible] GRAM WHOLE | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 25 | 75 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 50 | 0 | 0 | 0 | 0 | 100 |
| [illegible] WHOLE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 50 | 0 | 0 | 0 | 0 | 100 |
| [illegible] DAL UNWASHED | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| [illegible] DAL WASHED | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 71 | 29 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 25 | 0 | 0 | 0 | 0 | 100 |
| MASH WHOLE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 33 | 67 | 0 | 0 | 0 | 0 | 100 |
| MASH DAL WASHED | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | [illegible] | 0 | 0 | 0 | 0 | 100 |
| MASH DAL UNWASHED | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MASOOR WHOLE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 25 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | [illegible] | [illegible] | 0 | 0 | 0 | 0 | 100 |
| MASOOR DAL | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 83 | 17 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | [illegible] | 0 | 0 | 0 | 0 | 100 |
| BAJRA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [illegible] | 100 | 0 | 0 | 0 | 0 | 100 |
| [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| [illegible] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1=.5 KG  2=1 KG  3=2 KG  4=5 KG  5=10 KG  6=20 KG  7=TOTAL

TABLE 6.32

CLASSIFICATION OF HOUSEHOLD WHO WHOULD LIKE TO PURCHASE IN DIFFERENT INCOME GROUPS IN PACKTTED FORM BY SIZE OF PACKAGE

(TOTAL)

| | INCOME GROUP 1 | | | | | | | INCOME GROUP 2 | | | | | | | INCOME GROUP 3 | | | | | | | INCOME GROUP 4 | | | | | | | ALL INCOME GROUP | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Commodities | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Atta(Wheat Flour) | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 30 | 70 | 100 | 0 | 0 | 0 | 0 | 10 | 90 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 78 | 100 |
| Maida (Baked Prod.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Suji | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 88 | 0 | 0 | 0 | 0 | 100 |
| Rice Basmati Whole | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 18 | 35 | 24 | 12 | 12 | 0 | 100 | 8 | 77 | 0 | 12 | 4 | 0 | 100 | 0 | 76 | 9 | 12 | 3 | 0 | 100 | 7 | 68 | 7 | 13 | 5 | 0 | 100 |
| Rice Basmati Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 0 | 33 | 0 | 0 | 0 |
| Rice Ordinary Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 17 | 0 | 67 | 0 | 0 | 100 | 25 | 0 | 0 | 50 | 25 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 22 | 0 | 44 | 12 | 0 | 100 |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Gram Whole | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 60 | 40 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 4 | 0 | 0 | 0 | 100 | 26 | 72 | 2 | 0 | 0 | 0 | 100 |
| Gram Dal | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 16 | 84 | 0 | 0 | 0 | 0 | 100 | 6 | 91 | 3 | 0 | 0 | 0 | 100 | 18 | 81 | 2 | 0 | 0 | 0 | 100 |
| Kabli Gram Whole | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 33 | 67 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 79 | 2 | 0 | 0 | 0 | 100 |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 55 | 0 | 0 | 0 | 0 | 100 |
| Mung Dal Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 71 | 0 | 0 | 0 | 0 | 0 | 25 | 75 | 0 | 0 | 0 | 0 | 0 | 27 | 73 | 0 | 0 | 0 | 0 | 0 |
| Mung Dal Washed | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 62 | 38 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 70 | 1 | 0 | 0 | 0 | 100 |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 40 | 60 | 0 | 0 | 0 | 0 | 100 |
| Mash Dal Washed | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 53 | 47 | 0 | 0 | 0 | 0 | 100 | 30 | 70 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 72 | 1 | 0 | 0 | 0 | 100 |
| Mash Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 78 | 0 | 0 | 0 | 0 | 0 | 25 | 75 | 0 | 0 | 0 | 0 | 0 | 23 | 77 | 0 | 0 | 0 | 0 | 0 |
| Masoor Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 25 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 75 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 |
| Masoor Dal Washed | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 65 | 35 | 0 | 0 | 0 | 0 | 100 | 21 | 79 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 75 | 2 | 0 | 0 | 0 | 100 |
| Bason | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 56 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 72 | 0 | 0 | 0 | 0 | 100 |
| Dalya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Double Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1=5K.G 2=1 K.G 3=2 K.G 4=5 K.G 5=10 K.G 6=20 K.G 7 TOTAL

TABLE 6.33

CLASSIFICATION OF PERCENTAGES OF HOUSEHOLD WHO WHOULD LIKE TO PURCHASE THE COIMMODITIES IN PACKTTED FORM BY SIZE

(URBAN)

| Commodities | ILLETRATE | | | | | | | MATRIC | | | | | | | ABOVE MATRIC | | | | | | | TOTAL | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Atta(Wheat Flour) | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 92 | 0 | 0 | 30 | 70 | 100 | 0 | 0 | 0 | 0 | 10 | 90 | 100 | 0 | 0 | 0 | 0 | 24 | 76 | 100 |
| Maida (Baked Prod.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Suji | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 20 | 80 | 0 | 0 | 0 | 0 | 100 | 20 | 80 | 0 | 0 | 0 | 0 | 100 | 13 | 87 | 0 | 0 | 0 | 0 | 100 |
| Rice Basmati Whole | 13 | 63 | 0 | 0 | 25 | 0 | 100 | 0 | 83 | 0 | 17 | 0 | 0 | 100 | 6 | 68 | 9 | 12 | 6 | 0 | 100 | 6 | 73 | 4 | 12 | 6 | 0 | 100 |
| Rice Basmati Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 40 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 67 | 0 | 33 | 0 | 0 | 100 |
| Rice Ordinary Whole | 33 | 33 | 0 | 33 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 33 | 0 | 0 | 33 | 0 | 100 | 33 | 33 | 0 | 17 | 17 | 0 | 100 |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gram Whole | 40 | 60 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 20 | 75 | 5 | 0 | 0 | 0 | 100 | 20 | 78 | 2 | 0 | 0 | 0 | 100 |
| Gram Dal | 40 | 60 | 0 | 0 | 0 | 0 | 100 | 3 | 97 | 0 | 0 | 0 | 0 | 100 | 19 | 78 | 3 | 0 | 0 | 0 | 100 | 15 | 84 | 1 | 0 | 0 | 0 | 100 |
| Kabli Gram Whole | 33 | 67 | 0 | 0 | 0 | 0 | 100 | 6 | 94 | 0 | 0 | 0 | 0 | 100 | 19 | 78 | 4 | 0 | 0 | 0 | 100 | 15 | 83 | 2 | 0 | 0 | 0 | 100 |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 57 | 43 | 0 | 0 | 0 | 0 | 100 | 44 | 56 | 0 | 0 | 0 | 0 | 100 |
| Mung Dal Unwashed | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 27 | 73 | 0 | 0 | 0 | 0 | 100 |
| Mung Dal Washed | 33 | 67 | 0 | 0 | 0 | 0 | 100 | 11 | 89 | 0 | 0 | 0 | 0 | 100 | 25 | 71 | 4 | 0 | 0 | 0 | 100 | 21 | 77 | 2 | 0 | 0 | 0 | 100 |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 |
| Mash Dal Washed | 43 | 57 | 0 | 0 | 0 | 0 | 100 | 14 | 86 | 0 | 0 | 0 | 0 | 100 | 27 | 70 | 3 | 0 | 0 | 0 | 100 | 23 | 75 | 2 | 0 | 0 | 0 | 100 |
| Mash Unwashed | 33 | 67 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 33 | 67 | 0 | 0 | 0 | 0 | 100 | 23 | 77 | 0 | 0 | 0 | 0 | 100 |
| Masoor Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 40 | 60 | 0 | 0 | 0 | 0 | 100 |
| Masoor Dal | 36 | 64 | 0 | 0 | 0 | 0 | 100 | 4 | 96 | 0 | 0 | 0 | 0 | 100 | 21 | 76 | 3 | 0 | 0 | 0 | 100 | 18 | 80 | 1 | 0 | 0 | 0 | 100 |
| Besan | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 14 | 86 | 0 | 0 | 0 | 0 | 100 | 25 | 74 | 0 | 0 | 0 | 0 | 100 | 28 | 72 | 0 | 0 | 0 | 0 | 100 |
| Dalya | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Double Roti (Nos) | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 80 | 20 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 87 | 13 | 0 | 0 | 0 | 0 | 100 |

1=5K G 2=1 K G 3=2 K G 4=5 K G 5=10 K G 6=20 K G 7 TOTAL

TABLE 6.34

CLASSIFICATION OF PERCENTAGES OF HOUSEHOLD WHO WHOULD LIKE TO PURCHASE THE COMMODITIES IN PACKTTED FORM BY SIZE

(RURAL)

| Commodities | ILLETRATE | | | | | | | MATRIC | | | | | | | ABOVE MATRIC | | | | | | | TOTAL | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Atta(Wheat Flour) | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 20 | 80 | 100 |
| Maida (Baked Prod.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Suji | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Rice Basmati Whole | 40 | 0 | 40 | 20 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 50 | 0 | 50 | 0 | 0 | 100 | 27 | 33 | 22 | 23 | 0 | 0 | 100 |
| Rice Basmati Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rice Ordinary Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Gram Whole | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 67 | 33 | 0 | 0 | 0 | 0 | 100 |
| Gram Dal | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 20 | 80 | 0 | 0 | 0 | 0 | 100 | 40 | 60 | 0 | 0 | 0 | 0 | 100 |
| Kabli Gram Whole | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 75 | 0 | 0 | 0 | 0 | 100 | 40 | 60 | 0 | 0 | 0 | 0 | 100 |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 |
| Mung Dal Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mung Dal Washed | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 67 | 0 | 0 | 0 | 0 | 100 | 75 | 25 | 0 | 0 | 0 | 0 | 100 |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 33 | 67 | 0 | 0 | 0 | 0 | 100 |
| Mash Dal Washed | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 20 | 80 | 0 | 0 | 0 | 0 | 100 | 44 | 56 | 0 | 0 | 0 | 0 | 100 |
| Mash Unwashed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Masoor Whole | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 60 | 40 | 0 | 0 | 0 | 0 | 100 |
| Mascor Dal Washed | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 67 | 0 | 0 | 0 | 0 | 100 | 75 | 25 | 0 | 0 | 0 | 0 | 100 |
| Bason | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Dalya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Double Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1=[illegible] 2=1 K.G 3=2 K.G 4=5 K.G 5=10 K.G 6=20 K.G & 7 TOTAL

TABLE 6.35

CLASSIFICATION OF PERCENTAGES OF HOUSEHOLD WHO WHOULD LIKE TO PURCHASE
THE COMMODITIES IN PACKTTED FORM BY SIZE
(TOTAL)

| Commodities | ILLETRATE | | | | | | | MATRIC | | | | | | | ABOVE MATRIC | | | | | | | TOTAL | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Atta (Wheat Flour) | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | 7 | 93 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 100 | 0 | 0 | 0 | 0 | 22 | 78 | 100 |
| Maida (Baked Prod.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| Suji | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 17 | 83 | 0 | 0 | 0 | 0 | 100 | 20 | 80 | 0 | 0 | 0 | 0 | 100 | 12 | 88 | 0 | 0 | 0 | 0 | 100 |
| Rice Basmati Whole | 28 | 28 | 22 | 11 | 11 | 0 | 100 | 0 | 84 | 0 | 16 | 0 | 0 | 100 | 6 | 67 | 8 | 14 | 6 | 0 | 100 | 7 | 68 | 7 | 13 | 5 | 0 | 100 |
| Rice Basmati Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 40 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 67 | 0 | 33 | 0 | 0 | 100 |
| Rice Ordinary Whole | 33 | 33 | 0 | 33 | 0 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 100 | 14 | 14 | 0 | 57 | 14 | 0 | 100 | 22 | 22 | 0 | 44 | 12 | 0 | 100 |
| Rice Ordinary Broken | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Gram Whole | 63 | 38 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 25 | 71 | 4 | 0 | 0 | 0 | 100 | 26 | 72 | 2 | 0 | 0 | 0 | 100 |
| Gram Dal | 63 | 38 | 0 | 0 | 0 | 0 | 100 | 3 | 97 | 0 | 0 | 0 | 0 | 100 | 21 | 77 | 3 | 0 | 0 | 0 | 100 | 18 | 81 | 1 | 0 | 0 | 0 | 100 |
| Kabli Gram Whole | 60 | 40 | 0 | 0 | 0 | 0 | 100 | 6 | 94 | 0 | 0 | 0 | 0 | 100 | 21 | 76 | 3 | 0 | 0 | 0 | 100 | 17 | 81 | 2 | 0 | 0 | 0 | 100 |
| Mung Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 20 | 80 | 0 | 0 | 0 | 0 | 100 | 45 | 55 | 0 | 0 | 0 | 0 | 100 |
| Mung Dal Unwashed | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 27 | 73 | 0 | 0 | 0 | 0 | 100 |
| Mung Dal Washed | 68 | 32 | 0 | 0 | 0 | 0 | 100 | 11 | 89 | 0 | 0 | 0 | 0 | 100 | 27 | 70 | 3 | 0 | 0 | 0 | 100 | 28 | 70 | 1 | 0 | 0 | 0 | 100 |
| Mash Whole | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 40 | 60 | 0 | 0 | 0 | 0 | 100 |
| Mash Dal Washed | 69 | 31 | 0 | 0 | 0 | 0 | 100 | 13 | 87 | 0 | 0 | 0 | 0 | 100 | 27 | 70 | 3 | 0 | 0 | 0 | 100 | 26 | 72 | 1 | 0 | 0 | 0 | 100 |
| Mash Unwashed | 33 | 67 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 33 | 67 | 0 | 0 | 0 | 0 | 100 | 23 | 77 | 0 | 0 | 0 | 0 | 100 |
| Masoor Whole | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 50 | 50 | 0 | 0 | 0 | 0 | 100 |
| Masoor Dal Washed | 67 | 33 | 0 | 0 | 0 | 0 | 100 | 4 | 96 | 0 | 0 | 0 | 0 | 100 | 24 | 74 | 3 | 0 | 0 | 0 | 100 | 23 | 75 | 2 | 0 | 0 | 0 | 100 |
| Sagoo | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 14 | 86 | 0 | 0 | 0 | 0 | 100 | 25 | 75 | 0 | 0 | 0 | 0 | 100 | 28 | 72 | 0 | 0 | 0 | 0 | 100 |
| Dalia | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 100 |
| Chapati (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanduri Roti (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nan (Nos) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Double Roti (Nos) | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 80 | 20 | 0 | 0 | 0 | 0 | 100 | [illegible] | 0 | 0 | 0 | 0 | 0 | 100 | [illegible] | 13 | 0 | 0 | 0 | 0 | 100 |

1=5K.G 2=1 K.G 3=2 K.G 4=5 K.G 5=10 K.G 6=20 K.G & 7 TOTAL

# TABLE 6.36

CLASSIFICATION OF HOUSE HOLD WHO WOULD LIKE TO PURCHASE FOOD ITEMS IN DESIRED PACKETTED FORM BY EXTENT OF HIGHER PRICE THEY ARE PREPARE TO PAY FOR DIFFERENT INCOME GROUPS

| | URBAN | | | | | | | | | | RURAL | | | | | | | | | | TOTAL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | Total | | 1 | | 2 | | 3 | | 4 | | Total | | 1 | | 2 | | 3 | | 4 | | Total | |
| | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 |
| A) Atta (Wheat Flour) | - | 100 | 75 | 25 | 57 | 43 | 40 | 60 | 55 | 45 | 100 | - | - | - | - | - | - | - | 100 | - | 67 | 33 | 75 | 25 | 57 | 43 | 40 | 60 | 56 | 44 |
| Maida (Baked Products) | - | - | - | - | - | 100 | - | - | - | 100 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 | - | - | - | 100 |
| Suji | - | 100 | 67 | 33 | 29 | 31 | - | 100 | 33 | 67 | - | - | - | - | - | - | - | - | - | - | - | 100 | 67 | 33 | 29 | 71 | - | 100 | 33 | 67 |
| Rice Basmati Whole | - | - | 71 | 29 | 53 | 47 | 42 | 58 | 51 | 49 | 100 | - | 100 | - | - | - | - | - | 100 | - | 67 | 33 | 82 | 18 | 53 | 47 | 42 | 58 | 55 | 45 |
| Rice Basmati Broken | - | - | 100 | - | 67 | 33 | - | - | 75 | 25 | - | - | - | - | - | - | - | - | - | - | - | - | 100 | - | 67 | 33 | - | - | 75 | 25 |
| Rice Ordinary Whole | - | | 100 | - | 100 | - | - | - | 100 | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 | - | 100 | - | - | - | 100 | - |
| Rice Ordinary Broken | - | - | - | - | 67 | 33 | - | - | 67 | 33 | - | - | 100 | - | - | - | - | - | 100 | - | - | - | 87 | 13 | - | - | - | - | 87 | 13 |
| Gram Whole | - | 100 | 80 | 20 | 71 | 29 | 60 | 40 | 55 | 45 | 100 | - | 100 | - | - | - | - | - | 100 | - | 67 | 33 | 86 | 14 | 71 | 29 | 60 | 40 | 70 | 30 |
| Gram dal | - | 100 | 75 | 25 | 53 | 47 | 44 | 56 | 46 | 54 | 100 | - | 100 | - | - | - | - | - | 100 | - | 67 | 33 | 83 | 17 | 53 | 47 | 44 | 56 | 58 | 42 |
| Kabali Gram Whole | - | 100 | 75 | 25 | 33 | 67 | 50 | 50 | 75 | 25 | 100 | - | 100 | - | - | - | - | - | 100 | - | 67 | 33 | 83 | 17 | 33 | 67 | 50 | 50 | 80 | 20 |
| Mung Whole | - | - | - | - | 100 | - | 50 | 50 | 60 | 40 | - | - | 100 | - | - | - | - | - | 100 | - | - | - | 100 | 17 | 100 | - | 50 | 50 | 80 | 20 |
| Mung Dal Unwashed | - | - | - | - | 75 | 25 | - | 100 | 56 | 44 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 75 | 25 | - | 100 | 56 | 44 |
| Mung Dal Washed | - | 100 | 100 | - | 58 | 42 | 38 | 62 | 57 | 43 | 100 | - | 100 | - | - | - | - | - | 100 | - | 67 | 33 | 100 | - | 58 | 42 | 38 | 62 | 61 | 39 |
| Mash Whole | - | - | 100 | - | 100 | - | - | - | 100 | - | - | - | 100 | - | - | - | - | - | 100 | - | - | - | 100 | - | 100 | - | - | - | 100 | - |
| Mash Dal washed | - | 100 | 75 | 25 | 58 | 42 | 43 | 57 | 50 | 50 | 100 | - | 100 | - | - | - | - | - | 100 | - | 67 | 33 | 83 | 17 | 58 | 42 | 43 | 57 | 50 | 50 |
| Mash Dal Unwashed | - | - | - | - | 67 | 33 | - | 100 | 25 | 75 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 67 | 33 | - | 100 | 25 | 75 |
| Masoor Whole | - | - | - | - | 50 | 50 | - | 100 | 43 | 57 | - | - | 100 | - | - | - | - | - | 100 | - | - | - | 100 | - | 50 | 50 | - | 100 | 62 | 38 |
| Masoor Dal Washed | - | 100 | 88 | 12 | 53 | 47 | 45 | 55 | 59 | 41 | 100 | - | 100 | - | - | - | - | - | 100 | - | 67 | 33 | 93 | 7 | 53 | 47 | 55 | 45 | 59 | 41 |
| Bason | - | - | 80 | 20 | 55 | 45 | 50 | 50 | 43 | 57 | - | - | - | - | - | - | - | - | - | - | - | - | 80 | 20 | 55 | 45 | 50 | 50 | 43 | 57 |
| Dalya | - | - | - | - | 50 | 50 | - | 100 | 43 | 57 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 50 | 50 | - | 100 | 43 | 57 |
| Chapati (Nos.) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Tanduri Roti (Nos.) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Nan (Nos.) | - | - | - | - | 50 | 50 | 100 | - | 75 | 25 | - | - | - | - | - | - | - | - | - | - | - | - | 100 | - | 50 | 50 | 100 | - | 75 | 25 |
| Double Roti (Nos.) | - | - | 50 | 50 | 38 | 62 | 50 | 50 | 44 | 56 | 100 | - | - | - | - | - | - | - | 100 | - | 100 | - | 50 | 50 | 38 | 62 | 50 | 50 | 47 | 53 |

TABLE 6.37

CLASSIFICATION OF HOUSEHOLDS WHO WOLD LIKE TO PURCHASE FOOD ITEMS IN DESIRED PACKETTED FORM BY EXTENT OF HIGHER PRICES THEY ARE PREPARE TO PAY BY DIFFERENT EDUCATION GROUPS

(PAKISTAN)

(Percentage)

| | URBAN | | | | | | | | RURAL | | | | | | | | TOTAL | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | Total | | 1 | | 2 | | 3 | | Total | | 1 | | 2 | | 3 | | Total | |
| | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 | 0 | 1-5 |
| Atta (Wheat Flour) | 57 | 43 | 64 | 36 | 42 | 58 | 55 | 45 | 100 | - | - | - | - | - | 100 | - | 67 | 33 | 64 | 36 | 42 | 58 | 56 | 44 |
| Maida (Baked Product) | - | - | - | - | - | 100 | - | 100 | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 | - | 100 |
| Suji | 67 | 33 | 33 | 67 | - | 100 | 33 | 67 | - | - | - | - | - | - | - | - | 67 | 33 | 33 | 67 | - | 100 | 33 | 67 |
| Rice Basmati Whole | 50 | 50 | 53 | 47 | 50 | 50 | 51 | 49 | 100 | - | - | - | - | - | 100 | - | 75 | 25 | 53 | 47 | 50 | 50 | 55 | 45 |
| Rice Basmati Broken | - | - | 100 | - | - | 100 | 75 | 25 | - | - | - | - | - | - | - | - | - | - | 100 | - | - | 100 | 75 | 25 |
| Rice Ordinary Whole | 100 | - | - | - | 100 | - | 100 | - | - | - | - | - | - | - | - | - | 100 | - | - | - | 100 | - | 100 | - |
| Rice Ordinary Broken | - | - | 67 | 33 | - | - | 67 | 33 | - | - | - | - | 100 | - | 100 | - | - | - | 67 | 33 | 100 | - | 80 | 20 |
| Gram Whole | 51 | 43 | 60 | 40 | 83 | 17 | 60 | 40 | 100 | - | - | - | | - | 100 | - | 73 | 27 | 60 | 40 | 83 | 17 | 70 | 30 |
| Gram Dal | 50 | 50 | 59 | 41 | 50 | 50 | 46 | 54 | 100 | - | - | - | 100 | - | 100 | - | 70 | 30 | 59 | 41 | 58 | 42 | 58 | 42 |
| Kabali Gram Whole | - | 100 | 55 | 45 | 45 | 55 | 25 | 75 | 100 | - | - | - | 100 | - | 100 | - | 50 | 50 | 55 | 45 | 54 | 46 | 80 | 20 |
| Mung Whole | - | - | 100 | - | 67 | 33 | 80 | 20 | - | - | - | - | 100 | - | 100 | - | - | - | 100 | - | 80 | 20 | 80 | 20 |
| Mung Dal Unwashed | - | 100 | 100 | - | 33 | 67 | 56 | 46 | - | - | - | - | | - | | - | - | 100 | 100 | - | 33 | 67 | 56 | 44 |
| Mung Dal Washed | 80 | 20 | 44 | 56 | 55 | 45 | 57 | 43 | 100 | - | - | - | 100 | - | 100 | - | 91 | 9 | 44 | 56 | 62 | 38 | 61 | 39 |
| Mash Whole | - | - | 100 | - | 100 | - | 100 | - | - | - | - | - | 100 | - | 100 | - | - | - | 100 | - | 100 | - | 100 | - |
| Mash Dal Washed | 67 | 33 | 58 | 42 | 50 | 50 | 60 | 40 | 100 | - | - | - | 100 | - | 100 | - | 80 | 20 | 58 | 42 | 58 | 42 | 50 | 50 |
| Mash Dal Unwashed | - | 100 | 100 | - | 50 | 50 | 25 | 75 | - | - | - | - | - | - | - | - | - | 100 | 100 | - | 50 | 50 | 25 | 75 |
| Masoor Whole | - | - | - | 100 | 33 | 67 | 57 | 43 | 100 | - | - | - | 100 | - | 100 | - | 100 | - | - | 100 | 60 | 40 | 62 | 38 |
| Masoor Dal Washed | 57 | 43 | 60 | 40 | 54 | 46 | 59 | 41 | 100 | - | - | - | 100 | - | 100 | - | 77 | 23 | 60 | 40 | 60 | 40 | 59 | 41 |
| Bason | 67 | 33 | 56 | 44 | 57 | 43 | 43 | 57 | - | - | - | - | - | - | - | - | 67 | 33 | 56 | 44 | 57 | 43 | 43 | 57 |
| Dalya | 100 | - | 50 | 50 | - | 100 | 43 | 57 | - | - | - | - | - | - | - | - | 100 | - | 50 | 50 | - | 100 | 43 | 57 |
| Chapati | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Tanduri Roti (No.) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Nan (Nos.) | - | 100 | 100 | - | 100 | - | 75 | 25 | - | - | - | - | - | - | - | - | - | 100 | 100 | - | 100 | - | 75 | 25 |
| Double Roti (No.) | 33 | 57 | 43 | 57 | 100 | - | 44 | 56 | 100 | - | - | - | - | - | 100 | - | 60 | 40 | 43 | 57 | 100 | - | 47 | 53 |

1=ILLETRATE 2= UP TO MATRIC 3=MATRIC AND ABOVE

## TABLE 6.38

PERCENTAGE CLASSIFICATION OF SAMPLE SHOWING AWARENESS OF IMPROVED PRODUCTS BY INCOME GROUPS (PAKISTAN)

(PERCENTAGE)

| | Urban | | | | | Rural | | | | | Total | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Income Group | | | | | Income Group | | | | | Income Group | | | | |
| | 1 | 2 | 3 | 4 | Total | 1 | 2 | 3 | 4 | Total | 1 | 2 | 3 | 4 | Total |
| Enrich Flour | - | - | 0.96 | 0.81 | 0.59 | - | - | 0.63 | 0.75 | 0.40 | - | - | 0.82 | 0.77 | 0.53 |
| Brown Flour | 17.22 | 82.67 | 78.37 | 91.09 | 84.58 | [illegible] | [illegible] | 70.89 | 67.52 | 64.07 | [illegible] | 76.83 | 75.14 | 83.52 | 78.42 |
| Pakora Mix | 11.92 | 60.89 | 62.50 | 80.16 | 68.17 | 5.63 | 36.55 | 48.10 | 52.14 | 38.33 | [illegible] | 46.54 | 56.28 | 71.15 | 53.05 |
| Kheer | 11.92 | 62.87 | 65.38 | 80.97 | 69.91 | 6.34 | 36.21 | 50.63 | 54.70 | 39.32 | [illegible] | 47.15 | 59.02 | 72.53 | 54.41 |
| Gunda Howa Atta | - | 0.50 | 3.37 | 1.21 | 1.60 | - | - | 1.90 | 0.85 | 0.99 | - | 0.41 | 2.73 | 1.10 | 1.43 |
| Samosa | 0.66 | 11.88 | 16.83 | 36.83 | 21.66 | 1.41 | 3.45 | 5.06 | 14.53 | 5.66 | [illegible] | 6.91 | 11.75 | 29.12 | 13.55 |
| Paparr | 3.97 | 21.78 | 25.96 | 37.25 | 28.49 | 3.52 | 4.83 | 13.92 | 18.80 | 8.91 | [illegible] | 11.79 | 20.77 | 31.32 | 18.57 |
| Canned Rice | - | 0.99 | 1.92 | 4.86 | 2.62 | - | - | 0.63 | 2.56 | 0.71 | - | 0.61 | 1.37 | 4.12 | 1.65 |

INCOME GROUPS :

1 = upto 1000
2 = 1001 = 2000
3 = 2001 - 3500
4 = 3501 and above

TABLE 6.39

PERCENTAGE CLASSIFICATION OF SAMPLE SHOWING AWARENESS OF IMPROVED PRODUCTS BY EDUCATION GROUPS

(Pakistan) (% age)

| Province | Urban | | | | Rural | | | | Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | Total | 1 | 2 | 3 | Total | 1 | 2 | 3 | Total |
| Enrich Flour | - | 0.75 | 0.89 | 0.59 | - | 0.50 | 0.61 | 0.40 | - | 0.62 | 0.77 | 0.53 |
| Brown Flour | 86.39 | 80.75 | 97.56 | 84.58 | 62.50 | 66.36 | 87.64 | 64.07 | 76.99 | 74.27 | 87.58 | 78.42 |
| Pakora Mix | 49.74 | 67.92 | 84.89 | 68.17 | 29.00 | 42.40 | 70.79 | 38.33 | 29.89 | 46.02 | 52.70 | 53.05 |
| Kheer Mix | 50.79 | 70.94 | [illegible] | 69.91 | 30.25 | 42.86 | 71.90 | 39.32 | 36.89 | 58.30 | 81.85 | 54.41 |
| Gonda Hawa Atta | 1.57 | 1.13 | 2.22 | 1.60 | - | 0.45 | 1.00 | 0.99 | 0.99 | 0.68 | 1.92 | 1.43 |
| Smosa | 7.85 | 17.74 | 38.22 | 21.66 | 4.25 | 5.53 | 12.36 | 5.66 | 5.41 | 12.24 | 30.89 | 13.55 |
| Paparr | 18.32 | 28.68 | 37.33 | 28.49 | 7.00 | 6.91 | 22.47 | 8.91 | 10.66 | 18.88 | 33.12 | 18.57 |
| Canned Rice | 1.05 | 2.26 | 4.44 | 2.62 | - | - | 3.37 | 0.71 | 0.51 | 1.45 | 4.14 | 1.65 |

1- Illetrate
2- Up to Matric
3- Above Matric

## TABLE 6.40

PERCENTAGE OF HOUSEHOLDS WHO WOULD LIKE TO PURCHASE THE IMPROVED PRODUCTS CLASSIFIED BY INCOME GROUPS (PERCENTAGE)

(PAKISTAN)

| | Urban | | | | | Rural | | | | | Total | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Income Group | | | | | Income Group | | | | | Income Group | | | | |
| | 1 | 2 | 3 | 4 | Total | 1 | 2 | 3 | 4 | Total | 1 | 2 | 3 | 4 | Total |
| Enrich Flour | 32.26 | 64.36 | 64.90 | 66.80 | 64.83 | 10.28 | 39.66 | 49.37 | 44.44 | 44.84 | 22.54 | 55.69 | 58.20 | 59.62 | 54.70 |
| Brown Flour | 22.58 | 52.48 | 50.96 | 55.47 | 53.05 | 11.69 | 40.69 | 45.57 | 38.46 | 43.71 | 17.92 | 51.42 | 48.63 | 50.00 | 48.32 |
| Pakora Mix | 12.26 | 26.73 | 32.69 | 44.53 | 35.17 | 11.13 | 36.55 | 34.81 | 43.72 | 35.08 | 11.56 | 32.52 | 33.61 | 45.88 | 35.13 |
| Kheer Mix | 12.26 | 27.23 | 34.62 | 46.15 | 36.48 | 10.42 | 35.52 | 36.08 | 43.72 | 34.79 | 10.93 | 32.11 | 35.25 | 46.98 | 35.61 |
| Gonda Howa Atta | - | 5.45 | 11.06 | 12.96 | 9.74 | - | 2.76 | 5.70 | 4.27 | 3.39 | - | 3.86 | 8.74 | 10.16 | 6.52 |
| Samaso | 2.45 | 4.95 | 17.58 | 11.34 | 9.01 | 1.41 | 1.38 | 5.06 | 3.55 | 3.39 | 2.31 | 2.85 | 8.20 | 10.44 | 6.16 |
| Paparr | 2.90 | 7.43 | 13.94 | 10.93 | 10.90 | 1.41 | 2.76 | 8.06 | 3.55 | 6.65 | 2.31 | 4.67 | 11.75 | 10.16 | 8.75 |
| Canned Rice | - | - | 4.65 | 4.17 | 2.16 | - | 0.34 | 2.53 | 3.42 | 1.27 | - | 0.20 | 3.28 | 3.85 | 1.58 |

INCOME GROUPS :

1 = upto 1000
2 = 1001 - 2000
3 = 2001 - 3500
4 = 3501 and above.

TABLE 6.41

PERCENTAGE OF HOUSEHOLDS WHO WOULD LIKE TO PURCHASE THE IMPROVED PRODUCTS BY EDUCATION GROUPS

(Pakistan) (x)

| Province | Urban | | | | Rural | | | | Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | Total | 1 | 2 | 3 | Total | 1 | 2 | 3 | Total |
| Enrich Flour | 63.35 | 67.17 | 64.00 | 64.83 | 39.50 | 56.22 | 40.45 | 44.84 | 47.21 | 62.24 | 57.32 | 54.7[illegible] |
| Brown Flour | 48.69 | 50.19 | 60.44 | 53.05 | 35.00 | 57.60 | 48.31 | 43.71 | 39.42 | 53.53 | 57.01 | 48.32 |
| Pakeza Mix | 19.37 | 33.96 | 49.78 | 35.17 | 29.50 | 40.09 | 47.19 | 35.08 | 26.23 | 36.72 | 49.04 | 35.13 |
| Kneer Mix | 19.90 | 35.47 | 51.56 | 36.48 | 29.50 | 40.55 | 43.82 | 34.79 | 26.40 | 37.76 | 49.36 | 35.63 |
| Genda Howa Atta | 5.76 | 9.06 | 13.78 | 9.74 | 3.50 | 2.76 | 4.49 | 3.39 | 4.23 | 6.22 | 11.15 | 6.52 |
| Smosa | 5.24 | 10.19 | 10.22 | 9.01 | 4.00 | 2.76 | 2.25 | 3.39 | 4.40 | 6.85 | 7.96 | 6.16 |
| Papar | 6.81 | 13.21 | 11.11 | 10.90 | 6.75 | 5.99 | 7.87 | 6.65 | 6.77 | 9.96 | 10.19 | 8.75 |
| Canned Rice | - | 4.06 | 4.44 | 2.16 | - | 0.46 | 2.25 | 1.27 | - | 3.19 | 3.55 | 1.58 |

1- Illetrate
2- Up to Matric

TABLE 6.42

CLASSIFICATION OF HOUSEHOLD BY HIGHER PRICES THEY ARE WILLING TO PAY FOR IMPROVED FOR DIFFERENT INCOME GROUPS

( P A K I S T A N )

(Percentage)

| COMMODITIES | Urban | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | | 2 | | | 3 | | | 4 | | | Total | | |
| | 0 | 1-5 | 6-10 | 0 | 1-5 | 6-10 | 0 | 1-5 | 6-10 | 0 | 1-5 | 6-10 | 0 | 1-5 | 6-10 |
| Enrich Floor | 31 | 69 | - | 36 | 60 | 4 | 31 | 68 | 1 | 16 | 82 | 2 | 27 | 71 | 2 |
| Brown Floor | 63 | 37 | - | 86 | 14 | - | 55 | 45 | - | 47 | 53 | - | 61 | 39 | - |
| Pakora Mix | 40 | 60 | - | 70 | 30 | - | 66 | 34 | - | 56 | 44 | - | 62 | 38 | - |
| Kheer Mix | 40 | 60 | - | 17 | 33 | - | 64 | 36 | - | 55 | 45 | - | 60 | 40 | - |
| Gonda Howa Atta | - | 100 | - | 27 | 73 | - | 39 | 61 | - | 25 | 75 | - | 30 | 70 | - |
| Samosa | - | 100 | - | 70 | 30 | - | 68 | 32 | - | 61 | 39 | - | 63 | 37 | - |
| Paparr | 25 | 75 | - | 53 | 47 | - | 66 | 34 | - | 52 | 48 | - | 56 | 44 | - |
| Canned Rice | - | 100 | - | 56 | 44 | - | 50 | 50 | - | 31 | 69 | - | 40 | 60 | - |

| COMMODITIES | Rural | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | | 2 | | | 3 | | | 4 | | | Total | | |
| | 0 | 1-5 | 6-10 | 0 | 1-5 | 6-10 | 0 | 1-5 | 6-10 | 0 | 1-5 | 6-10 | 0 | 1-5 | 6-10 |
| Enrich Floor | 49 | 47 | 4 | 23 | 72 | 5 | 24 | 69 | 7 | 17 | 77 | 6 | 26 | 68 | 6 |
| Brown Floor | 71 | 29 | - | 64 | 36 | - | 68 | 31 | 1 | 31 | 69 | - | 61 | 39 | - |
| Pakora Mix | 63 | 37 | - | 52 | 48 | - | 58 | 40 | 2 | 40 | 60 | - | 52 | 48 | - |
| Kheer Mix | 59 | 31 | - | 50 | 50 | - | 61 | 37 | 2 | 47 | 53 | - | 54 | 46 | - |
| Gonda Howa Atta | 50 | 50 | - | 50 | 50 | - | 11 | 89 | - | - | 100 | - | 25 | 75 | - |
| Samosa | 50 | 50 | - | - | 100 | - | 63 | 37 | - | 50 | 50 | - | 63 | 37 | - |
| Paparr | 40 | 60 | - | 38 | 62 | - | 43 | 57 | - | 45 | 55 | - | 43 | 57 | - |
| Canned Rice | - | - | - | - | 100 | - | - | 100 | - | - | - | - | - | 100 | - |

| COMMODITIES | Total | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | | 2 | | | 3 | | | 4 | | | Total | | |
| | 0 | 1-5 | 6-10 | 0 | 1-5 | 6-10 | 0 | 1-5 | 6-10 | 0 | 1-5 | 6-10 | 0 | 1-5 | 6-10 |
| Enrich Floor | 49 | 46 | 5 | 28 | 65 | 7 | 26 | 69 | 5 | 16 | 81 | 3 | 25 | 71 | 4 |
| Brown Floor | [illegible] | 30 | - | 72 | 28 | - | 59 | 40 | 1 | 41 | 59 | - | 61 | 39 | - |
| Pakora Mix | 57 | 43 | - | 57 | 43 | - | 59 | 39 | 2 | 51 | 49 | - | 57 | 43 | - |
| Kheer Mix | 63 | 37 | - | 56 | 44 | - | 60 | 39 | 1 | 53 | 47 | - | 57 | 43 | - |
| Gonda Howa Atta | 33 | 67 | - | 43 | 57 | - | 28 | 72 | - | 19 | 81 | - | 29 | 71 | - |
| Samosa | 25 | 75 | - | 79 | 21 | - | 61 | 39 | - | 52 | 48 | - | 63 | 37 | - |
| Paparr | 31 | 69 | - | 41 | 59 | - | 51 | 49 | - | 42 | 58 | - | 51 | 49 | - |
| Canned Rice | - | 100 | - | 50 | 50 | - | 35 | 65 | - | 26 | 74 | - | [illegible] | [illegible] | - |

1=UP TO 1000 2=1001-2000 3=2001-3500 4=3501 & above

TABLE 6.43

CLASSIFICATION OF HOUSEHOLD BY HIGHER PRICES THEY ARE WILLING TO PAY
FOR IMPROVED FOR DIFFERENT EDUCATION GROUPS

(P A K I S T A N)

(Percentage)

**Urban**

| COMMODITIES | 1: 0 | 1: 1-5 | 1: 6-10 | 2: 0 | 2: 1-5 | 2: 6-10 | 3: 0 | 3: 1-5 | 3: 6-10 | Total: 0 | Total: 1-5 | Total: 6-10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Enrich Floor | 45 | 54 | 1 | 24 | 72 | 4 | 16 | 82 | - | 27 | 71 | 2 |
| Brown Flour | 78 | 22 | - | 61 | 39 | - | 50 | 50 | - | 61 | 39 | - |
| Powdered Milk | 68 | 32 | - | 57 | 43 | - | 64 | 36 | - | 62 | 38 | - |
| Fresh Milk | 66 | 34 | - | 57 | 43 | - | 60 | 40 | - | 60 | 40 | - |
| Gundha Howa Atta | 27 | 73 | - | 46 | 54 | - | 19 | 81 | - | 30 | 70 | - |
| Samosa | 60 | 40 | - | 63 | 37 | - | 65 | 35 | - | 63 | 37 | - |
| Papar | 54 | 46 | - | 49 | 51 | - | 68 | 32 | - | 55 | 44 | - |
| Canned Rice | 44 | 56 | - | 38 | 62 | - | 39 | 61 | - | 40 | 60 | - |

**Rural**

| COMMODITIES | 1: 0 | 1: 1-5 | 1: 6-10 | 2: 0 | 2: 1-5 | 2: 6-10 | 3: 0 | 3: 1-5 | 3: 6-10 | Total: 0 | Total: 1-5 | Total: 6-10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Enrich Floor | 37 | 60 | 3 | 19 | 74 | 7 | 0 | 89 | 11 | 26 | 68 | 6 |
| Brown Flour | 70 | 30 | - | 53 | 46 | 1 | 58 | 42 | - | 61 | 39 | - |
| Powdered Milk | 62 | 38 | - | 41 | 58 | 1 | 48 | 52 | - | 52 | 48 | - |
| Fresh Milk | 64 | 36 | - | 44 | 55 | 1 | 51 | 49 | - | 54 | 46 | - |
| Gundha Howa Atta | 21 | 79 | - | 50 | 50 | - | - | 100 | - | 25 | 75 | - |
| Samosa | 69 | 31 | - | 67 | 33 | - | - | 100 | - | 63 | 73 | - |
| Papar | 48 | 52 | - | 46 | 54 | - | 14 | 86 | - | 43 | 57 | - |
| Canned Rice | - | 100 | - | - | 100 | - | - | 100 | - | - | 100 | - |

**Total**

| COMMODITIES | 1: 0 | 1: 1-5 | 1: 6-10 | 2: 0 | 2: 1-5 | 2: 6-10 | 3: 0 | 3: 1-5 | 3: 6-10 | Total: 0 | Total: 1-5 | Total: 6-10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Enrich Floor | 40 | 56 | 4 | 21 | 72 | 7 | 12 | 84 | 4 | 26 | 70 | 4 |
| Brown Flour | 74 | 26 | - | 55 | 44 | 1 | 52 | 48 | - | 61 | 39 | - |
| Powdered Milk | 62 | 38 | - | 48 | 51 | 1 | 8 | 42 | - | 57 | 43 | - |
| Fresh Milk | 63 | 37 | - | 50 | 49 | 1 | 57 | 43 | - | 57 | 43 | - |
| Gundha Howa Atta | 20 | 80 | - | 49 | 51 | - | 15 | 85 | - | 29 | 71 | - |
| Samosa | 57 | 43 | - | 62 | 38 | - | 56 | 44 | - | 63 | 37 | - |
| Papar | 40 | 60 | - | 44 | 56 | - | 47 | 53 | - | 51 | 49 | - |
| Canned Rice | 20 | 80 | - | 35 | 65 | - | 34 | 66 | - | 35 | 65 | - |

1=Illiterate 2=Upto Matric 3=Above Matric

TABLE 6.44

CO-EFFICIENT OF REGRESSION OF HOUSEHOLDS WHO WOULD LIKE TO PURCHASE IMPROVED PRODUCTS BY URBAN AND RURAL WITHIN DIFFERENT INCOME GRUOPS

| | URBAN | | RURAL | | TOTAL | |
|---|---|---|---|---|---|---|
| | Regression Co-efficien | | Regression Co-efficient | | Regression Co-effiecient | |
| | a | b | a | b | a | b |
| Enrich Flour | -18.00 | 38.90 | 51.50 | 1.60 | 61.00 | 40.30 |
| Brown Flour | -23.00 | 23.40 | 24.00 | 2.40 | 12.00 | 26.50 |
| Pakora Mix | -10.00 | 13.30 | 19.50 | 4.10 | 20.00 | 19.30 |
| Kheer Mix | -10.50 | 14.30 | 19.50 | 3.40 | 19.00 | 19.30 |
| Gonda Howa Atta | - 7.00 | 7.50 | 0.50 | 1.60 | - 9.00 | 11.20 |
| Samosa | - 2.00 | 3.10 | - 1.50 | 1.50 | - 5.50 | 6.10 |
| Paparr | - 6.70 | 3.30 | - 4.40 | 2.70 | 1.00 | 7.70 |
| Canned Rice | - 9.00 | 7.40 | - 1.50 | 1.50 | -12.50 | 10.50 |

TABLE 6.45

CO-EFFICIENT OF REGRESSION OF HOUSEHOLDS WHO WOULD LIKE TO PURCHASE IMPROVED PRODUCTS BY URBAN AND RURAL WITH DIFFERENT EDUCATION GROUPS

| | URBAN | | RURAL | | TOTAL | |
|---|---|---|---|---|---|---|
| | Regression Co-efficient | | Regression Co-efficient | | Regression Co-efficient | |
| | a | b | a | b | a | b |
| Enrich Flour | 54.00 | 27.00 | 141.00 | -31.5 | 243.67 | -14.50 |
| Brown Flour | -1.33 | 24.00 | 63.67 | -12.00 | 83.00 | 10.00 |
| Pakora Mix | 2.30 | 14.00 | 62.33 | -11.50 | 89.00 | 0.50 |
| Khir Mix | 0.00 | 16.50 | 61.00 | -12.00 | 84.67 | 2.00 |
| Gonda Howa Atta | -1.67 | 8.50 | 13.00 | - 3.50 | 16.00 | 4.50 |
| Samosa | 3.33 | 2.00 | 6.00 | - 1.50 | 13.67 | - 0.50 |
| Paparr | 8.67 | 1.00 | 17.00 | -4.00 | 37.67 | - 5.50 |
| Canned Rice | 0.33 | 6.00 | 7.00 | -2.00 | 13.00 | 2.50 |

## TABLE 6.46

Standard Error And t-Value Of Households Who Would Like To Purchase Improved Products By Urban And Rural Within Different Income Groups

| | Urban | | Rural | | Total | |
|---|---|---|---|---|---|---|
| | Std.Err | t-Value | Std.Err | t-Value | Std.Err | t-Value |
| Enrich Flour | 8.06 | 3.15 | 20.79 | 2.71 | 28.41 | 3.25 |
| Brown Flour | 3.39 | 1.66 | 9.16 | 2.74 | 5.41 | 1.96 |
| Pakora Mix | 2.80 | 2.15 | 8.65 | 2.05 | 9.32 | 3.38 |
| Kheer Mix | 2.54 | 2.47 | 9.34 | 2.45 | 9.70 | 3.29 |
| Gonda Howa Atta | 0.59 | 1.71 | 1.10 | 1.71 | 0.52 | 2.18 |
| Samosa | 0.52 | 1.19 | 0.59 | 3.48 | 1.10 | 3.38 |
| Paparr | 0.17 | 1.38 | 0.17 | 2.45 | 0.00 | 1.32 |
| Canned Rice | 1.98 | 2.44 | 0.39 | 3.02 | 1.75 | 2.63 |

## TABLE 6.47

Standard Error And t-Value Of Households Who Would Like To Purchase Improved Products By Urban And Rural Within Different Education Groups

| | Urban | | Rural | | Total | |
|---|---|---|---|---|---|---|
| | Std.Err | t-Value | Std.Err | t-Value | Std.Err | t-Value |
| Enrich Flour | 24.25 | 5.24 | 18.19 | 3.38 | 42.44 | 4.94 |
| Brown Flour | 4.62 | 2.72 | 16.74 | 2.76 | 21.36 | 3.16 |
| Pakora Mix | 7.51 | 2.61 | 10.10 | 3.75 | 17.61 | 3.74 |
| Kheer Mix | 6.06 | 2.69 | 10.39 | 3.34 | 16.45 | 3.96 |
| Gonda Howa Atta | 2.02 | 1.77 | 2.60 | 1.96 | 4.62 | 2.52 |
| Samosa | 2.31 | 2.17 | 0.87 | 2.93 | 1.44 | 2.40 |
| Paparr | 6.35 | 2.50 | 1.73 | 3.20 | 4.62 | 2.42 |
| Canned Rice | 2.31 | 3.28 | 1.73 | 3.75 | 0.58 | 3.83 |

of marketing of wheat, rice and pulses covers the following departments and agencies:

- Marketing Departments
  - o Central Government
    - oo Department of Agriculture and Livestock Products Marketing and Grading.
  - o Provincial Governments
    - oo Economics and Marketing Directorate, Department of Agriculture, Punjab.
    - oo Economics and Marketing Sections, Department of Agriculture, NWFP and Baluchistan.
    - oo Bureau of Supply and Prices, Sind.
- Regulated Markets and Regulatory Bodies.
- Statutory Autonomous Marketing Agencies
  - o Pakistan Agricultural Storage and Services Corporation (PASSCO)
  - o Rice Export Corporation of Pakistan (RECP)

- Procurement Agencies
  - o Food Department, Government of Punjab.
  - o Food Department, Government of Sind.
- Agricultural Prices Commission.

## 7.1 DEPARTMENT OF AGRICULTURE & LIVESTOCK PRODUCTS MARKETING AND GRADING

At the Federal level, agricultural marketing is the responsibility of the Department of Agricultural and Livestock Products Marketing and Grading under the Ministry of Food, Agriculture and Cooperatives. The Department provides advice to the Federal Government on all matters related to agricultural marketing in the country. It also has the responsibility of providing guidance to the Provinces in the marketing field and of coordinating provincial activities at the national level.

### FUNCTIONS

The specific functions of the Department are as follows:

- Grading of Agricultural Commodities for Export.
- Agricultural Commodity Research.
- Marketing Intelligence.

### Grading of Agricultural Commodities

In order to improve the quality of agricultural commodities as well as to establish their export trade on scientific lines, the Department has introduced compulsory grading schemes. So far grading of 13 commodities has been introduced on compulsory basis. Wheat, rice and pulses are not included in this group of 13 commodities.

## Agricultural Commodity Research

This involves both market and laboratory research on agricultural commodities and livestock products to ascertain the quality requirements of the buyers and to evaluate the quality of exportable agricultural and livestock commodities produced in the country. On this basis, national standards of quality are laid down and introduced for export trade. As a result of this research, a number of commodity and situation reports and brouchers have been published by the Department.

## Market Intelligence

The Department undertakes the marketing intelligence work as one of its main functions. It collects whole-sale prices of about 200 items from 40 important markets of the country mainly through Market Committees and staff of the agriculture marketing directorates/cells of the provincial Agriculture Departments. These prices are compiled on monthly basis and are published in the Departments monthly journal entitled 'Market and Prices'. At the end of the year an annual issue of 'Market and Price' is compiled and issued. This journal is supplied to about 200 agencies both within and outside the country. In the Karachi Market, daily pries of 180 items are collected through the Department's own staff which are compiled and supplied to the Press, Military authorities, Customs, State Bank, Statistics Division, Planning and Development Department of Sind Government and other agencies regularly. Prices of about 80 items are supplied daily to Radio Pakistan for broadcast. Additionally, daily wholesale and retail prices of 20 items of daily consumption from 10 important markets of the country are collected through Department's own staff. These are compiled on weekly basis and are supplied to the Secretaries of the Federal Economics Ministries. Situation and outlook reports are also prepared and published periodically.

## Organization

The Department is directed by the Agricultural and Livestock Marketing Adivsor based in Karachi. It comprises of the following two groups:

- Agricultural Commodity Research Group

- Agricultural Commodity Grading and Inspection Group.

Both groups are headed by the Deputy Agricultural Marketing Adivsor. At present the Agricultural Commodity Research Group is responsible for market surveys, commodity price collection and reporting and laboratory research for evolving national quality grades and standards. The Agricultural Commodity Grading and Inspection Group is responsible for the actual grading and quality control of agricultural and livestock products for export.

## CONSTRAINTS

A number of constraints have been noticed in the performance of various functions by the department. Grading of agricultural commodities is presently confined to items of export interest. None of the food items is thus included in this group. In view of the specialist nature of these activities and the experience gained by the Department in this respect, it would be desirable to extend its activities to major food items used mainly for local consumption.

Agricultural commodity research and marketing intelligence are the other two functions which need strengthening. In this respect, detailed regular studies of farm gate prices for different crops are necessary to serve as basis for appropriate policy framework designed to ensure optimum returns to the growers.

It has been observed that needed coordination with and supervision over the Provincial Marketing Departments are lacking. Further coverage of the market intelligence activities need to be extended through including areas representing different ecological and socio-economic zones.

## 7.2 PROVINCIAL SET UP OF AGRICULTURAL MARKETING DEPARTMENTS

In the Punjab there exists a Directorate of Agricultural Economics and Marketing under the Directors General of

Agriculture Field of the Department of Agriculture. In Sind, the function is performed by the Bureau of Supply and Prices. In the North West Frontier Province and Baluchistan, marketing sections of the Directorates of Agriculture are responsible for marketing improvements.

i) <u>Agriculture Economics and Marketing Directorate, Punjab</u>

There exists a full-fledge Directorate in the Punjab for supervising, guiding and developing agricultural marketing in the Province. It undertakes marketing surveys, gathers and publishes price statistics and enforces marketing laws, rules and regulations.

<u>Functions</u>

The functions of the Directorate can be divided under the following heads.

a) Development of Markets:

The Department undertakes inspection of sites and surveys and prepares schemes for the establishment of grain markets, fruits/vegetable markets, feeder markets and market committees. At present prospects for establishing new markets at Multan, Faisalabad and Sargodha and improvement of grain market in Lahore are under consideration.

b) Administration of the Agricultural Produce Market Ordinance 1978 and Rules framed thereunder.

The Department supervises and regulates the marketing committees in accordance with the provisions of the

Ordinance. It passes their annual budgets and supplementary grants, if any. It checks and scrutinizes working of the committees and advises them in respect of:

- Preparation of By-laws
- Constitution of Arbitration Boards
- Proceedings of meetings
- Construction of warehouses, godowns and cold storage
- Planning and implementation of development projects
- Provision of necessary facilities to the growers

c) Market Survey and Studies:

The Department undertakes studies on the cost of production of crops, marketing margins, use of inputs, sale of agricultural commodities by farmers at different levels, marketable surplus etc. It assists the Federal Government in the adoption of proper grades and standards for the export of agricultural commodities. It also keeps close contacts with the agricultural processing industries and helps to solve their problems, especially relating to marketing.

Cost of production and marketing studies for the following crop have been carried out recently for the Agricultural Prices Commission:

- o Sugarcane
- o Wheat
- o Cotton
- o Rice

d) Collection and Dissemination of Market Intelligence:

The Department collects marketing intelligence of all agricultural commodities and arranges for its dissemination through various publicity media. The Department regularly collects price data through the Market Committees and issues the following reports.

- Daily Price Report:

It contains daily wholesale prices of 68 items from 10 important markets. The Report is supplied to various government departments and to publicity media for wider dissemination.

- Monthly Economic & Agrarian Situation Report:

This report contains brief review of the price trends during the month, comparison with the situation prevailing in the corresponding month of the previous year and analysis of determining factors. The commodities and the markets covered are the same as for the Weekly Report. This report is also circulated to the concerned Provincial and Federal agencies and departments.

ii) Marketing Sections, NWFP and Baluchistan

In the NWFP and Baluchistan, there exist Economic and Marketing Sections attached to the Directorates of Agriculture. The Section is headed by a Deputy Director (E&M) who is assisted by Extra Assistant Directors (E&M). The Section performs the usual marketing functions including the following:

- Study of comparative economics of different crops and cropping patterns.

- Survey of market conditions, compilation of price statistics.

iii) Bureau of Supply and Prices, Sind

The Bureau is an integrated organization, set up to plan, guide and ensure adequate marketing facilities, ensure regular supplies and undertake stabilization of prices of essential commodities for the common benefit of growers, traders and consumers.

Functions

The Bureau performs the following functions:

- To collect, collate and disseminate information regarding trade, movement and prices of essential commodities to include agricultural produce, livestock, fishery, poultry and selected manufactured items.

- To conduct production and marketing cost studies of essential commodities with a view to:

  o Ascertaining acceptable price level

  o Recommending corrective measures to keep the prices at the level indicated by cost studies.

- To identify bottlenecks in the system of supply, movement and storage of essential commodities and recommend remedial measures to ensure even flow.

- Perform functions of Controller General of Prices Sind Government under the Price Control and Prevention of Profiteering and Hoarding Act 1977 alongwith the operative sections of the West Pakistan Food Supplies Act 1958.

- Exercise technical control over the Market Committees and formulate policies for the scientific development of Marketing facilities for growers, traders and consumers. These functions are performed under the Agricultural Product Act, 1939, as amended by Amendment Ordinance of 1982.

- Enforce Sind Standards weights and Measures Enforcement Act and Rules 1976.

- To establish liaison and coordination with the Central Government and appropriate Corporations with a view to:

  o Project the problems of inter provincial movement, supply and price control of essential commodities.

- o Implement Policies of the Central Government within the para meters of the aims and objects of the Bureau.

- Discourage monopolistic tendencies and give necessary advice and policy guidance to the concerned Departments and Agencies to energize cooperative movement, consumer resistance and setting up of competing agencies in Private and Public Sectors.

  The Bureau has been given powers to administer the following enactments:

- The Agricultural Produce Marketing Ordinance, 1982.

- The Price Control and Prevention of Profiteering and Hoarding Act 1977, previously administered by Industries Departments.

- The Sind Standard Weights and Measures (Enforcement) Act. 1975, previously administered by Labour Department.

The Bureau is headed by a Director General with the status and power of a Secretary to the Government of Sind. The Economics and Marketing Wing is under a Deputy Director while the other two wings, viz., Costing, Statistics and Policy Wing and the Field Operations and Monitoring Wing are under Additional Directors. The Deputy Director Economic and Marketing) is assisted by one Assistant Director (Agricultural Produce), one Assistant Director (Livestock) and one Assistant Director (Poultry and Fisheries). The Additional Director (Costing) has one Assistant Director (Costing) and one Assistant Director (policy) and one Statistical Officer. The Field Operations Wing has one post of Deputy Director (Marketing), one Deputy Director (WSY Section) and one Supervisor (Industrial Section).

## Constraints

The major deficiency observed in the working of the Punjab and Sindh Agricultural Marketing Departments is inadequate supervision over the operations of the Market Committees and absence of coordination in respect of basis adopted and coverage of marketing intelligence with other provincial departments and the Federal Department.

## 7.3 THE REGULATED MARKETS AND THE MARKET COMMITTEES

### Purpose of Establishment

To regulate and effectuate marketing of agricultural produce, especially to eliminate malpractices and to prevent excessive marketing costs in transactions.

### Functions of Market Committee

The Market Committee controls and supervises the marketing activities in the markets and frame by laws, defines market practices and fixes handling charges payable to various functionaries (traders, commission agents, etc.) of the market. It also issues/revokes functionaries permits, as well as prepares market-related information (daily, weekly or monthly basis). Weighing methods used by the functionaries are checked by the Market Committee.

## Source of Funds

The Market Committee imposes a market fee on sellers and a license fee on traders and market functionaries. It may raise loans to apply to expenses of land, buildings and equipments, from the Provincial Government.

## Market Charges

Specific charges specified in the laws are commissions, weighment, cleaning, bagging, etc. (varying by item of commodities). These are imposed on growers/sellers. The market fee is charged to the wholesaler/commission agents.

## Supervision of Market Operations

Actual supervision is carried out by the enforcement staff comprising of Inspector/Sub-inspector. Enforcement staff, in practice, issue license, collect market fees and ensure implementation of prescribed market practices. The strength of enforcement staff varies from market to market, according to the work load and scale of market.

## Role of the Provincial Government

Daily market operations are controlled by the Market Committee, while the Provincial Government is responsible for notification of market areas, market yards, commodities to be regulated in the market, constitution of the Market Committee, election/nomination of Committee members, sanction of the budget of the Committee and others.

The major constraints observed were collusion between the supervisory staff of the Market Committees and the local market functionaries to the detriment of the interests of the growers. More effective supervision over the functioning of Market Committee by the Provincial Agriculatureal Marketing Department is needed.

## 7.4 STATUTORY AUTONOMOUS MARKETING AGENCIES

The principal statutory autonomous agencies involved in the marketing of food crops are as follows:

- The Pakistan Agricultural Storage and Services Corporation Limited (PASSCO)

- The Rice Export Corporation of Pakistan (RECP)

PASSCO deals mainly with wheat, rice and gram among pulses and the Provincial Food Department deal mainly with wheat. RECP plays an active part in the marketing and export operations of rice. A brief functional review of these agencies follows:

### i) Pakistan Agricultural Storage and Services Corporation Limited (PASSCO)

#### Functions

The main functions of PASSCO include the following:

o Purchase and sale of agricultural commodities

- Acquire, construct and operate warehouses for storage of agricultural commodities.

- Provide "Machinery Pool Services" at economical rates to the farmers.

Organization

PASSCO activities are controlled by its Managing Director with his headquarters at Lahore. It has nine regional offices of which six are in the Punjab, two in Sindh and one in Baluchistan. The regional offices supervise procurement and processing operations through managers located in mandi towns. The agricultural machinery hire services are supervised by an Agricultural Engineer located at Lahore. There are 20 machinery centres of which 12 are in the Punjab, 7 in Sindh and one in Baluchistan. The Punjab centres are located at Kot Mubarak, Manga Mandi, Depalpur, Khanewal, Vehari, Gojra, Gujranwala Chiniot, Rajana, Muridke, Satrah and Shahpur Jahania. The Sindh centres are located at shahdadpur, Hala, Thatta, Tando Allahyar, Tando Mohammad Khan, Jhinda and Sakrand.

The storage construction programmes are organized by an Engineering Advisor assisted by eleven Executive Engineers stationed at various sites.

Operations

The two major commodities procured by PASSCO are wheat and paddy. The quantities procured during the last four years are shown below:

TABLE 7.1

PROCUREMENT OPERATIONS OF PASSCO

(Tonnes)

| Year | Wheat | Paddy |
|---|---|---|
| 1983-84 | 650,000 | 350,000 |
| 1984-85 | 655,050 | 552,000 |
| 1985-86 | 1,395,430 | 310,221 |
| 1986-87 | 1,397,965 | 13,748 |
| 1987-88 | 1,400,000 | 17,018 |

Among the other commodities gram was procured only during 1986-87 to the extent of 7000 tonnes to support price levels.

PASSCO has been progressively increasing its storage capacity which presently stands at 558,200 tonnes. This includes 443,200 tonnes in godowns, 100,000 tonnes in silos and 15000 tonnes of open bulk capacity.

PASSCO sells wheat to the deficit provinces and agencies at the same price on which it is purchased. The Corporation is allowed incidental expenses for these operations.

Operating Costs

The average operating costs of PASSCO, classified by major components, for 1986 and 1987, are shown below.

TABLE 7.2

OPERATING COSTS OF PASSCO

(Rs. per tonne)

| Cost Items | 1986 | 1987 |
|---|---|---|
| Transportation of Wheat | 21.39 | 29.67 |
| Labour Charges | 8.48 | 11.09 |
| Dhab Mats | 0.29 | 1.11 |
| Polythene | 0.60 | 0.57 |
| Construction of Plinth | 1.52 | 2.40 |
| Pesticides | 2.12 | 5.36 |
| Sutli | 0.24 | 0.17 |
| Miscellaneous | 0.67 | 0.72 |
| Vehicle | 1.32 | 2.03 |
| | 36.62 | 53.12 |



It is to be noted that there has been 45 percentage increase over the cost level of the previous year, which appears excessive in comparison with the prevailing inflation rates.

PASSCO did not occur in any of the marketing chains drawn on the basis of the marketing activities of the sample growers. The above costs represent subsidy on operations of PASSCO.

## ii) Rice Export Corporation of Pakistan Ltd.

The Rice Export Corporation of Pakistan (RECP) was set up in 1947 as a private limited company to undertake exports of rice on monopoly basis in the public sector. It was charged with the responsibility of taking all measures, such as publicity campaigns, collection of market intelligence and construction of godowns etc. required for the performance of its main function.

### Procurement Operations

Rice was procured till 1985-86 under the Monopoly. Procurement Scheme". The policy was revised in 1986-87 when "voluntary" procurement was introduced. It was felt that compulsory procurement at support prices was detrimental to the interests of growers and was acting as a disincentive for increasing rice production. This was due to the fact that under monopoly procurement, the support price, which was intended to be the minimum guaranteed price, became in practice the maximum price that a farmer could get for his produce.

A table showing annual procurements of rice by RECP since 1983-84 is given on the next page.

RECP has been procuring 2.3 to 3.0 million tonnes of rice each year during the last five years, the ratio of procurements to total output ranging between 29 and 52 per cents during the period.

TABLE 7.3

PROCUREMENT OF RICE BY PFCP

(000 Tonnes)

| Year | Basmati | | Other Varieties | | Total | |
|---|---|---|---|---|---|---|
| | Quantity | % of Total | Quantity | % of Total | Quantity | % of Total |
| 1983–84 | 926 | 29 | 822 | 46 | 2833 | 40 |
| 1984–85 | 855 | 31 | 958 | 50 | 2768 | 44 |
| 1985–86 | 785 | 29 | 985 | 63 | 2350 | 52 |
| 1986–87 | 790 | 30 | 1068 | 47 | 3045 | 43 |
| 1987–88 | 903 | 25 | 607 | 31 | 2869 | 29 |

## Handling, Remilling and Packing

RECP cleaning and grading facilities consist of 14 plants with a total capacity of 817,000 tonnes. All basmati rice is exported after cleaning in the mills. An automatic packing plant is also in commission to meet the demand of the buyers for packetted rice.

## Exports

The Ministry of Commerce of the Federal Government fixes annual export targets. The annual targets and actual exports for the last five years are shown in Table 7.4.

The exports of other varieties of rice has shown better performance whereas basmati exports have generally lagged behind targets.

The sale of basmati rice to Gulf countries is on the basis of agreement with the Council of Gulf countries. For other varieties, sales are affected through floating of tenders, on fixed prices without tenders, direct negotiations and on government to government basis. Sales through government to government negotiations are the most important channel accounting for almost one-half of the the total sales followed by sales through inviting tenders having a share varying from about one-third to two-fifth during different years.

The private sector has been allowed to export basmati rice from 1987-88 in packets of upto 20 kg. They can obtain rice from RECP or may use their own rice. All exports are however subject to RECP's inspection and quality control procedures.

TABLE 7.4

EXPORT TARGETS AND ACTUAL EXPORTS OF RICE BY RECP

('000' Tonnes)

| Year | Basmati | | | Other Varieties | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Target | Actual | Actual as % of of Target | Target | Actual | Actual as % of of Target | Target | Actual | Actual as % of Target |
| 1983-84 | 300 | 406 | 135 | 800 | 853 | 107 | 1100 | 1259 | 114 |
| 1984-85 | 350 | 163 | 47 | 850 | 617 | 73 | 1200 | 780 | 65 |
| 1985-86 | 325 | 277 | 85 | 775 | 1044 | 135 | 1100 | 1321 | 120 |
| 1986-87 | 260 | 136 | 52 | 990 | 1117 | 113 | 1250 | 1253 | 100 |
| 1987-88 | 200 | 221 | 111 | 1000 | 988 | 99 | 1200 | 1209 | 101 |

RECP has been earning profits on its procurement and export operations each year. The summary position for the last three years is given below:

(Million Rs.)

| | 1984-85 | 1985-86 | 1986-87 |
|---|---|---|---|
| Export (Tons) | | | |
| Basmati | 229,658 | 276,980 | 136,251 |
| Others | 758,692 | 1,043,530 | 1,117,411 |
| Total: | 988,350 | 1,320,510 | 1,253,662 |
| Average Export Price (Rs./Tons) | | | |
| Basmati | 9,634 | 11,130 | 12,429 |
| Others | 3,027 | 2,567 | 2,733 |
| Average FOB Cost (Rs./Ton) | | | |
| Basmati | 6,246 | 5,809 | 6,437 |
| Others | 3,467 | 3,566 | 3,462 |
| Profit (Loss) Rs./Ton | | | |
| Basmati | 3,388 | 5,321 | 5,992 |
| Others | (440) | (999) | (729) |
| Profit (Loss) (Rs. Million) | | | |
| Basmati | 778.16 | 1473.71 | 916.46 |
| Others | (333.56) | (1042.96) | 914.71 |
| Total: | 444.60 | 430.75 | 1.75 |

## 7.5 PROCUREMENT DEPARTMENTS

The government organizes elaborate procurement operations for wheat to ensure support prices to the growers. These operations are undertaken through the provincial Food Departments in Punjab and Sind although the formulation of pricing policy is vested in the Federal Ministry of Food and Agriculture.

The Sind Food Department is an internal directorate of the 'Agriculture, Livestock, Fisheries and Food Department. In the Punjab, however, Food Department is an independent department under a Secretary with a separate entity, the Food Directorate, providing for larger scope for effective operations. The field set-up of both the Food Departments is almost similar. Each district is under a District Food Controller, administratively controlled by a Deputy Director in each Division.

### Functions

The functions of the respective Food Departments are somewhat different as shown below:

**Punjab:**

- Voluntary Procurement of wheat
- Distribution of wheat
- Procurement of insecticides, fumigants and gunny bags
- Control over flour mills and sugar mills
- Administration of food laws
- Planning and construction of additional storage accommodation.

## Sind:

- Food procurement and distribution

- Storage of foodgrains

- Administration of the Tea (control of prices, distribution and Movement) ordinance, 1960.

- Service matters except those entrusted to the Services and General Administration Department.

The Government purchases wheat of the prescribed standards from the growers and others at specified procurement centres at the notified support prices. Full price is paid through the banks immediately after delivery of stocks to the Government representative. Sample are taken and subjected to laboratory analysis in all cases. Recoveries on account of quality lags are, however, made after assessment by the laboratory. The bags are supplied by the government on loan depending on the size of the sale proceeds.

The Provincial Food Departments participate in wheat procurement operations on behalf of the Government. The Pakistan Agricultural Storage and Services Corporation (PASSCO) also purchases from within specified areas. The Government encourages and provides guidance to the growers for direct sales of wheat at the procurement centres.

The annual quantities of wheat procured during the last five year are shownbelow.

TABLE 7.5

ANNUAL WHEAT PROCUREMENTS BY PROVINCES

(000 Tonnes)

| Year | Punjab | Sind | NWFP | Baluchistan | Total |
|---|---|---|---|---|---|
| 1983-84 | 2995 | 749 | 25 | 52 | 3821 |
| 1984-85 | 1714 | 540 | 3 | 18 | 2275 |
| 1985-86 | 2018 | 501 | 5 | 9 | 2533 |
| 1986-87 | 4102 | 816 | 68 | 49 | 5035 |
| 1987-88 | 2936 | 973 | 39 | 27 | 3975 |

A number of sample growers and intermediaries however sold their produce to the procurement centres of the Provincial Food Department. The charges of the Department per tonne of wheat are given below:

| | Rs. Per Tonne |
|---|---|
| Gunny bags | 168.16 |
| Delivery expenses | 10.50 |
| Bank commission | 7.92 |
| Taxes and Duties | 7.89 |
| Transportation | 91.73 |
| Handling Charges | 18.27 |
| Godown costs | 12.65 |
| Storage | 0.98 |
| Departmental charges | 25.62 |
| Interest | 225.36 |
| Total: | 575.08 |

The above costs work out to Rs. 23.00 per 40 kg. This represents subsidy for undertaking wheat procurement operations.

## 7.6 THE AGRICULTURAL PRICES COMMISSION

In Pakistan, the price support programme for agriculture has been followed for the past three decades. Over these years, the Government has evolved an elaborate system of agricultural pricing. It fixes support prices for important crops to encourage production, and procures significant proportions of their output to cater to the needs of industrial workers and urban consumers, to export and to maintain price stability. Pricing policy has acted as an important instrument for accelerated agricultural development. The price support programme, initially confined to only a few major crops, now effectively covers wheat, rice, cotton, sugarcane and nontraditional oilseeds (sun flower, safflower and soyabean).

The price support structure various from crop to crop. For wheat and rice uniform support/procurement prices are maintained all over the country. Though procurement takes place primarily in the post-harvest season, the procurement prices remain the same throughout the year.

In the case of wheat, one price is fixed for all varieties. For rice however, different prices are fixed for basmati and other varieties to account for variations in quality. The prices thus fixed are given wide publicity through radio, television and the national press for the information of the farmers.

The entity playing an important role in formulating agricultural pricing policy and in fixing support prices, is the Agricultural Prices Commission (APCOM) which has been active since 1981, affiliated with the Federal Ministry of Food, Agriculture and Cooperations.

According to its terms of reference, APCom advises the Government on price policies for major agricultural commodities like wheat, rice, cotton, sugarcane, oilseeds, potatoes, and onions, and for agricultural inputs such as fertilizers, pesticides, and quality seeds. In doing so, the Commission takes into account production costs of crops in different ecological zones, keeping in view the need to: (a) provide incentives to the producers to raise productivity and production by adopting improved technology; (b) avoid waste and ensure rational use of inputs as well as of land and water; (c) develop production and cropping patterns in line with national requirements.

The Commission also performs the following functions:

- suggest appropriate non-price measures to back up the price policies;

- Gauge the impact of these policies on other sectors of the economy and on the cost of living and wage levels:

- Identify and suggest correction of the deficiencies and inefficiencies of the marketing system:

- Analyse and assess the adequacy of storage, processing, transportation and other facilities:

- Advise on measures to improve them, and:

- Carry out and promote studies and surveys relevant to price policy formulation:

- The commission has made special efforts to develop a system and methodology for the collection of on-farm data, determining criteria for the imputation of costs for various inputs at the farm under different farm sizes and tenurial arrangements, and evolving a methodology for measuring the impact of price policies on farmer's real incomes.

Since its inception in March 1981, the Agricultural Prices Commission has carried out, initiated, or planned a substantial amount of work. This includes:

- Formulation and submission to Government of price policies for wheat, rice, cotton, sugarcane, rape and mustard seeds, potatoes, onions, non-traditional oilseeds (sunflower, safflower, and soyabean), and gram:

- Well over two dozens in-depth studies and field surveys relevant to price policy formulation, including the methodology for estimating cost of production of crops, comparative advantage of growing various crops, fertilizer subsidy and fertilizer prices, measures to improve the low agricultural yields in Pakistan and the quality of produce of the various, crops, compilation and publication of basic statistical data relevant to agricultural pricing:

The Commission has established close working relationships with the agencies (both domestic and international) concerned with various aspects of agricultural development. Standing Committees on major crops such as wheat, rice, cotton, sugarcane, and oilseeds have also been set up, composed of official and non-official experts and selected progressive farmers from all provinces, for consultation on matters relating to price policy.

# CHAPTER VIII

## EVALUATION OF THE MARKETING SYSTEM

The analysis of the marketing system of the food crops under study has been presented in the previous sections. The analysis incorporates identification of major marketing channels and their participants, and estimation of their gross margins, costs and net margins resulting from the marketing activities.

The predominant actors in the present food marketing system are large number of individuals and independent private firms operating within the institutional framework of assembly, processing and distribution markets. A few state marketing agencies also exist concerned primarily with the procurement operations for effective implementation of government support policies.

The typical food marketing functions including buying from the farmer, transport to non-farm consumption centres, storage until sold, processing and sale of appropriate assortments to consumers, are performed by separate individuals or small firms, often dealing in a relatively few products. As a result, the marketing system is made up of a large number of small private food marketing firms. Since farmers are also typically very small operators, the number of transactions necessary to move a small quantity of product through the marketing system is quite large.

The basic features of the existing food distribution system thus include lengthy poorly coordinated distribution chains and the small-scale limited line retailer. There is absence of integration in so far as each trader operates independently forming a link in a long chain of intermediaries.

The analysis of the efficiency status of the marketing operations has been attempted through review of a set of "efficiency indicators", which, taken together, could provide a general "feel" of the present situation.

## 8.1 FARMER'S SHARE IN CONSUMER PRICE

The farmer's share, computed from farm-retail price spread and expressed as a percentage of retail price, is widely regarded as a measure of fairness of farm prices and of efficiency of food marketing. The following table shows the share of farmers in the retail prices for the reference crops for the sample as a whole.

TABLE 8.1

SHARE OF GROWER AND MARKETING MARGINS IN CONSUMER'S PRICE

(Percentages)

| Crop | Farmer Share | Marketing Margin | Consumer Price |
|---|---|---|---|
| Wheat | 64.77 | 35.23 | 100.00 |
| Rice: | | | |
| - Basmati | 52.49 | 47.51 | 100.00 |
| - Irri | 48.57 | 51.43 | 100.00 |
| Gram | 61.81 | 38.19 | 100.00 |
| Mung | 60.49 | 39.51 | 100.00 |
| Mash | 58.17 | 41.83 | 100.00 |
| Masoor | 60.29 | 39.71 | 100.00 |

It appears that wheat shows the highest share of farmers at 64.77 percent of the consumers price for the sample holdings as compared to the minimum of 48.57 percent for irri rice sample growers. The ratios appear consistent with results arrived at previously. The lower rates for rice are due to relatively higher processing costs as well as lower conversion ratio in processing as compared to other crops.

Estimates of producers' shares in consumers' prices for food crops for other countries are given in Table 8.2 on the next page.

International comparisons of producers shares and margins could provide some meaningful insights only if they relate to the same crops for the same periods and having similar marketing and agricultural services structures. This could be better illustrated with the help of the following data.

TABLE 8.3

MARGINS AS PERCENTAGE OF CONSUMERS PRICE
RICE (1979)

| ITEM | Philippines | USA |
|---|---|---|
| Farmers' Share | 84 | 43 |
| Milling | 9 | 8 |
| Packing | - | 14 |
| Transport | - | 6 |
| wholesaling/Retailing | 7 | 29 |
| TOTAL: | 100 | 100 |

Source:

Abbot, J.C. Marketing Improvement in the Developing World, Food & Agricultural Organization, Economic and Social Development Series No. 37, 1986.

TABLE 8.2

PERCENTAGE SHARES OF PRODUCERS IN CONSUMER PRICES FOR FOOD CROPS

(Percentages)

| Country | Period of Estimates | Crop | Producers Share | Source |
|---|---|---|---|---|
| Ghana | 1977 | Rice | 70.9 | 1 |
| USA | 1974 | Market Basket | 43.0 | 2 |
| | 1975 | Market Basket | 42.0 | 2 |
| | 1976 | Market Basket | 40.0 | 2 |
| Malawi | 1975-80 | Rice | 40.0 | 2 |
| Nageria | 1975-80 | Rice | 57.0 | 3 |
| Tanzania | 1975-80 | Rice | 57.0 | 3 |
| Bangladesh | 1975-80 | Rice | 79.0 | 3 |
| India | 1975-80 | Rice | 82.0 | 3 |
| Indonesia | 1975-80 | Rice | 84.0 | 3 |
| Philippines | 1975-80 | Rice | 87.0 | 3 |
| Tanzania | 1975-80 | Maize | 38.0 | 3 |
| Malawi | 1975-80 | Maize | 48.0 | 3 |
| Nigeria | 1975-80 | Maize | 55.0 | 3 |
| Kenya | 1975-80 | Maize | 57.0 | 3 |
| Philippine | 1975-80 | Maize | 72.0 | 3 |
| Tanzania | 1975-80 | Sorgham | 38.0 | 3 |
| Nigeria | 1975-80 | Sorgham | 60.0 | 3 |
| Sudan | 1975-80 | Sorgham | 61.0 | 3 |
| India | 1975-80 | Sorgham | 80.0 | 3 |
| Philippine | 1979 | Rice | 84.0 | 4 |
| USA | 1979 | Rice | 43.0 | 4 |
| India | 1975-80 | Wheat | 79.5 | 5 |

Source:

1. V. Roy Southworth "Food Crop Marketing in Atelubu District, Ghana Ph.D. Disseratation Stanford University, 1981, Quoted by Timmer, C. Peter and other "Food Policy Anayses, World Bank", 1985, P.169.

2. US Department of Agriculture in Marketing of Agricultural Products by Richard L Kohls and Josehp N. Uhl, P.235.

3. Food and Agriculture Organization, Agricultural Price Policies - Issues and Proposals . P.101, 1987.

4. Abbot, J.C. Marketing Improvement in the Developing World, Food and Agricultural Organization, Economic and Social Development Series NO. 37, 1986.

5. Dieter Elz ed., Agricultural Marketing Strategy and Pricing Policy, World Bank, 1987.

The table shows that rice grower in the Philippines receive a much larger share of the consumer price than do growers in the USA. Superficially it may appear that the US farmer is worse off because in addition to high cost of wholesaling/retailing, a significant share of the margin is absorbed by packaging cost.

Under conditions obtaining in US, however, the retailing of rice without pre-packing would both discourage consumption and increase the total margin because of the higher cost of retail labour, detrimental to the grower.

## 8.2 GROSS MARKETING MARGINS

The relative shares of various marketing costs in the average gross margins for crops under study are included in Table 8.4. It appears that after net margins, transport and processing costs are the major cost components.

The relative shares reported for some of the African and Asian countries are given in Table 8.5.

TABLE 8.5
SHARE OF CAUSAL FACTORS IN DIFFERENT FOOD GRAIN MARKETING MARGINS BETWEEN AFRICAN AND ASIAN COUNTRIES
(1975-80)

| | Absolutes Margin(Points) | | Relative Margins % | |
|---|---|---|---|---|
| | Africa | Asia | Africa | Asia |
| Taxes | 3.9 | 6.6 | 7 | 3 |
| Transport and Associated Costs | 27.5 | 13.8 | 50 | 69 |
| Profit | 12.6 | 4.0 | 23 | 20 |
| Transaction Cost (Residuals) | 11.0 | 1.6 | 20 | 8 |
| TOTAL | 55.0 | 20.0 | 100 | 100 |

Source:

Dieter Elz ed., Agricultural Marketing Strategy and Pricing Policy, World Bank, 1987
Estimated on the basis of information from Kenya and Malawi in Africa and Bangladesh and Indonesia in Asia.

Table - 8.4

AVERAGE RELATIVE SHARES OF COSTS OF VARIOUS MARKETING SERVICES IN THE GROSS MARGIN

Percentage

| | Wheat | Rice Basmati | Rice Irri | Gram | Mung | Mash | Masoor |
|---|---|---|---|---|---|---|---|
| Labour | 2.81 | 2.25 | 2.91 | 1.45 | 1.29 | 1.59 | 1.49 |
| Storage | 0.88 | 0.80 | 0.59 | 0.38 | 0.52 | 0.12 | 0.22 |
| Transport | 12.00 | 4.93 | 9.31 | 3.22 | 3.78 | 4.96 | 5.12 |
| Packing | 7.08 | 0.28 | 0.54 | 0.22 | 0.43 | 0.16 | 0.21 |
| Rent | 1.20 | 1.38 | 1.52 | 1.21 | 1.00 | 1.20 | 1.09 |
| Taxes | 0.70 | 0.27 | 0.54 | 0.21 | 0.12 | 0.39 | 0.43 |
| Credit Cost | 9.22 | 0.06 | 0.07 | --- | --- | 0.03 | 0.01 |
| Processing | 3.40 | 15.98 | 10.34 | 1.88 | 4.43 | 3.80 | 3.93 |
| Net Margin | 56.49 | 70.42 | 69.87 | 87.14 | 85.13 | 80.49 | 80.73 |
| Misc. | 6.22 | 3.63 | 4.31 | 4.29 | 3.30 | 7.26 | 6.77 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

## 8.3 NET MARGINS

Economic efficiency is concerned with whether the price of marketing services reasonably reflects the costs of resources used in providing them. The levels of the net margins enjoyed by different intermediaries thus provide an indicator of efficiency status. The ratios of net margins to gross margins, estimated for the crops under study for different types of intermediaries, are shown in Table 8.4.

The average ratios of net margins (profits) to the total vary from 56.49 percent in the case of wheat to 87.14 percent for Gram. The comparative average ratio in food grain marketing for some of the Asian and African countries are 20 and 23 percents respectively. The higher ratios estimated for Pakistan on the basis of the present survey indicate economic inefficiency as unreasonably high prices are being charged for the marketing services being provided by various intermediaries in the marketing chain.

## 8.4 MARKETING PRICE RATIOS

If markets are operating efficiently, prices of a given food will be related over space and time and among forms. Prices should only differ between geographical areas of a country by transportation costs from one point to another. The price of a storable commodity at one point in time should not exceed the price in a previous period of time by more than the cost of storage. Similarly, the price of a processed product should only exceed the price of the unprocessed equivalent by the cost of processing. The relevant internal marketing price ratios thus provide considerable insight into competitiveness and efficiency status of the performance of the marketing sector. These ratio are:

- Seasonal price ratios
- Spatial price margin
- Processing price ratio

An attempt has been made to calculate the seasonal price ratios and the spatial price margins for the reference crops on the basis of the following price data for the five years period ending 1988.

- Wholesale prices of selected commodities published by the Federal Bureau of Statistics.

- Retail prices of selected commodities published by the Federal Bureau of Statistics.

The processing price margins are based on the data obtained during the present study.

## Seasonal Price Ratios

The seasonal price variations have been derived from an index of prices calculated on the basis of the average monthly percentage of 12 months average for the five years period ending 1988. The calculation involves the following steps:

- Calculation of five yearly average prices for each of the 12 months.

- Calculation of 12 months average to serve as base.

- Calculation of indices for each month with the above base.

- Calculation of the range between the minimum and maximum indices.

- Calculation of seasonal variation (range as percentage of minimum level).

The seasonal variations derived on the above basis for crops under study for major markets are shown in Tables 8.6 and 8.7 for the wholesale and retail prices.

Among the crops under study, seasonal variations appear to be the least in the case of wheat and rice. These range between 10 to 12 percent for wheat at different markets and 11 to 12 percent for rice for wholesale prices. The range of seasonal variations for retail prices is 5 to 12 percent for wheat and 8 to 9 percent for rice. The maintenance of uniform support prices throughout the year for these crops appear to be responsible for the noted lower seasonal variations. For the other crops, the seasonal variation range between 15 percent for mash to 30 percent for masoor for wholesale prices and between 15 percent for mung to 25 percent for masoor.

TABLE - 8.6

AVERAGE INDEX OF MONTHLY WHOLESALE PRICES OF REFERENCE COMMODETIES
AND ESTIMATION OF SEASONNAL VARIATIONS

(RS. PER 40 K.G)

| CROPS | MARKETS | MONTHS | | | | | | | | | | | | RANGE | SEASONAL VARIATION (Range as % minimum Level |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JAN | FEB | MARCH | APRIL | MAY | JUN | JULY | AUG | SEPT | OCT | NOV | DEC | | |
| WHEAT | HYDERABAD | 100.38 | 101.30 | 99.23 | 9[illegible].59 | 93.28 | 99.28 | 99.92 | 101.53 | 100.84 | 100.84 | 103.25 | 103.25 | 9.97 | 10.32 |
| | MULTAN | 103.58 | 102.71 | 101.64 | [illegible].81 | 94.21 | 95.05 | 96.70 | 97.57 | 98.39 | 100.81 | 105.08 | 106.37 | 11.32 | 12.01 |
| | PESHAWAR | 101.30 | 104.50 | 103.79 | 10[illegible].47 | 100.47 | 96.33 | 96.33 | 95.14 | 99.32 | 98.93 | 101.07 | 102.37 | 9.36 | 9.84 |
| RICE BASMATI | GUJRANWALA | 95.64 | 95.64 | 96.60 | 9[illegible].60 | 96.92 | 95.48 | 98.59 | 104.34 | 105.69 | 106.57 | 104.97 | 103.78 | 11.09 | 11.61 |
| RICE IRRI | LARKANA | 96.66 | 96.85 | 95.33 | 9[illegible].24 | 100.76 | 97.37 | 98.69 | 103.08 | 103.49 | 105.63 | 101.75 | 100.76 | 10.30 | 10.80 |
| GRAM | SARGODHA | 91.72 | 91.51 | 91.92 | 9[illegible].63 | 97.80 | 98.11 | 99.27 | 99.33 | 108.43 | 109.21 | 108.86 | 111.23 | 19.72 | 21.55 |
| | PESHAWAR | 103.37 | 109.19 | 104.29 | 1[illegible].05 | 106.22 | 103.80 | 91.34 | 95.01 | 94.09 | 94.09 | 96.02 | 96.02 | 17.85 | 19.54 |
| MUNG | RAWALPINDI | 96.34 | 95.69 | 95.01 | 9[illegible].10 | 91.31 | 96.67 | 99.58 | 100.69 | 102.18 | 108.51 | 111.59 | 109.32 | 20.28 | 22.21 |
| | HYDERABAD | 94.62 | 95.88 | 100.30 | 9[illegible].36 | 100.88 | 98.38 | 93.98 | 101.98 | 104.48 | 103.23 | 106.40 | 100.52 | 12.42 | 13.13 |
| MASH | RAWALPINDI | 91.61 | 96.45 | 94.85 | 9[illegible].45 | 98.02 | 97.99 | 104.29 | 103.72 | 103.86 | 105.25 | 104.54 | 101.98 | 13.64 | 14.89 |
| MASOOR | LAHORE | 90.49 | 90.14 | 91.83 | 92.57 | 93.58 | 90.20 | 101.52 | 99.05 | 103.46 | 113.55 | 116.90 | 115.92 | 26.76 | 29.69 |

TABLE - 8.7

AVERAGE INDEX OF MONTHLY RETAIL PRICES OF REFERENCE COMMODETIES
AND ESTIMATION OF SEASONAL VARIATIONS

(RS. PER K.G)

| CROPS | MARKETS | MONTHS JAN | FEB | MARCH | APRIL | MAY | JUN | JULY | AUG | SEPT | OCT | NOV | DEC | RANGE | SEASONAL VARIATION (Range as % Minimum Level |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WHEAT | HYDERABAD | 98.73 | 98.31 | 98.73 | 97.86 | 97.88 | 97.88 | 100.85 | 100.85 | 101.69 | 100.00 | 101.69 | 105.08 | 7.20 | 7.36 |
| | MULTAN | 102.73 | 102.39 | 102.39 | 101.43 | 93.78 | 95.21 | 94.25 | 94.73 | 100.00 | 102.87 | 104.31 | 105.74 | 11.49 | 12.25 |
| | PASHAWAR | 102.23 | 102.23 | 101.33 | 101.78 | 99.55 | 100.00 | 99.55 | 99.55 | 97.77 | 100.00 | 99.10 | 100.00 | 4.46 | 4.76 |
| RICE BASMATTI | GUJRANWALA | 98.36 | 98.36 | 96.72 | 98.36 | 98.36 | 98.36 | 98.36 | 100.00 | 101.64 | 101.64 | 104.92 | 104.92 | 8.20 | 8.48 |
| RICE IRRI | SUKKUR | 95.72 | 98.68 | 96.71 | 95.03 | 95.39 | 111.84 | 98.68 | 101.31 | 100.65 | 100.32 | 103.61 | 100.92 | 8.22 | 8.59 |
| GRAM | FAISALABAD | 92.68 | 95.16 | 95.16 | 94.87 | 93.70 | 94.44 | 99.56 | 106.14 | 105.86 | 103.22 | 109.52 | 109.08 | 16.84 | 18.17 |
| | PESHAWAR | 93.79 | 95.77 | 95.11 | 95.11 | 93.36 | 96.96 | 97.09 | 108.19 | 106.74 | 103.17 | 109.51 | 108.98 | 19.15 | 21.19 |
| MUNG | RAWALPINDI | 95.95 | 94.13 | 93.22 | 95.14 | 98.18 | 98.48 | 99.70 | 102.02 | 103.24 | 105.87 | 107.29 | 107.29 | 14.07 | 15.09 |
| | HYDERABAD | 97.04 | 94.40 | 95.66 | 96.09 | 97.78 | 95.66 | 97.67 | 100.95 | 101.48 | 110.46 | 107.40 | 105.92 | 14.80 | 15.47 |
| MASH | RAWALPINDI | 92.54 | 93.46 | 95.11 | 95.13 | 95.39 | 95.86 | 99.63 | 105.06 | 107,27 | 105.89 | 106.81 | 107.27 | 14.73 | 15.92 |
| MASOOR | LAHORE | 99.00 | 100.99 | 101.54 | 99.64 | 67.68 | 92.84 | 91.03 | 94.29 | 108.69 | 106.06 | 110.05 | 108.69 | 22.37 | 24.57 |

The average monthly rises in prices compared with the estimated storage costs can help in evaluating the efficiency status of providing storage services. The indicative analysis is confined to gram crop since seasonal variation in wheat and rice does not reflect free market conditions while much of the storage of these crops is undertaken by public sector agencies.

The absolute range in wholesale prices for gram on the basis of 5 yearly averages and its relation with storage cost is shown below:

- Difference between minimum and maximum prices over 12 month period

| | | |
|---|---|---|
| Sargodha | | Rs. 34.88 |
| Peshawar | | Rs. 38.87 |
| | Average: | Rs. 36.88 |
| Average Monthly Price Rise | | Rs. 3.07 |
| Average Monthly Cost of Storage per 40 kg per Mongh | | Rs. 0.25 |

The comparison of average monthly price rise and average storage cost, even allowing for financial cost of keeping stocks, does show excessive profits for the storage services.

## Spatial Price Margin

An analysis of spatial price margins has also been attempted for gram crop for the two markets of Sargodha and Peshawar. The average wholesale prices for the last 5 years and the

5 yearly average for each month at the above two markets are given in Table 8.8 and 8.9. The coefficient of correlation between the monthly movements of prices for the two markets is calculated at 0.75 , which shows that the two markets are reasonably integrated for marketing operations. The monthly variations in the five-yearly average prices between this pair of markets is shown in Table 8.10. The average monthly variation in the wholesale prices of gram in this pair of markets is estimated at Rs. 20.53. The average transport cost by private trucks from Sargodha to Peshawar is estimated at Rs. 15-18 per 40 Kg. The comparison of the average monthly variation in the prices at the two markets with the transport costs does not show any excess profits at this stage.

## Processing Price Margin

The processing price margins, expressing the relationship between the gross and net margins of processors for crops under study are shown in Table 8.11.

TABLE 8.11

AVERAGE SHARES OF NET MARGINS IN GROSS MARGINS FOR PROCESSORS

(Percentage)

| Crop | Net Margin to Gross Margin |
|---|---|
| Wheat | 82.64 |
| Rice: | |
| - Basmati | 47.81 |
| - Irri | 30.55 |
| Gram | 94.90 |
| Mung | 93.74 |
| Mash | 86.32 |
| Masoor | 76.69 |

## TABLE 8.8

MONTHLY AVERAGE WHOLESALE PRICES OF GRAM AT SARGODHA MARKET

| Years | MONTHES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Jan | Feb | Mar | April | May | June | July | Aug | Sep | Oct | Nov | Dec |
| 1984 | 158.00 | 161.00 | 170.00 | 160.00 | 151.00 | 149.00 | 152.00 | 156.50 | 167.75 | 182.40 | 195.00 | 200.00 |
| 1985 | 200.00 | 200.00 | 210.00 | 220.00 | 225.00 | 225.00 | 230.00 | 230.00 | 230.00 | 210.00 | 190.00 | 190.00 |
| 1986 | 190.00 | 190.00 | 165.00 | 165.00 | 160.00 | 151.00 | 151.00 | 151.00 | 151.00 | 151.00 | 140.00 | 136.00 |
| 1987 | 136.00 | 131.00 | 130.00 | 128.00 | 128.00 | 142.00 | 142.00 | 138.00 | 138.00 | 158.00 | 180.00 | 210.00 |
| 1988 | 220.00 | 220.00 | 231.00 | 240.00 | 300.00 | 300.00 | 303.50 | 303.50 | 382.00 | 375.00 | 368.00 | 360.33 |
| Total | 904.00 | 902.00 | 906.00 | 913.00 | 964.00 | 967.00 | 978.50 | 979.00 | 1068.75 | 1076.40 | 1073.00 | 1096.33 |

TABLE 8.9

MONTHLY AVERAGE WHOLESALE PRICES OF GRAM AT PESHAWAR MARKET

Rs. Per 40kg

| Years | MONTHES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Jan | Feb | Mar | April | May | June | July | Aug | Sep | Oct | Nov | Dec |
| 1984 | 250.00 | 280.00 | 190.00 | 280.00 | 240.00 | 200.00 | 170.00 | 170.00 | 170.00 | 170.00 | 170.00 | 170.00 |
| 1985 | 170.00 | 203.33 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 | 240.00 |
| 1986 | 300.00 | 300.00 | 300.00 | 300.00 | 300.00 | 300.00 | 200.00 | 200.00 | 200.00 | 200.00 | 200.00 | 200.00 |
| 1987 | 200.00 | 200.00 | 200.00 | 145.00 | 136.00 | 144.00 | 144.00 | 144.00 | 144.00 | 144.00 | 165.00 | 165.00 |
| 1988 | 205.00 | 205.00 | 205.00 | 200.00 | 240.00 | 240.00 | 240.00 | 280.00 | 270.00 | 270.00 | 270.00 | 270.00 |
| Total | 1125.00 | 1188.33 | 1135.00 | 1165.00 | 1156.00 | 1124.00 | 994.00 | 1034.00 | 1024.00 | 1024.00 | 1045.00 | 1045.00 |
| Average | 225.00 | 237.67 | 227.00 | 233.00 | 231.20 | 224.80 | 198.80 | 206.80 | 204.80 | 204.80 | 209.00 | 209.00 |

Table - 8.10

DIFFERENACES IN THE 5 YEARLY AVERAGE MONTLY WHOLESALE PRICES OF GRAM BETWEEN PESHAWAR AND SARGODHA MARKETS (1984-88)

(Rs. Per 40 K.G)

| MONTHS | AVERAGE WHOLE SALE PRICES | | DIFFERENCES |
|---|---|---|---|
| | Peshawar | Sargohda | |
| JANUARY | 225.00 | 180.80 | 44.20 |
| FEBRUARY | 237.67 | 180.40 | 57.27 |
| MARCH | 227.00 | 181.20 | 45.80 |
| APRIL | 233.00 | 182.60 | 50.40 |
| MAY | 231.20 | 192.80 | 38.40 |
| JUNE | 224.80 | 193.40 | 31.40 |
| JULY | 198.80 | 195.70 | 3.10 |
| AUGUST | 206.80 | 195.80 | 11.00 |
| SEPTEMBER | 204.80 | 213.75 | -8.95 |
| OCTOBER | 204.80 | 215.28 | -10.48 |
| NOVEMBER | 209.00 | 214.60 | -5.60 |
| DECEMBER | 209.00 | 219.27 | -10.27 |
| MONTHLY AVERAGE | 217.66 | 197.13 | 20.53 |

It appears that ratios of net processing margins' are significantly high in the cases of wheat and pulses.

## 8.5 COMPETITIVE ENVIRONMENT

The positive implications of efficiency status are generally linked with the extent of competition prevailing at different stages of the marketing process. Theoretically the following conditions determine the competitive status of a market.

- Items of the commodity should be interchangeable and divisible.
- Buyers and sellers act in an economically rational manner.
- Firms are small and numerous enough so that individual decisions have no impact on prices.
- All participants have equal access to activities of the market on the same terms.
- Everyone has complete knowledge of forces likely to influence supply and demand.

Of the five elements listed above, the first two do not pose any problem in respect of the crops under study. Regarding the third element, the number of producers and consumers, forming the first and the last stages of the process, are large enough to ensure their competitive behaviour. The number of participants at the intermediate stages and the rules and conditions governing entry of new firms to their ranks are the major factors determining their competitive behaviour. The average number of intermediaries operating in the sample markets under study are shown in Table on the next page. There were in addition, beoparis and shopkeeper operating at the village level. The average number observed during the survey appears large enough to make unlikely any collusion among them. Further, the entry of new participants is permitted on satisfying general conditions of financial and moral background and after obtaining a license from the Market Committee in the case of regulated markets. In theory these conditions are not very difficult to satisfy and do not debar new entrants to the marketing trade. There also exist reasonable network for supplying market intelligence by several Federal and Provincial departments. The status of common knowledge about prices and market conditions is apparently more widespread in respect of wheat and rice whose suppor prices are fixed by the government and given wide publicity throughout the country. The same however cannot be said about the pulse crops.

## 8.6 CONCLUSIONS

In actual practice, the extent to which the conditions of market access and knowledge are satisfied to ensure competitive behaviour in a marketing system, is reflected in the final result, viz absence of excess profits earned at any stage of the marketing process. In this respect, the

## TABL 8.12

THE AVERAGE NUMBER OF MARKET INTERMEDIARY+ FOR THE SAMPLE MARKETS

| Province | Wheat | Rice | Gram | Mung | Mash | Masoor |
|---|---|---|---|---|---|---|
| Punjab | 73 | 56 | 267 | 63 | 69 | 69 |
| Sind | 300 | 147 | 45 | 117 | – | – |
| NWFP | 248 | – | 248 | – | – | – |
| Total Sample | 99 | 63 | 199 | 90 | 69 | 69 |

+ These include katcha arhatis, pacca arhatis and pacca/katcha arhatis analysis of gross and net margins and the estimation of seasonal, spatial and processing ratios conclusively show the presence of economic inefficiencies at different stages of the marketing system. Appropriate measures are therefore necessary for ensuring more efficient marketing operations. It may be pointed out that consumers spend about 50 percent of their income on food. Further, about 40 percent of what the consumers spend on food goes for marketing services. Obviously any reduction in food marketing costs would greatly benefit such consumers. A reduction of, say, 10 percent in food prices would increase their purchasing power by about 5 percent which can be spent by them on additional food with consequent nutritional benefits or on other non-food items with resultant beneficial employment effects. Thus any action taken for ensuring more efficient agricultural marketing operations would have significant impact on the overall economic development of the country.

# CHAPTER IX

# GUIDELINES FOR DEVELOPING MARKETING SERVICES

## 9.1 NEED FOR IMPROVEMENT IN THE MARKETING SYSTEM

The existing marketing system of food products is not geared to meet the requirements of a modern developing agricultural economy. The continued growth of population and increase in output will continue to influence the market situation in the future. The growth of population demands large increases in food production and marketing. Further, movement of people from rural to urban areas necessitates not only an increase in market volume but also a lengthened marketing chain.

A number of recent social and cultural development have also underscored the need for the transformation of the marketing services. It is a matter of general observation that with the rapid growth in the urban population, large number of subarbs are coming up around each major city. With improved roads and greater private car ownership, population is becoming more mobile and food consumption habits are also undergoing changes. In the major urban areas, the people now generally prefer to visit a single store where they could purchase most of their food and non-food needs for a period of a week or more.

With the introduction of technology, better means of packaging, preserving and handling food products are being introduced and getting popular with an increasing part of the urban population. In this changing environment, the small food store is being transformed to meet consumer's requirements. This transformation is still a far cry from the supermarket chains found in the developed markets.

## 9.2 LESSONS FROM DEVELOPMENT MARKET PRACTICES

The food marketing system in the developed countries has undergone drastic transformation over the last few decades. The new developments can broadly be classified as structural and functional.

Structurally, the improvements have involved close integration --- both horizontally and vertically --- of the various marketing activities in the shape of supermarket chains. The integrated systems involve capital intensive techniques, providing substantial benefits through scale economies, and the by passing of clogged wholesale food markets.

Functionally, new developments have involved extensive use of modern technology in packing, processing, transport, storage and information processing. Marketing methods have also been improved with the wide application of self-service in retailing and partly in wholesaling, the extensive introduction of computers and wide standardization of containers, products and operational methods. The introduction of self-service, while reducing the cost of retailing requires pre-packaging of products which were previously sold in bulk.

A number of environmental factors have to be kept in view while examining the prospects of introducing modern integrated marketing system represented by supermarket chain approach in developing countries like Pakistan. The major factors hindering the adaptation of supermarketing techniques are the large scale operations and capital intensity of the mass marketing technology of the developed markets. It is not appropriate for the small distributive institutions that make up so much of the economic activity in this country. Further it is comparatively more expensive and does not create jobs needed to absorb the rapidly expanding labour force in the country.

Supermarkets are primarily merchandisers of processed food which few poor people can afford to buy. Also, the lack of a sustained supply of uniform quality produce, typical in the less developed countries, makes it difficult for supermarkets to organize efficient food procurement. As a result they have to go through central wholesale markets, just like their traditional colleagues.

The supermarket, even in its more rudimentary version, is thus ill-equpped to service the low-and middle-income consumers in less-developed countries. Hence, if gains in food distribution are to be obtained, they must be secured through improvement in domestic or intermediate technologies.

## 9.3 GUIDELINES FOR FUTURE ACTION

The present development activities in food marketing aim at improving traditional rural assembly centres, wholesale and retail markets plus strengthening the corresponding infrastructure such as establishment of grades and standards and wholesale and market news services. The construction of wholesale markets, development of village to market road networks and improvements in the means of communication and transport have received increasing attention both from the national government as well as international funding agencies.

International aid for projects in agricultural marketing have also tended to focus on a specific segment of the overall marketing system. Good roads or improved storage facilities and similar other improvements alleviate marketing problems but they do not eliminate them. Furthermore low cost marketing systems are characterised primarily by a high degree of coordination between marketing stages rather than by isolated strengths in any one stage. This coordination is lacking presently in developing countries like Pakistan.

The action proposed for improving the marketing structure would involve an evolutionary process aimed at more effective coordination of the various marketing stages, ultimately leading to a simpler prototype of an integrated marketing structure.

The analysis of the existing market structure has shown that, as could be expected, the share of the farmgate prices in the consumers rupee has been higher where fewer intermediaries are involved in the marketing chain. In the case of rice in particular, direct sales of paddy to rice mills by growers has meant higher relative shares for them in the consumers price.

Thus appropriate policy instruments need to be initiated for providing incentives to the dealers to install modern processing facilities or the processors to establish selective wholesale and retail outlets. This would reduce the length of the marketing chain.

The policies adopted by the Government for regulating agricultural marketing activities have to a varying degree controlled or influenced markets and market institutions.

These policies have usually applied measures to restrict competition, control prices, restrict free movement, impose taxes or provide subsidies. government have also taken on some of the marketing function. These interventions have on the whole tended to exercise "control" rather than to increase the efficiency of distribution process.

Government involvement in the food marketing sector has generally been initiated for objectives not particularly related to the efficiency of the distribution system itself. The objectives of the government policy have been the securing of an urban food supply, reducing imports, stimulating production, raising tax revenue or sustaining low consumer prices.

There also exists a negative attitude of government towards the market intermediaries who are generally considered inefficient, exploitative and lacking in innovation. This attitude has often led the government to a "control" orientation where an alternative of stimulation of the private sector might have resulted in a better use of private sector resources. This would require a basic change in the philosophy, orientation and work approach on the part of the Agricultural Marketing Departments. Instead of confining their activities to regulating marketing practices and activities they may also be charged with the responsibility of assisting the marketing functionaries in adopting more efficient and innovative methods and in extending their activities to other related functional areas to become viable agro-business units. The Departments should also encourage better competitive environment through.

GOVERNMENT OF PAKISTAN

# MINISTRY OF FOOD, AGRICULTURE & COOPERATIVES

## FOOD SECURITY MANAGEMENT PROJECT

(ECONOMIC & POLICY ANALYSIS)

# MARKETING MARGINS OF SELECTED CROPS IN THE CONTEXT OF FARMING SYSTEMS AND ECOLOGICAL ZONES

## Volume II – APPENDICES

*JANUARY 1990*

UCGL

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TABLE 1.1

NAMES OF SAMPLE VILLAGES WITH NUMBER OF SAMPLE GROWERS FOR EACH CROP

| Crop | Sample Districts | Sample Villages | No. of Grower |
|---|---|---|---|
| Wheat | Jhang | Thatha Shah Jamal | 20 |
| | | Gagh | 20 |
| | | Mandey Syed | 20 |
| | Multan | Nawab Pur Doem | 20 |
| | | Khara | 20 |
| | | Hawaile Nasir Khan | 20 |
| | Bannu | Kotehrah | 24 |
| | | Kamar Kala | 20 |
| | | Koti Sadat | 20 |
| | Nawab Shah | Jiando-Rajper | 20 |
| | | 26-Nasrat | 20 |
| | | i) Sehra. ]<br>ii) New Jatau-ai ] | 20 |
| | Chakwal | Jhatla | 21 |
| | Attock | Haji Shah | 6 |
| | Chakwal | Chungi | 35 |
| Sub-Total: | | | 306 |
| Rice | Larkana | Gujar | 25 |
| | | i) Panju-Lorar ]<br>ii) Khokhar ] | 25 |
| | | i) Bakapur ]<br>ii) Tahir Hulio ]<br>iii) Qaiser Abaro ] | 25 |
| | Jacobabad | Haji Ali Bux Imroni | 26 |
| | | Jabar Balkani (Khai) | 25 |
| | | Muhammad Hussain Mazari | 25 |

| Crop | Sample Districts | Sample Villages | No. of Growers |
|---|---|---|---|
| Rice | Gujranwala | Chaba Cheema | 25 |
| | | Pindi Dhudal | 25 |
| | | Kuralke | 25 |
| | Sialkot | Dhey | 25 |
| | | Tharanwala | 25 |
| | | Parag pur | 25 |
| Sub-Total | | | 301 |
| Gram | Bhakkar | Mahani | 10 |
| | | Maliana Doggar | 10 |
| | | 56-ML | 10 |
| | Khushab | 27-MB | 12 |
| | | Nikro-Shaheed | 13 |
| | | Kate-Mar | 12 |
| | Bannu | Domail | 9 |
| | | Azeem Kaley | 11 |
| | Jacobabad | Khuda Bux Nonari | 10 |
| | | Abdul Khaliq Bangwar | 10 |
| | | Dokan Skool | 10 |
| Sub-Total | | | 117 |
| Mash | Sialkot | Dhala | 13 |
| | | Lalian | 10 |
| | | Dhol Bojwa | 13 |
| | Rawal Pindi | Bannus | 16 |
| | | Jatti | 13 |
| | | Jattal | 13 |
| Sub-Total | | | 78 |

| Crop | Sample Districts | Sample Villages | No. of Growers |
|---|---|---|---|
| Mung | Swat | Jaur | 8 |
| | | Bazar Gai | 8 |
| | D.G. Khan | Chak Bakkar | 8 |
| | Leiah | 117A - TDA | 8 |
| | | 248 - TDA | 8 |
| | Sangher | Sarhari | 8 |
| | Khairpur | Hango Reja | 8 |
| | | i) Nawan Laharo ] ii) Bhango Beham ] | 8 |
| Sub-Total | | | 64 |
| Masoor | Rawalpindi | Gore-Saian | 12 |
| | | Devi | 14 |
| | | Guga Shareef | 12 |
| | Sialkot | Naurang Abad | 11 |
| | | Teetarpur | 12 |
| | | Maloke | 15 |
| Sub-total | | | 76 |
| TOTAL: | | | 941 |

TABLE I.2

SIZE OF THE SAMPLE OF MARKET ACTORS TO WHOM SAMPLE GROWERS SOLD THEIR PRODUCE

| CROP | Village Shopkeeper | Village Beopari | | Pacca Arhati | Katcha Arhati | Pacca - Katcha Arhati | Total |
|---|---|---|---|---|---|---|---|
| | | Total | Surveyed | | | | |
| Wheat | – | 37 | 16 | 11 | 4 | 11 | 42 |
| Rice | – | 4 | 4 | 18 | 10 | 13 | 45 |
| Gram | 1 | 1 | 1 | 6 | 3 | 16 | 27 |
| Mung | 1 | 10 | 6 | 8 | 1 | 11 | 27 |
| Masoor | – | 11 | 10 | 5 | 3 | 2 | 20 |
| Mash | – | 8 | 8 | 1 | 3 | – | 12 |
| Total | 2 | 71 | 45 | 49 | 24 | 53 | 173 |

TABLE- 1.3

NUMBER OF SAMPLE UNITS OF PROCESSOR AND WHOLESALERS/RETAILERS BY DIFFERENT CROPS

| DISTRICT | PROCESSING UNITS | | | | | | | | | | | | WHOLESALERS AND RETAILERS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WHEAT | | | RICE | | | PULSES | | | TOTAL | | | WHEAT | | | RICE | | | PULSES | | | TOTAL | | |
| | M | SM | Total | M | SM | Total | M | SM | Total | M | SM | Total | Who | Ret | Total | Who | Ret | Total | Who | Ret | Total | Who | Ret | Total |
| Jhang | 2 | 4 | 6 | - | - | - | - | - | - | 2 | 4 | 6 | 6* | - | 6 | - | - | - | - | - | - | 6 | - | 6 |
| Multan | 4 | 4 | 8 | - | - | - | - | 3 | 3 | 4 | 7 | 11 | 2* | - | 2 | - | - | - | 5 | 3 | 8 | 7 | 3 | 10 |
| Sialkot | - | - | - | - | 3 | 3 | - | - | - | - | 3 | 3 | - | - | - | - | - | | - | - | - | - | - | - |
| Gujranwala | - | - | - | 7 | 3 | 10 | - | - | - | 7 | 3 | 10 | - | - | - | 3 | 10 | 13 | - | - | - | 3 | 10 | 13 |
| Faisalabad | - | - | - | - | - | - | - | 5 | 5 | - | 5 | 5 | - | - | - | - | - | - | 6 | 4 | 10 | 6 | 4 | 10 |
| Sargodha | - | - | - | - | - | - | - | 4 | 4 | - | 4 | 4 | - | - | - | - | - | - | 5 | 5 | 10 | 5 | 5 | 10 |
| Punjab | 6 | 8 | 14 | 7 | 6 | 13 | - | 12 | 12 | 13 | 26 | 39 | 8 | - | 8 | 3 | 10 | 13 | 16 | 12 | 28 | 27 | 22 | 49 |
| Nawabshah | 1 | 3 | 4 | - | - | - | - | - | - | 1 | 3 | 4 | 3 | 4 | 7 | - | - | - | - | - | - | 3 | 4 | 7 |
| Larkana | - | - | - | - | 4 | 4 | - | - | - | - | 4 | 4 | - | - | - | 2 | 8 | 10 | - | - | - | 2 | 8 | 10 |
| Jacobabad | 1 | - | 1 | - | 2 | 2 | - | - | - | 1 | 2 | 3 | 1 | 6 | 7 | - | 5 | 5 | - | - | - | 1 | 11 | 12 |
| Shikarpur | - | - | - | 1 | - | 1 | - | - | - | 1 | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Sind | 2 | 3 | 5 | 1 | 6 | 7 | - | - | - | 3 | 9 | 12 | 4 | 10 | 14 | 2 | 13 | 15 | - | - | - | 6 | 23 | 29 |
| Peshawar | 1 | - | 1 | - | - | - | - | - | - | 1 | - | 1 | 7 | - | 7 | - | - | - | - | - | - | 7 | - | 7 |
| Pakistan | 9 | 11 | 20 | 8 | 12 | 20 | - | 12 | 12 | 17 | 35 | 52 | 19 | 10 | 29 | 5 | 23 | 28 | 16 | 12 | 28 | 40 | 45 | 85 |

M = Medium Units
SM = Semi Medium Units

Who = Wholesalers
Ret = Retailers
* = Shopkeeper worked as wholesalers and retailers

APPENDIX III-1

AVERAGE HOUSEHOLD COMPOSITION FOR SAMPLE DISTRICTS

CROP: WHEAT

| District | Farm Size | No. of Farmers | Adult Above 10 Years: Male | Adult Above 10 Years: Female | Adult Above 10 Years: Total | Children: Male | Children: Female | Children: Total | Total: Male | Total: Female | Total: Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Jhang | Small | 27 | 3.33 | 3.00 | 6.33 | 1.59 | 1.59 | 3.18 | 4.92 | 4.59 | 9.51 |
| | Medium | 17 | 3.18 | 2.76 | 5.94 | 1.47 | 1.59 | 3.06 | 4.65 | 4.35 | 9.00 |
| | Large | 16 | 3.81 | 3.69 | 7.50 | 1.63 | 1.50 | 3.13 | 5.44 | 5.19 | 10.63 |
| | Total | 60 | 3.42 | 3.12 | 6.54 | 1.57 | 1.57 | 3.14 | 4.99 | 4.69 | 9.68 |
| Multan | Small | 14 | 3.00 | 3.50 | 6.50 | 2.64 | 1.86 | 4.50 | 5.64 | 5.36 | 11.00 |
| | Medium | 19 | 3.58 | 3.42 | 7.00 | 3.05 | 2.37 | 5.42 | 6.63 | 5.79 | 12.42 |
| | Large | 27 | 3.11 | 2.85 | 5.96 | 1.41 | 1.22 | 2.63 | 4.52 | 4.07 | 8.59 |
| | Total | 60 | 3.23 | 3.18 | 6.41 | 2.22 | 1.73 | 3.95 | 5.45 | 4.91 | 10.36 |
| Attock | Small | 23 | 2.30 | 2.17 | 4.47 | 1.30 | 1.26 | 2.56 | 3.60 | 3.43 | 7.03 |
| | Medium | 20 | 3.05 | 3.25 | 6.30 | 0.95 | 1.00 | 1.95 | 4.00 | 4.25 | 8.25 |
| | Large | 19 | 2.55 | 2.16 | 4.72 | 1.00 | 1.37 | 2.37 | 3.58 | 3.53 | 7.11 |
| | Total | 62 | 2.63 | 2.52 | 5.15 | 1.10 | 1.21 | 2.31 | 3.73 | 3.73 | 7.46 |
| Sub-Total | Small | 64 | 2.89 | 2.81 | 5.70 | 1.72 | 1.53 | 3.25 | 4.61 | 4.34 | 8.95 |
| | Medium | 56 | 3.27 | 3.16 | 6.43 | 1.82 | 1.64 | 3.46 | 5.09 | 4.80 | 9.88 |
| | Large | 62 | 3.13 | 2.85 | 5.98 | 1.34 | 1.34 | 2.68 | 4.47 | 4.19 | 8.66 |
| | Total | 182 | 3.09 | 2.93 | 6.02 | 1.62 | 1.50 | 3.12 | 4.71 | 4.43 | 9.14 |
| Nawabshah | Small | 22 | 3.50 | 3.41 | 6.91 | 2.77 | 2.23 | 5.00 | 6.27 | 5.64 | 11.91 |
| | Medium | 26 | 3.54 | 3.31 | 6.85 | 1.73 | 1.65 | 3.38 | 5.27 | 4.96 | 10.23 |
| | Large | 12 | 3.33 | 3.42 | 6.75 | 3.08 | 1.92 | 5.00 | 6.41 | 5.34 | 11.75 |
| | Total | 60 | 3.49 | 3.37 | 6.85 | 2.38 | 1.92 | 4.30 | 5.56 | 5.29 | 11.15 |
| Bannu | Small | 27 | 3.04 | 2.67 | 5.71 | 2.30 | 1.26 | 3.56 | 5.34 | 3.93 | 9.27 |
| | Medium | 27 | 3.59 | 3.37 | 6.96 | 2.30 | 1.70 | 4.00 | 5.89 | 5.07 | 10.96 |
| | Large | 10 | 2.70 | 3.30 | 6.00 | 2.10 | 1.80 | 3.90 | 4.80 | 5.10 | 9.90 |
| | Total | 64 | 3.22 | 3.06 | 6.28 | 2.27 | 1.53 | 3.80 | 5.49 | 4.59 | 10.08 |
| Total | Small | 113 | 3.04 | 2.89 | 5.93 | 2.06 | 1.60 | 3.66 | 5.10 | 4.49 | 9.59 |
| | Medium | 109 | 3.41 | 3.25 | 6.66 | 1.92 | 1.66 | 3.58 | 5.33 | 4.91 | 10.24 |
| | Large | 84 | 3.11 | 2.99 | 6.10 | 1.68 | 1.48 | 3.16 | 4.79 | 4.47 | 9.26 |
| | Total | 306 | 3.19 | 3.05 | 6.24 | 1.91 | 1.59 | 3.50 | 5.10 | 4.64 | 9.74 |

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APPENDIX III-2

%AGE SHARE OF AREA UNDER WHEAT IN THE TOTAL AREA OF DIFFERNET SIZES OF SAMPLE HOLDING OF EACH DISTRICT

CROP: WHEAT

| District | Farm Size | Number of Farmers | Average Cultivated Area/Farmer | Reference Crop | | Average Yield (Per Acre)(40 kg.) |
|---|---|---|---|---|---|---|
| | | | | Area | %age | |
| Jhang | Small | 27 | 10.52 | 7.02 | 66.73 | 21.14 |
| | Medium | 17 | 22.24 | 14.56 | 65.48 | 18.34 |
| | Large | 16 | 46.41 | 30.91 | 66.60 | 20.48 |
| | Total | 60 | 23.41 | 15.53 | 66.32 | 20.04 |
| Multan | Small | 14 | 7.98 | 6.68 | 83.67 | 18.06 |
| | Medium | 19 | 23.13 | 12.21 | 52.79 | 22.16 |
| | Large | 27 | 109.94 | 36.89 | 33.55 | 20.04 |
| | Total | 60 | 58.66 | 22.03 | 37.55 | 20.27 |
| Attock | Small | 23 | 11.85 | 8.33 | 70.28 | 10.88 |
| | Medium | 20 | 24.05 | 13.90 | 57.80 | 6.71 |
| | Large | 19 | 61.05 | 27.84 | 45.60 | 6.20 |
| | Total | 62 | 30.86 | 16.10 | 52.18 | 7.25 |
| Sub-Total | Small | 64 | 10.44 | 7.41 | 71.01 | 16.40 |
| | Medium | 56 | 23.19 | 13.53 | 58.34 | 15.25 |
| | Large | 62 | 78.56 | 32.57 | 41.46 | 16.52 |
| | Total | 182 | 37.57 | 17.87 | 47.55 | 16.20 |
| Nawabshah | Small | 22 | 10.41 | 5.39 | 51.75 | 23.91 |
| | Medium | 26 | 23.92 | 12.81 | 53.54 | 21.65 |
| | Large | 12 | 61.21 | 25.83 | 42.21 | 18.69 |
| | Total | 60 | 26.43 | 12.69 | 48.03 | 20.80 |
| Bannu | Small | 27 | 9.17 | 5.88 | 64.14 | 13.83 |
| | Medium | 27 | 20.90 | 10.61 | 50.78 | 10.66 |
| | Large | 10 | 62.78 | 18.88 | 30.07 | 13.42 |
| | Total | 64 | 22.49 | 9.91 | 44.04 | 12.27 |
| Total | Small | 113 | 10.13 | 6.65 | 65.67 | 11.44 |
| | Medium | 109 | 22.80 | 12.63 | 55.42 | 15.85 |
| | Large | 84 | 74.21 | 29.98 | 40.40 | 16.55 |
| | Total | 306 | 32.23 | 15.19 | 47.12 | 16.42 |

APPENDIX III-3

SHARE OF DIFFERENT USES OF TOTAL OUTPUT OF WHEAT BY SAMPLE GROWERS OF DIFFERENT SIZES FOR EACH DISTRICT

(Quantity 40 Kg.)

| istrict | Farm Size | Gross Production (40 Kg.) | Domestic Consumption | | Payment in Kind | | Kept for Seed | | Losses | | Total Quantity For Different Uses | | Quantity Marketed | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quantity | % | Quantity | % | Quantity | % | Quantity | % | Quantity | % | Quantity | % |
| hang | Small | 148.37 | 53.26 | 36 | 27.93 | 19 | 9.37 | 6 | - | - | 90.56 | 61 | 57.81 | 39 |
| | Medium | 267.09 | 88.18 | 32 | 47.35 | 18 | 20.85 | 8 | - | - | 155.89 | 58 | 111.21 | 42 |
| | Large | 633.00 | 112.00 | 18 | 70.19 | 11 | 33.69 | 5 | - | - | 215.89 | 34 | 417.13 | 66 |
| | Total | 311.24 | 78.82 | 25 | 44.70 | 14 | 18.97 | 6 | - | - | 142.49 | 45 | 168.76 | 55 |
| Multan | Small | 120.64 | 59.64 | 49 | 24.00 | 20 | 3.71 | 3 | - | - | 87.36 | 72 | 33.29 | 28 |
| | Medium | 270.61 | 82.21 | 30 | 73.05 | 27 | 4.42 | 2 | - | - | 159.69 | 59 | 110.92 | 41 |
| | Large | 739.11 | 140.44 | 19 | 206.19 | 28 | 24.30 | 3 | - | - | 370.93 | 50 | 368.19 | 50 |
| | Total | 446.44 | 103.15 | 23 | 121.52 | 27 | 13.20 | 3 | - | - | 237.87 | 53 | 208.58 | 47 |
| Attock | Small | 90.65 | 40.27 | 43 | 10.46 | 12 | 6.84 | 8 | - | - | 57.57 | 63 | 33.09 | 37 |
| | Medium | 93.80 | 39.00 | 42 | 11.50 | 12 | 13.00 | 14 | - | - | 63.50 | 68 | 30.30 | 32 |
| | Large | 172.53 | 44.47 | 26 | 32.11 | 19 | 24.89 | 14 | - | - | 101.47 | 59 | 71.05 | 41 |
| | Total | 116.76 | 41.15 | 35 | 17.43 | 15 | 14.36 | 12 | - | - | 72.94 | 62 | 43.82 | 38 |
| Sub-Total | Small | 121.56 | 49.99 | 41 | 23.79 | 17 | 7.22 | 6 | - | - | 78.00 | 64 | 43.56 | 36 |
| | Medium | 206.39 | 68.59 | 33 | 43.27 | 21 | 12.32 | 6 | - | - | 124.18 | 60 | 82.21 | 40 |
| | Large | 538.10 | 103.69 | 19 | 117.74 | 22 | 26.90 | 5 | - | - | 248.34 | 46 | 289.76 | 54 |
| | Total | 299.56 | 74.01 | 26 | 60.73 | 21 | 15.50 | 5 | - | - | 150.24 | 53 | 149.32 | 48 |
| Nawabshah | Small | 128.86 | 53.83 | 42 | 15.45 | 12 | 6.64 | 5 | - | - | 75.91 | 59 | 52.95 | 41 |
| | Medium | 277.31 | 74.23 | 27 | 54.42 | 20 | 17.54 | 6 | - | - | 146.19 | 53 | 131.12 | 47 |
| | Large | 482.67 | 97.09 | 20 | 81.67 | 17 | 54.00 | 11 | - | - | 232.75 | 48 | 249.92 | 52 |
| | Total | 263.95 | 71.32 | 27 | 45.58 | 17 | 20.83 | 8 | - | - | 137.73 | 52 | 126.22 | 48 |
| Bannu | Small | 81.32 | 37.57 | 46 | 20.56 | 25 | 4.70 | 6 | - | - | 62.84 | 77 | 18.48 | 23 |
| | Medium | 113.13 | 59.00 | 52 | 17.94 | 16 | 9.61 | 8 | - | - | 86.55 | 76 | 26.58 | 24 |
| | Large | 253.43 | 90.25 | 36 | 83.25 | 33 | 10.33 | 4 | - | - | 183.83 | 73 | 69.60 | 27 |
| | Total | 121.63 | 54.84 | 45 | 29.25 | 24 | 7.65 | 6 | - | - | 91.75 | 75 | 29.88 | 25 |
| Total | Small | 113.37 | 47.77 | 42 | 19.69 | 17 | 6.51 | 6 | - | - | 73.97 | 65 | 39.40 | 35 |
| | Medium | 200.21 | 67.56 | 34 | 39.65 | 20 | 12.89 | 6 | - | - | 120.11 | 60 | 80.10 | 40 |
| | Large | 496.29 | 101.15 | 20 | 109.48 | 22 | 25.80 | 6 | - | - | 238.43 | 48 | 257.86 | 52 |
| | Total | 249.42 | 69.47 | 27 | 51.18 | 21 | 14.90 | 6 | - | - | 135.55 | 54 | 113.87 | 46 |

APPENDIX III-4

PER CAPITA PER ANNUM CONSUMPTION OF WHEAT BY SAMPLE DISTRICTS

CROP: WHEAT

| District | Farm Size | Domestic Consumption (40 Kg.) | Average Household Size (Number) | Per Capita Consumption per annum (40 Kg.) |
|---|---|---|---|---|
| Jhang | Small | 53.26 | 9.51 | 5.60 |
| | Medium | 88.18 | 9.00 | 9.80 |
| | Large | 112.00 | 10.63 | 10.54 |
| | Total | 78.82 | 9.68 | 8.14 |
| Multan | Small | 59.64 | 11.00 | 5.42 |
| | Medium | 82.21 | 12.42 | 6.62 |
| | Large | 140.44 | 8.59 | 16.35 |
| | Total | 103.15 | 10.36 | 9.96 |
| Attock/ Chakwal | Small | 40.27 | 7.03 | 5.73 |
| | Medium | 39.00 | 8.25 | 4.73 |
| | Large | 44.47 | 7.11 | 6.25 |
| | Total | 41.15 | 7.46 | 5.52 |
| Sub-Total | Small | 49.99 | 8.95 | 5.59 |
| | Medium | 68.59 | 9.88 | 6.94 |
| | Large | 103.69 | 8.66 | 11.97 |
| | Total | 74.01 | 9.14 | 8.10 |
| Nawabshah | Small | 53.82 | 11.91 | 4.52 |
| | Medium | 74.23 | 10.23 | 7.26 |
| | Large | 97.08 | 11.75 | 8.26 |
| | Total | 71.32 | 11.15 | 6.40 |
| Bannu | Small | 37.57 | 9.27 | 4.05 |
| | Medium | 59.00 | 10.96 | 5.38 |
| | Large | 90.25 | 9.90 | 9.12 |
| | Total | 54.84 | 10.08 | 5.44 |
| Total | Small | 47.77 | 9.59 | 4.98 |
| | Medium | 67.56 | 10.24 | 6.60 |
| | Large | 101.15 | 9.26 | 10.92 |
| | Total | 69.47 | 9.74 | 7.13 |

APPENDIX III-5

PERCENTAGE CLASSIFICATION OF TOTAL WHEAT SOLD BY MONTH BY SAMPLE GROWERS OF DIFFERENT FARM SIZES AND AVERAGE MONTHLY SALE PRICES FOR EACH DISTRICT

CROP: WHEAT

| District | Farm Size | Percentage Qty. sold in different months: Feb. | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Average prices received (Per 40 kg): Feb. | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JHANG | Small | | - | 25 | 53 | 16 | - | - | - | - | - | - | 78.94 | 79.41 | 82.00 | - | - | - | - | 79.[illegible] |
| | Medium | | - | 12 | 86 | 2 | - | - | - | - | - | - | 77.64 | 79.22 | 83.00 | - | - | - | - | 79.[illegible] |
| | Large | | - | 51 | 31 | 18 | - | - | - | - | - | - | 78.43 | 78.26 | 80.35 | - | - | - | - | 78.[illegible] |
| | Total | | - | [illegible] | 45 | [illegible] | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | - | - | - | - | [illegible] |
| MULTAN | Small | | - | 100 | - | - | - | - | - | - | - | - | 78.70 | - | - | - | - | - | - | 78.[illegible] |
| | Medium | | - | 91 | - | 9 | - | - | - | - | - | - | 76.71 | - | 80.00 | - | - | - | - | 77.[illegible] |
| | Large | | - | 75 | - | 25 | - | - | - | - | - | 78.[illegible] | 78.63 | - | 81.57 | - | - | - | - | 79.[illegible] |
| | Total | | [illegible] | [illegible] | - | [illegible] | - | - | - | - | - | [illegible] | [illegible] | - | [illegible] | - | - | - | - | [illegible] |
| ATTOCK | Small | 25 | 19 | 19 | 37 | - | - | - | - | - | 85.00 | 78.55 | 80.05 | 80.85 | - | - | - | - | - | [illegible] |
| | Medium | | - | 95 | 5 | - | - | - | - | - | - | - | 79.93 | 85.00 | - | - | - | - | - | [illegible] |
| | Large | | - | 87 | 13 | - | - | - | - | - | - | 78.[illegible] | 80.14 | 81.05 | - | - | - | - | - | [illegible] |
| | Total | 7 | [illegible] | [illegible] | [illegible] | - | - | - | - | - | [illegible] | [illegible] | 80.07 | [illegible] | - | - | - | - | - | [illegible] |
| SUB-TOTAL | Small | 7 | [illegible] | 37 | 42 | 9 | - | - | - | - | 85.00 | 78.55 | 78.99 | 79.77 | 81.[illegible] | - | - | - | - | 80.[illegible] |
| | Medium | | | 59 | 36 | 5 | - | - | - | - | - | - | 77.47 | 79.32 | 80.39 | - | - | - | - | 78.[illegible] |
| | Large | | [illegible] | 63 | 12 | 15 | - | - | - | - | - | 78.30 | 78.71 | 78.48 | 81.[illegible] | - | - | - | - | 79.[illegible] |
| | Total | [illegible] | 4 | [illegible] | 20 | [illegible] | | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | [illegible] |
| NAWABSHAH | Small | | | 14 | 86 | - | - | - | - | - | | | 82.00 | 81.24 | | - | - | - | - | 81.[illegible] |
| | Medium | | - | 4 | 68 | 8 | - | - | - | - | - | - | 82.00 | 81.64 | | - | - | - | - | 81.[illegible] |
| | Large | | - | 10 | 79 | 11 | - | - | - | - | - | - | 82.00 | 81.22 | 82.00 | - | - | - | - | 81.[illegible] |
| | Total | | | 8 | 84 | 8 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | - | - | - | - | [illegible] |
| BANNU | Small | | 2 | 27 | 22 | 9 | - | - | 19 | 21 | - | 80.00 | 79.55 | 81.97 | 83.33 | - | - | 77.60 | 81.72 | 80.[illegible] |
| | Medium | | | 47 | 25 | - | 7 | 5 | - | 16 | - | - | 80.66 | 85.09 | - | 79.33 | 72.00 | - | 82.41 | 81.[illegible] |
| | Large | | [illegible] | 57 | 20 | 12 | 11 | - | | - | - | - | 85.31 | 96.54 | 70.00 | 90.5[illegible] | - | | - | [illegible] |
| | Total | | - | 46 | 22 | 7 | 6 | 2 | 5 | 11 | - | 80.00 | 82.61 | 87.39 | 74.53 | 88.[illegible] | 72.00 | 77.60 | 82.07 | 82.[illegible] |
| Total | Small | 4 | [illegible] | 30 | 52 | 7 | - | - | 2 | 2 | 85.00 | 78.81 | 79.42 | 80.53 | 82.20 | - | - | 77.60 | 81.72 | 80.[illegible] |
| | Medium | | - | 36 | 55 | 6 | 1 | - | - | 1 | - | - | 78.01 | 80.63 | 81.28 | 79.33 | 72.00 | - | 82.41 | 79.[illegible] |
| | Large | | 4 | 60 | 22 | [illegible] | - | - | - | - | - | 78.[illegible] | 78.99 | [illegible] | 80.8[illegible] | 90.5[illegible] | - | - | - | 79.[illegible] |
| | Total | [illegible] | [illegible] | 30 | 34 | [illegible] | - | - | - | 1 | 85.00 | 78.[illegible] | 78.84 | 80.70 | 80.9[illegible] | 88.[illegible] | 72.00 | 77.[illegible] | 82.07 | 78.[illegible] |

APPENDIX III-6

AVERAGE STORAGE CAPACITY CLASSIFIED BY TYPE FOR SAMPLE GROWERS OF EACH SAMPLE DISTRICT

CROP: WHEAT (40 Kg)

| District | Farm Size | Average Quantity Kept for Storage | Total Storage Capacity of all Types | %age of Storage Capacity Utilization for Wheat to Total Capacity | Standard Storage Capacity | | Sub-Standard Storage Capacity | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Capacity | %age of Total Capacity | Capacity | %age of Total Capacity |
| Jhang | Small | 62.63 | 61 | 103 | 3 | 5 | 58 | 95 |
| | Medium | 108.53 | 95 | 114 | 39 | 41 | 56 | 59 |
| | Large | 145.69 | 214 | 65 | 95 | 44 | 119 | 56 |
| | Total | 97.79 | 112 | 87 | 38 | 34 | 74 | 66 |
| Multan | Small | 63.35 | 60 | 106 | 27 | 45 | 33 | 55 |
| | Medium | 86.63 | 119 | 73 | 91 | 76 | 28 | 24 |
| | Large | 164.74 | 379 | 43 | 327 | 86 | 52 | 14 |
| | Total | 116.35 | 224 | 52 | 184 | 82 | 40 | 19 |
| Attock/ Chakwal | Small | 47.11 | 113 | 42 | 45 | 40 | 68 | 60 |
| | Medium | 52.00 | 109 | 48 | 44 | 40 | 65 | 60 |
| | Large | 69.36 | 142 | 49 | 76 | 54 | 66 | 46 |
| | Total | 55.51 | 120 | 46 | 54 | 45 | 66 | 55 |
| Sub-Total | Small | 57.21 | 79 | 72 | 23 | 29 | 56 | 71 |
| | Medium | 80.91 | 108 | 75 | 58 | 54 | 50 | 46 |
| | Large | 130.59 | 264 | 49 | 190 | 72 | 74 | 28 |
| | Total | 89.51 | 151 | 59 | 91 | 60 | 60 | 40 |
| Bannu | Small | 60.46 | 568 | 11 | 79 | 14 | 489 | 86 |
| | Medium | 91.87 | 936 | 10 | 302 | 32 | 634 | 68 |
| | Large | 151.08 | 873 | 17 | 798 | 91 | 77 | 9 |
| | Total | 92.15 | 768 | 12 | 344 | 44 | 442 | 56 |

APPENDIX III-6

CROP : WHEAT

| District | Farm Size | Average Quantity Kept for Storage | Total Storage Capacity of all Type | %age of Storage Capacity Utilization for Wheat to Total Capacity | 1/Standard Storage Capacity | | 2/Sub-Standard Storage Capacity | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Capacity | %age of Total Capacity | Capacity | %age of Total Capacity |
| Bannu | Small | 42.37 | 62 | 68 | 5 | 8 | 57 | 92 |
| | Medium | 69.61 | 96 | 72 | 27 | 28 | 69 | 71 |
| | Large | 100.58 | 85 | 118 | 44 | 52 | 41 | 48 |
| | Total | 62.49 | 80 | 79 | 25 | 25 | 67 | [illegible] |
| Total | Small | 54.28 | 174 | 31 | 37 | 17 | 144 | 83 |
| | Medium | 80.15 | 279 | 29 | 101 | 36 | 178 | 64 |
| | Large | 129.95 | 347 | 37 | 278 | 80 | 69 | 21 |
| | Total | 84.37 | 260 | 32 | 125 | 45 | 14 | 5 |

1. Pacca room, pacca Bhorola, and Drum/Box
2. Katcha Room, Katcha Bhorola and other

APPENDIX III-7

MARKETING CHANNELS FOR SAMPLE GROWERS OF EACH DISTRICT

( % AGE ) CROP: WHEAT

| District | Farm Size | Local Sales | Shopkeeper | Village Beopari | Pacca Arhatti | Katcha Arhatti | Kachna/ Pacca Arhatti | Food Deptt. |
|---|---|---|---|---|---|---|---|---|
| Jhang | Small | – | – | 53 | – | 47 | | – |
| | Medium | – | – | 43 | – | 57 | | 1 |
| | Large | – | – | 39 | 29 | 32 | | – |
| | Total | – | – | 41 | 20 | 39 | | – |
| Multan | Small | 1 | | 99 | | | | – |
| | Medium | 17 | | 83 | | | | – |
| | Large | 12 | | 55 | | | | 33 |
| | Total | 12 | | 62 | | | | 26 |
| Attock | Small | 97 | | 3 | | | | |
| | Medium | 100 | | – | | | | |
| | Large | 100 | | – | | | | |
| | Total | 99 | | 1 | | | | |
| Sub Total | Small | 27 | | 47 | – | 26 | | – |
| | Medium | 21 | | 55 | – | 23 | | 1 |
| | Large | 14 | | 45 | 11 | 12 | | 18 |
| | Total | 17 | | 47 | 8 | 15 | | 13 |
| Nawabshah | Small | – | – | – | | | 59 | 41 |
| | Medium | | 3 | – | | | 39 | 58 |
| | Large | – | – | 10 | | | 8 | 82 |
| | Total | – | 1 | 5 | | | 28 | 66 |
| Bannue | Small | 39 | 1 | 3 | | 57 | – | – |
| | Medium | 55 | – | – | | 45 | – | – |
| | Large | 3 | 17 | – | | 80 | – | – |
| | Total | 32 | 6 | 1 | | 61 | – | – |
| Total | Small | 21 | – | 30 | – | 23 | 15 | 11 |
| | Medium | 19 | 1 | 23 | – | 18 | 15 | 25 |
| | Large | 12 | 1 | 37 | 9 | 12 | 1 | 28 |
| | Total | 14 | 1 | 33 | 6 | 15 | 6 | 25 |

TABLE III.8

CLASSIFICATION OF MARKETING COSTS OF GROWERS FOR SALES TO DIFFERENT FUNCTIONARIES AND THE FARM GATE PRICES

WHEAT

| Province | Farm Size | PACCA ARHATI | | | | | | | | | | KATCHA ARHATI | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE | | | | | | | Farm Gate Price | Average Marketing Price | Marketing Cost | %AGE OF MARKETING COST | | | | | | | Farm Gate Price |
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Jhang | Small | - | - | - | - | - | - | - | - | - | - | 160.43 | 3.55 | - | - | - | 71 | 29 | - | 100 | 75.88 |
| | Medium | - | - | - | - | - | - | - | - | - | - | 160.05 | 3.18 | - | - | - | 31 | 32 | 37 | 100 | 76.9 |
| | Large | 177.00 | 3.69 | 16 | 38 | - | 32 | 8 | - | 100 | 73.31 | 175.67 | 4.70 | - | - | - | 20 | 23 | 57 | 100 | 73.9 |
| | Total | 177.00 | 3.69 | 16 | 38 | - | 32 | 8 | - | 100 | 73.31 | 179.33 | 3.75 | - | - | - | 26 | 26 | 48 | 100 | 75.55 |
| Multan | Small | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Medium | - | - | - | - | - | - | - | - | - | - | - | | - | - | - | - | - | - | - | - |
| | Large | - | - | - | | - | - | - | | - | - | - | | - | - | - | - | - | - | - | - |
| | Total | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Attock | Small | - | - | - | - | - | - | - | - | - | - | - | | - | - | - | - | - | - | - | - |
| | Medium | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Large | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Total | - | - | - | - | | - | - | - | | - | - | - | - | - | - | - | - | - | - | - |
| Punjab | Small | - | - | - | - | - | - | - | - | - | - | 160.43 | 1.55 | - | - | - | - | - | - | - | - |
| | Medium | - | - | - | - | - | - | - | - | - | - | 160.05 | 3.18 | - | - | - | 71 | 29 | - | 100 | 75.88 |
| | Large | 177.00 | 3.69 | 16 | 38 | - | 32 | 8 | 6 | 100 | 73.31 | 175.67 | 4.70 | - | - | - | 31 | 32 | 37 | 100 | 76.9 |
| | Total | 177.00 | 3.69 | 16 | 38 | - | 32 | 8 | 6 | 100 | 73.31 | 179.33 | 3.75 | - | - | - | 20 | 23 | 57 | 100 | 73.9 |
| | | | | | | | | | | | | | | | | | 26 | 26 | 48 | 100 | 75.55 |

1. Preparation Charges 2. Transportation Charges 3. Octroi 4. Commission 5. Paladari, Weighmen & Chuger 6. Cost of Deduction 7. Total

416

WHEAT

| Province | Farm Size | KATCHA/PACCA ARHATI: Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE: 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price | FOOD DEPARTMENT: Average Marketing Price | Marketing Cost | %AGE OF MARKETING COST: 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jhang | Small | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | 83.00 | 3.00 | – | 67 | – | – | 33 | – | 100 | 180.00 |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | – | – | – | – | 83.00 | 3.00 | – | 67 | – | – | 33 | – | 100 | 180.00 |
| Multan | Small | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | 82.00 | 3.10 | – | 19 | – | – | – | 81 | 100 | 178.9[illegible] |
| | Total | – | – | – | – | – | – | – | – | – | – | 82.00 | 3.10 | – | 19 | – | – | – | 81 | 100 | 179.93 |
| Attock | Small | – | – | – | – | – | – | – | – | – | – | – | – | – | | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Punjab | Small | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | 83.00 | 3.00 | – | 67 | – | – | 33 | – | 100 | 180.00 |
| | Large | – | – | – | – | – | – | – | – | – | – | 82.30 | 3.10 | – | 19 | – | – | – | 81 | 100 | 179.93 |
| | Total | – | – | – | – | – | – | – | – | – | – | 82.00 | 3.08 | – | 21 | – | – | – | 79 | 100 | 179.12 |

1. Preparation Charges 2. Transportation Charges 3. Octroi 4. Commission 5. Paladari, Weighmen & Changer 6. Cost of Deduction 7. Total

WHEAT

PACCA ARHATI

| Province | Farm Size | Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price |
|---|---|---|---|---|---|---|---|---|---|---|---|
| vab-th | Small | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | – | – | – | – |
| [illegible] | Small | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | – | – | – | – |
| is- | Small | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – |
| | Large | 77.00 | 3.69 | 16 | 38 | – | 32 | 8 | 6 | 100 | 73.31 |
| | Medium | 77.00 | 3.69 | 16 | 38 | – | 32 | 8 | 6 | 100 | 73.31 |

KATCHA ARHATI

| Province | Farm Size | Average Marketing Price | Marketing Cost | %AGE OF MARKETING COST 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price |
|---|---|---|---|---|---|---|---|---|---|---|---|
| vab-th | Small | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | – | – | – | – |
| [illegible] | Small | 80.92 | 6.73 | – | 31 | – | 43 | 23 | 3 | 100 | 74.10 |
| | Medium | 81.77 | 6.00 | – | 33 | – | 38 | 23 | 6 | 100 | 75.77 |
| | Large | 55.86 | 7.24 | – | 38 | – | 35 | 17 | 10 | 100 | 51.82 |
| | Total | 56.21 | 6.95 | – | 36 | – | 37 | 18 | 9 | 100 | 79.26 |
| is- | Small | 80.51 | 3.18 | – | 16 | – | 56 | 26 | 2 | 100 | 77.33 |
| | Medium | 80.37 | 3.79 | – | 9 | – | 32 | 25 | 34 | 100 | 76.58 |
| | Large | 80.78 | 4.03 | – | 14 | – | 27 | 26 | 33 | 100 | 76.75 |
| | Medium | 80.44 | 3.95 | – | 10 | – | 31 | 26 | 33 | 100 | 76.49 |

1. Preparation Charges 2. Transportation Charges 3. Octroi 4. Commission 5. Paladari, Weighmen & Charger 6. Cost of Deduction 7. Total

WHEAT

| Province | Farm Size | KATCHA PACCA ARHATI: Average Marketing Price | Marketing Cost | %age of Marketing Price: 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price | FOOD DEPARTMENT: Average Marketing Price | Marketing Cost | %age of Marketing Cost: 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | Small | 81.77 | 5.03 | – | 37 | 9 | 54 | – | – | 100 | 76.72 | 82.00 | [illegible] | 45 | 41 | [illegible] | – | – | – | [illegible] | [illegible] |
| | Medium | 81.83 | 5.19 | – | 40 | 10 | 50 | – | – | 100 | 76.64 | 82.00 | [illegible] | 45 | 41 | [illegible] | – | [illegible] | – | [illegible] | [illegible] |
| | Large | 81.94 | 4.71 | – | 39 | 9 | 52 | – | – | 100 | 76.23 | 82.00 | [illegible] | – | 74 | 26 | – | – | – | [illegible] | [illegible] |
| | Total | 81.52 | 5.06 | – | 39 | 9 | 52 | – | – | 100 | 76.46 | 82.00 | [illegible] | 27 | 54 | 19 | – | – | – | [illegible] | [illegible] |
| [illegible] | Small | – | – | – | – | – | – | | – | – | – | – | – | – | – | [illegible] | – | – | – | [illegible] | [illegible] |
| | Medium | – | – | – | – | – | – | | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| [illegible] | Small | 81.77 | 5.03 | – | 37 | 9 | 54 | – | – | 100 | 76.72 | 82.00 | [illegible] | 45 | 41 | [illegible] | – | – | – | – | – |
| | Medium | 81.83 | 5.19 | – | 40 | 10 | 50 | – | – | 100 | 76.64 | 82.00 | [illegible] | 50 | 26 | [illegible] | – | – | – | [illegible] | [illegible] |
| | Large | 81.94 | 4.71 | – | 39 | 9 | 52 | – | – | 100 | 76.23 | 82.00 | 2.75 | – | 25 | 3 | – | – | – | [illegible] | [illegible] |
| | Total | 81.52 | 5.06 | – | 39 | 9 | 52 | – | – | 100 | 76.46 | 82.00 | [illegible] | 33 | 31 | 6 | – | – | [illegible] | [illegible] | [illegible] |

TABLE III-9

PERCENTAGE CLASSIFICATION OF QUANTITIES TRANSPORTED BY DIFFERENT MODE FOR SAMPLE GROWERS OF DIFFERENT FARM SIZE FOR EACH PROVINCE

| | Farm Size | Tractor/Trolley | | Truck | | Bullocks/ Camel Carts | | Horse Drawn Carts | | Pack Animal | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. |
| Jhang | Small | – | – | – | – | 88 | 43 | – | – | 12 | 57 | 100 | 100 |
| | Medium | – | – | 29 | 13 | 42 | 52 | – | – | 29 | 35 | 100 | 100 |
| | Large | 33 | 20 | – | – | 34 | 72 | – | – | 33 | 8 | 100 | 100 |
| | Total | 6 | 11 | 11 | 4 | 61 | 62 | – | – | 22 | 23 | 100 | 100 |
| Multan | Small | – | – | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | 50 | 67 | 50 | 33 | – | – | 100 | 100 |
| | Large | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| | Total | 60 | 88 | – | – | 20 | 8 | 20 | 4 | – | – | 100 | 100 |
| Attock | Small | – | – | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | – | – | | – | – | – |
| Punjab | Small | – | – | – | – | 88 | 43 | – | – | 12 | 57 | 100 | 100 |
| | Medium | – | – | 22 | 11 | 45 | 42 | 11 | 17 | 22 | 30 | 100 | 100 |
| | Large | 66 | 68 | – | – | 17 | 29 | – | – | 17 | 3 | 100 | 100 |
| | Total | 17 | 50 | 9 | 2 | 52 | 33 | 5 | 3 | 17 | 12 | 100 | 100 |

TABLE III.9 (Contd.)

RELATIVE SHARES OF DIFFERENT MODES IN THE TRANSPORTATION OF PRODUCE BY SAMPLE GROWERS

| | Farm Size | Tractor/Trolley | | Truck | | Bullocks/ Camel Carts | | Horse Drawn Carts | | Pack Animal | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. |
| Nawabshah | Small | 14 | 49 | – | – | 86 | 51 | – | – | – | – | 100 | 100 |
| | Medium | 29 | 37 | 4 | 26 | 67 | 37 | – | – | – | – | 100 | 100 |
| | Large | 64 | 80 | – | – | 36 | 20 | – | – | – | – | 100 | 100 |
| | Total | 30 | 60 | 2 | 10 | 68 | 30 | – | – | – | – | 100 | 100 |
| Bannu | Small | 6 | 31 | 27 | 24 | – | – | 40 | 24 | 27 | 21 | 100 | 100 |
| | Medium | – | – | 62 | 34 | – | – | 15 | 9 | 23 | 57 | 100 | 100 |
| | Large | – | – | 100 | 100 | – | – | – | – | – | – | 100 | 100 |
| | Total | 3 | 12 | 53 | 46 | – | – | 24 | 13 | 20 | 29 | 100 | 100 |
| Pakistan | Small | 9 | 26 | 9 | 12 | 58 | 33 | 13 | 11 | 11 | 18 | 100 | 100 |
| | Medium | 15 | 35 | 24 | 9 | 43 | 34 | 7 | 6 | 11 | 16 | 100 | 100 |
| | Large | 48 | 70 | 26 | 6 | 22 | 19 | – | – | 4 | 5 | 100 | 100 |
| | Total | 19 | 55 | 18 | 7 | 45 | 25 | 8 | 3 | 10 | 10 | 100 | 100 |

## APPENDIX III-10

### AVERAGE TRANSPORTATION COST OF DIFFERENT MODES FOR SAMPLE GROWERS OF DIFFERENT FARM SIZES FOR EACH SAMPLE DISTRICT.

RS./40 Kg./Km. CROP: WHEAT

| District | Farm Size | Tractor Trolley | Truck | Bullock/Camel Cart | Rehra | Pack Animals |
|---|---|---|---|---|---|---|
| Jhang | Small | | | 0.15 | | 0.01 |
| | Medium | | 0.21 | 0.14 | | 0.12 |
| | Large | 0.04 | – | 0.20 | | 0.20 |
| | Total | 0.04 | 0.21 | 0.16 | | 0.13 |
| Multan Attock [illegible] | Small | | | – | | – |
| | Medium | | | 0.13 | 0.13 | – |
| | Large | 0.04 | | | – | – |
| | Total | 0.04 | | 0.13 | 0.13 | – |
| Sub-Total | Small | | | 0.15 | | 0.01 |
| | Medium | | 0.21 | 0.12 | 0.13 | 0.12 |
| | Large | 0.04 | – | 0.20 | – | 0.20 |
| | Total | 0.04 | 0.21 | 0.15 | 0.13 | 0.13 |
| Nawabshah | Small | 0.20 | 0.17 | 0.20 | | – |
| | Medium | 0.17 | 0.17 | 0.21 | | – |
| | Large | 0.14 | – | 0.18 | | – |
| | Total | 0.15 | 0.17 | 0.20 | | – |
| Bannu | Small | 0.17 | 0.20 | | 0.16 | 0.25 |
| | Medium | – | 0.17 | | 0.17 | 0.25 |
| | Large | – | 0.23 | | – | – |
| | Total | 0.17 | 0.20 | | 0.16 | 0.25 |
| Total | Small | 0.17 | 0.20 | 0.17 | 0.16 | 0.16 |
| | Medium | 0.17 | 0.15 | 0.16 | 0.15 | 0.17 |
| | Large | 0.08 | 0.23 | 0.19 | – | 0.20 |
| | Total | 0.10 | 0.19 | 0.17 | 0.15 | 0.17 |



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TABLE III-11

OPERATING COSTS OF SECOND STAGE MARKET ACTORS

Rs./40 Kg.

| Province | Market Actor | Labour | Rent | Packing Cost | Total |
|---|---|---|---|---|---|
| Punjab | Village Beopari | 0.16 | 0.02 | - | 0.18 |
| | Katcha Arhati | 0.53 | 0.63 | - | 1.16 |
| | Pacca Arhati | 0.12 | 0.09 | 0.11 | 0.32 |
| Sindh | Village Beopari | - | - | - | - |
| | Katcha Arhati | - | - | - | - |
| | Pacca Arhati | 0.68 | - | 0.09 | 0.77 |
| NWFP | Village Beopari | - | - | - | - |
| | Katcha Arhati | 0.49 | 0.70 | - | 1.19 |
| | Pacca Arhati | - | - | - | - |
| Pakistan | Village Beopari | 0.16 | 0.02 | - | 0.18 |
| | Katcha Arhati | 0.52 | 0.65 | - | 1.17 |
| | Pacca Arhati | 0.14 | 0.09 | 0.11 | 0.34 |

TABLE III-12

AVERAGE STORAGE COST FOR DIFFERENT TYPES OF ACTORS

WHEAT

| Province | Type of Actor | Average Storage Period (days) | Average Storage Cost/Rs./Month/ 40. Kg. | Average Storage Cost (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | - | - | - |
| | Katcha Arhati | 8 | 0.38 | 0.10 |
| | Pacca Arhati | 4 | 0.18 | 0.02 |
| Sind | Village Beopari | - | - | - |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 3 | 0.33 | 0.03 |
| N.W.F.P. | Village Beopari | - | - | - |
| | Katcha Arhati | 12 | 0.49 | 0.19 |
| | Pacca Arhati | - | - | - |
| Pakistan | Village Beopari | - | - | - |
| | Katcha Arhati | 9 | 0.42 | 0.13 |
| | Pacca Arhati | 3 | 0.24 | 0.02 |

TABLE III-13

AVERAGE TRANSPORTATION COST FOR DIFFERENT MODES FOR SECOND STAGE MARKET ACTORS

WHEAT

Rs./40 Kg./Km.

| | | MODE OF TRANSPORTATION | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Rail | Truck | Tractor/ Trolley | Bullocks Carts | Pack Animal | Any Other | Total |
| Punjab | Village Beopari | – | 0.03 | – | – | – | – | 0.03 |
| | Katcha Arhati | 0.05 | – | – | – | – | – | 0.05 |
| | Pacca Arhati | – | 0.03 | – | – | – | – | 0.03 |
| Sind | Village Beopari | – | – | – | – | – | – | – |
| | Katcha Arhti | – | – | – | – | – | – | – |
| | Pacca Arhti | – | 0.04 | 0.10 | – | – | – | 0.07 |
| N.W.F.P. | Village Beopari | – | – | – | – | – | – | – |
| | Katcha Arhti | – | – | 0.11 | – | – | – | 0.11 |
| | Pacca Arhti | – | – | – | – | – | – | – |
| Pakistan | Village Beopari | – | 0.03 | – | – | – | – | 0.03 |
| | Katcha Arhti | 0.05 | – | 0.11 | – | – | – | 0.07 |
| | Pacca Arhti | – | 0.03 | 0.10 | – | – | – | 0.07 |

TABLE III-14

AVERAGE TRANSPORTATION COST FOR DIFFERENT TYPES OF SECOND STAGE ACTORS

WHEAT

| Province | Type of Actor | Average Distance (Km.) | Average Transportation Cost Per Km./40 Kg (Rs.) | Average Transportation Cost (Rs./40 Kg.) |
|---|---|---|---|---|
| Punjab | Village Beopari | 1.00 | 0.03 | 0.03 |
| | Katcha Arhati | | | |
| | Pacca Arhati | 1.33 | 0.03 | 0.04 |
| Sind | Village Beopari | - | - | - |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.92 | 0.07 | 0.06 |
| N.W.F.P. | Village Beopari | - | - | - |
| | Katcha Arhati | | | |
| | Pacca Arhati | - | - | - |
| Pakistan | Village Beopari | 1.00 | 0.03 | 0.03 |
| | Katcha Arhati | | | |
| | Pacca Arhati | 1.28 | 0.03 | 0.04 |



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TABLE III-15

AVERAGE LOSSES FOR DIFFERENT TYPES OF ACTORS

WHEAT

| Province | Type of Actor | Average Quantity of Losses (KG.) | Average %age of Losses (%) | Average Cost of Losses (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | 0.008 | 0.02 | 0.01 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.016 | 0.04 | 0.03 |
| Sind | Village Beopari | - | - | - |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.012 | 0.03 | 0.02 |
| N.W.F.P. | Village Beopari | - | - | - |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | - | - | - |
| Pakistan | Village Beopari | 0.008 | 0.02 | 0.01 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.016 | 0.04 | 0.03 |



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APPENDIX III-16

CHARACTERISTICS OF PROCESSORS OF WHEAT

| | Punjab | | Sind | | NWFP | |
|---|---|---|---|---|---|---|
| | Modern | Chakki | Modern | Chakki | Modern | Chakki |
| 1. Capacity Utilization (%) | 59 | - | 32 | - | 50 | - |
| 2. Detailed of Fixed Assets (Rupees) | | | | | | |
| - Land | 161900 | 9800 | 193266 | 30000 | 20000 | - |
| - Building | 486208 | 12000 | 2559594 | 5000 | 2454929 | - |
| - Machinery | 1022406 | 14500 | 3901535 | 20000 | 3414277 | - |
| - Other fixed assets | 171308 | - | 7650 | - | 90028 | - |
| Total | 1841822 | 36300 | 6662045 | 55000 | 5979234 | - |
| 3. Wheat Milled On Different Account (%) | | | | | | |
| - On Own Account | 76 | - | 100 | 25 | 100 | - |
| - On Government Account | 24 | - | - | - | - | - |
| - For Other | - | 100 | - | 75 | - | - |
| 4. Recovery Ratio (%) | | | | | | |
| - Atta | 68 | 100 | 80 | 100 | 98 | - |
| - Maida | 15 | - | 6 | - | - | - |
| - Fines | - | - | - | - | - | - |
| - Suji | 10 | - | 6 | - | - | - |
| - Bran | 5 | - | 5 | - | 2 | - |
| - Pefraction | 2 | - | 3 | - | - | - |



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TABLE III-17

DETAILS OF OPERATING COSTS OF SAMPLE WHOLESALERS AND RETAILERS

(Rs./40 Kg.)

| PROVINCE | WHOLESALERS | | | | | | | RETAILERS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Labour | Shop Rent | Electricity | Telephone | Taxes | Others | Total | Labour | Shop Rent | Electricity | Telephone | Taxes | Others | Total |
| jab | 0.38 | 0.26 | 0.03 | - | 0.03 | - | 0.72 | 0.34 | 0.10 | 0.03 | - | 0.03 | - | 0.50 |
| d | 0.06 | 0.20 | 0.01 | 0.10 | 0.03 | 0.08 | 0.45 | 0.90 | 0.22 | 0.05 | 0.06 | 0.10 | - | 1.33 |
| | - | 0.25 | 0.02 | 0.11 | 0.02 | 0.10 | 0.50 | 0.55 | 0.37 | 0.09 | 0.09 | 0.38 | 0.12 | 1.60 |
| stan | 0.10 | 0.22 | 0.02 | 0.09 | 0.03 | 0.07 | 0.53 | 0.61 | 0.19 | 0.05 | 0.04 | 0.06 | 0.02 | 0.97 |

TABLE III-18

FARM GATE PRICES AND MARKETING MARGINS FOR DIFFERENT MARKETING CHANNELS - WHEAT

RS./40 Kg.

| | PUNJAB | | | | | SIND | | NWFP |
|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII | VIII |
| **A. Farmer** | | | | | | | | |
| - Farm Gate Price | 76.56 | 75.58 | 73.31 | 73.31 | 78.92 | 76.46 | 79.90 | 79.26 |
| - Cost | | | | | | | | |
| o Preparation Charges | - | - | 0.59 | 0.59 | - | - | 0.57 | - |
| o Transportation Charges | | - | 1.40 | 1.40 | 0.65 | 1.97 | 1.13 | 2.50 |
| o Octroi | - | - | - | - | - | 0.46 | 0.40 | - |
| o Commission | - | 0.98 | 1.18 | 1.18 | - | 2.63 | - | 2.57 |
| o Miscellaneous Cost | - | 0.97 | 0.30 | 0.30 | - | - | - | 1.25 |
| o Cost of Deduction | - | 1.80 | 0.22 | 0.22 | 2.43 | - | - | 0.63 |
| o Total Cost | - | 3.75 | 3.69 | 3.69 | 3.08 | 5.06 | 2.10 | 6.95 |
| o Marketing Price | 76.56 | 79.33 | 77.00 | 77.00 | 82.00 | 81.52 | 82.00 | 86.21 |
| **B. Village Beopari** | | | | | | | | |
| - Sale Price | 82.00 | - | - | - | - | - | - | - |
| - Purchase Price | 76.56 | - | - | - | - | - | - | - |
| - Gross Margin | 5.44 | - | - | - | - | - | - | - |
| - Cost | | | | | | | | |
| o Labour Cost | 0.16 | - | - | - | - | - | - | - |
| o Shop Rent | 0.02 | - | - | - | - | - | - | - |
| o Packing Cost | - | - | - | - | - | - | - | - |
| o Storage Cost | - | - | - | - | - | - | - | - |
| o Losses | 0.01 | - | - | - | - | - | - | - |
| o Transportation Cost | 0.03 | - | - | - | - | - | - | - |
| o Credit cost | - | - | - | - | - | - | - | - |
| o Other Cost | - | - | - | - | - | - | - | - |
| o Total Cost | 0.22 | - | - | - | - | - | - | - |
| - Net Margin | 5.22 | - | - | - | - | - | | - |
| **C. Katcha Arhati** | | | | | | | | |
| - Sale Price | - | 82.00 | - | - | - | - | - | 93.00 |
| - Purchase Price | - | 79.33 | - | - | - | - | - | 86.21 |
| - Gross Margin | - | 2.67 | - | - | - | - | - | 6.79 |
| - Cost | | | | | | | | |
| o Labour Cost | - | 0.53 | - | - | - | - | - | 0.49 |
| o Shop Rent | - | 0.63 | - | - | - | - | - | 0.70 |
| o Packing Cost | - | - | - | - | - | - | - | - |
| o Storage Cost | - | 0.10 | - | - | - | - | - | 0.19 |
| o Losses | - | - | - | - | - | - | - | - |
| o Transportation Cost | - | - | - | - | - | - | - | - |
| o Credit cost | - | - | - | - | - | - | - | 0.09 |
| o Other Cost | - | 0.08 | - | - | - | - | - | 0.18 |
| o Total Cost | - | 1.34 | - | - | - | - | - | 1.65 |
| - Net Margin | - | 1.33 | - | - | - | - | - | 5.14 |

| | PUNJAB | | | | | SIND | | NWFP |
|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII | VIII |
| **Pacca Arhati** | | | | | | | | |
| – Sale Price | – | – | 82.00 | 84.00 | – | 85.00 | – | – |
| – Purchase Price | – | – | 77.00 | 77.00 | – | 81.52 | – | – |
| – Gross Margin | – | – | 5.00 | 7.00 | – | 3.48 | – | – |
| o Labour Cost | – | – | 0.12 | 0.12 | – | 0.68 | – | – |
| o Shop Rent | – | – | 0.09 | 0.09 | – | – | – | – |
| o Packing Cost | – | – | 0.11 | 0.11 | – | 0.09 | – | – |
| o Storage Cost | – | – | 0.02 | 0.02 | – | 0.03 | – | – |
| o Losses | – | – | 0.03 | 0.03 | – | 0.02 | – | – |
| o Transportation Cost | – | – | 0.04 | 0.04 | – | 0.06 | – | – |
| o Credit cost | – | – | 0.04 | 0.04 | – | – | – | – |
| o Other Cost | – | – | 0.04 | 0.04 | – | 0.04 | – | – |
| o Total Cost | – | – | 0.49 | 0.49 | – | 0.92 | – | – |
| Net Margin | – | – | 4.51 | 6.51 | – | 2.56 | – | – |
| **E. Food Department/Passco** | | | | | | | | |
| – Sale Price | 82.00 | 82.00 | 82.00 | – | 82.00 | – | 82.00 | – |
| – Purchase Price | 82.00 | 82.00 | 82.00 | – | 82.00 | – | 82.00 | – |
| o Packing Cost | 6.73 | 6.73 | 6.73 | – | 6.73 | – | 6.73 | – |
| o Delivery Cost | 0.42 | 0.42 | 0.42 | – | 0.42 | – | 0.42 | – |
| o Bank Commission | 0.32 | 0.32 | 0.32 | – | 0.32 | – | 0.32 | – |
| o Taxes and Duties | 0.32 | 0.32 | 0.32 | – | 0.32 | – | 0.32 | – |
| o Transportation | 3.67 | 3.67 | 3.67 | – | 3.67 | – | 3.67 | – |
| o Handling Charges | 0.73 | 0.73 | 0.73 | – | 0.73 | – | 0.73 | – |
| o Godown Expenses | 0.51 | 0.51 | 0.51 | – | 0.51 | – | 0.51 | – |
| o Storage and Unforeseen Expenses | 0.04 | 0.04 | 0.04 | – | 0.04 | – | 0.04 | – |
| o Storage Surcharge | 0.24 | 0.24 | 0.24 | – | 0.24 | – | 0.24 | – |
| o Departmental Charges | 1.02 | 1.02 | 1.02 | – | 1.02 | – | 1.02 | – |
| o Interest | 9.01 | 9.01 | 9.01 | – | 9.01 | – | 9.01 | – |
| o Total Cost | 23.01 | 23.01 | 23.01 | – | 23.01 | – | 23.01 | – |
| – Net Margin | (23.01) | (23.01) | (23.01) | – | (23.01) | – | (23.01) | – |



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| | PUNJAB | | | | | SIND | | NWFP |
|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII | VIII |
| **F. Processors** | | | | | | | | |
| - Purchase Price | 82.00 | 82.00 | 82.00 | 84.00 | 82.00 | 85.00 | 82.00 | 93.00 |
| - Sale Price | 62.02 | 62.02 | 62.02 | 62.02 | 62.02 | 86.00* | 86.00* | 97.89** |
| o Atta (27.20) Kg. | 19.22 | 19.22 | 19.22 | 19.22 | 19.22 | 7.37* | 7.37* | - |
| o Maida (6.10) Kg. | 11.60 | 11.60 | 11.60 | 11.60 | 11.60 | 6.94* | 6.94* | - |
| o Suji (4.00) Kg. | | | | | | | | |
| Total: | 92.84 | 92.84 | 92.84 | 92.84 | 92.84 | 100.31 | 100.31 | 97.89 |
| - Gross Margin | 10.84 | 10.84 | 10.84 | 8.84 | 10.84 | 15.31 | 18.31 | 4.89 |
| - Cost | | | | | | | | |
| o Direct Cost | 3.20 | 3.20 | 3.20 | 3.20 | 3.20 | 3.60 | 3.60 | 3.12 |
| o Fixed Cost | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.80 |
| o Financial Cost | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | - | - | - |
| o Depreciation | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.27 | 0.27 | 0.10 |
| o Transportation Cost | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.36 | 0.36 | - |
| o Storage Cost | - | - | - | - | - | 0.08 | 0.08 | - |
| o Other Cost | - | - | - | - | - | - | - | - |
| o Total Cost | 4.92 | 4.92 | 4.92 | 4.92 | 4.92 | 5.05 | 5.05 | 4.02 |
| o Less Cost of By-Products | 2.89 | 2.89 | 2.89 | 2.89 | 2.89 | 4.52 | 4.52 | 1.05 |
| - Net Cost | 2.03 | 2.03 | 2.03 | 2.03 | 2.03 | 0.53 | 0.53 | 2.97 |
| - Net Margin | 8.81 | 8.81 | 8.81 | 6.81 | 8.81 | 14.78 | 17.78 | 1.92 |
| **G. Wholesaler** | | | | | | | | |
| - Sale Price | | | | | | | | |
| o Atta | 70.18 | 70.18 | 70.18 | 70.18 | 70.18 | 89.90 | 89.90 | 109.07 |
| o Maida | 20.31 | 20.31 | 20.31 | 20.31 | 20.31 | 9.72 | 9.72 | - |
| o Suji | 13.64 | 13.64 | 13.64 | 13.64 | 13.64 | 9.15 | 9.15 | - |
| Total: | 104.13 | 104.13 | 104.13 | 104.13 | 104.13 | 108.77 | 108.77 | 109.07 |
| - Purchase Price | | | | | | | | |
| o Atta | 62.02 | 62.02 | 62.02 | 62.02 | 62.02 | 86.00 | 86.00 | 97.89 |
| o Maida | 19.22 | 19.22 | 19.22 | 19.22 | 19.22 | 7.37 | 7.37 | - |
| o Suji | 11.60 | 11.60 | 11.60 | 11.60 | 11.60 | 6.94 | 6.94 | - |
| Total: | 92.84 | 92.84 | 92.84 | 92.84 | 92.84 | 100.31 | 100.31 | 97.89 |

* Atta 32 Kg., Maida 2.4 Kg., Suji 2.4 Kg.
** Atta 39 Kg.

| | PUNJAB | | | | | SIND | | NWFP |
|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII | VIII |
| - Gross Margin | 11.29 | 11.29 | 11.29 | 11.29 | 11.29 | 8.46 | 8.46 | 11.18 |
| - Cost | | | | | | | | |
| o Hired Labour | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.06 | 0.06 | - |
| o Shop Rent | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.20 | 0.20 | 0.25 |
| o Electricity | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.01 | 0.01 | 0.02 |
| o Telephone | - | - | - | - | -- | 0.10 | 0.10 | 0.11 |
| o Tax | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 |
| o Other Cost | - | - | - | - | - | 0.08 | 0.08 | 0.10 |
| o Transportation Cost | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 2.03 | 2.03 | 3.63 |
| Total Cost | 2.37 | 2.37 | 2.37 | 2.37 | 2.37 | 2.51 | 2.51 | 4.13 |
| - Net Margin | 8.92 | 8.92 | 8.92 | 8.92 | 8.92 | 5.95 | 5.95 | 7.05 |
| **H. Retailer** | | | | | | | | |
| - Sale Price | | | | | | | | |
| o Atta | 78.88 | 78.88 | 78.88 | 78.88 | 78.88 | 94.40 | 94.40 | 117.00 |
| o Maida | 23.49 | 23.49 | 23.49 | 23.49 | 23.49 | 11.82 | 11.82 | - |
| o Suji | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 11.82 | 11.82 | - |
| Total: | 117.37 | 117.37 | 117.37 | 117.37 | 117.37 | 118.04 | 118.04 | 117.00 |
| - Purchase Price | | | | | | | | |
| o Atta | 70.18 | 70.18 | 70.18 | 70.18 | 70.18 | 89.90 | 89.90 | 109.07 |
| o Maida | 20.31 | 20.31 | 20.31 | 20.31 | 20.31 | 9.72 | 9.72 | - |
| o Suji | 13.64 | 13.64 | 13.64 | 13.64 | 13.64 | 9.15 | 9.15 | - |
| Total: | 104.13 | 104.13 | 104.13 | 104.13 | 104.13 | 108.77 | 108.77 | 109.07 |
| - Gross Margin | 13.24 | 13.24 | 13.24 | 13.24 | 13.24 | 9.27 | 9.27 | 7.93 |
| - Cost | | | | | | | | |
| o Hired Labour | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.90 | 0.90 | 0.85 |
| o Shop Rent | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.22 | 0.22 | 0.37 |
| o Electricity | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.05 | 0.05 | 0.09 |
| o Telephone | - | - | - | - | - | 0.06 | 0.06 | 0.09 |
| o Tax | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.10 | 0.10 | 0.08 |
| o Other Cost | - | - | - | - | - | - | - | 0.12 |
| o Transportation Cost | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | - | - | - |
| Total Cost: | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 1.33 | 1.33 | 1.60 |
| - Net Margin | 10.94 | 10.94 | 10.94 | 10.94 | 10.94 | 7.94 | 7.94 | 6.33 |

Note:- Definations of the costs are given in table III-17a on page A-31a to A-31c

Table III-19

## Definations of the Costs.

### A. Farmer Cost

| | |
|---|---|
| - Preparation Charges | - The cost of filling and un filling the bag. |
| - Transportation Charges | - The cost to transport the quantity from village to the point of sale. |
| - Octroi | - Tax paid to the Local body. |
| - Commission | - The cost deducted by market functionaries for his services. |
| - Miscelleneous Cost | - Include the cost of weighman, cleaner, loading and unloading etc. |
| - Cost of Deduction | - The cost which is deducted by market functionaries against drying losses, wastage and other losses. |

### B. Market Functionaries.

| | |
|---|---|
| - Labour Cost | - The cost of permanent and casual hired labour for used for loading, unloading, and filling. |
| - Shop rent | - The amount of shop rent or rental value. |
| - Packing Cost | - The cost of bags. |
| - Storage cost | - The cost of storage includes rent of the storage and labour on storage. |
| - Losses | - The cost of losses during operation. |
| - Transportation Cost. | - The cost of transporting the quantity from one place to an other. |

| | | | |
|---|---|---|---|
| - | Credit Cost | - | The interest cost for the loan which market functionaries give to the farmer. |
| - | Other Costs | - | Other costs include entertainment, telephone, electricity etc |

C. Food Department/Passco.

| | | | |
|---|---|---|---|
| - | Packing Cost | - | The cost of bags. |
| - | Delivery Cost | - | The cost of labour for unloading un-filling, transportation Charges from farmer to centre. |
| - | Bank Commission | - | Commission paid to bank for banking services |
| - | Taxes and Duties | - | Include the Octroi and market fee. |
| - | Transportation | - | The cost to tinasport the quantity from Food Department centre to sale point. |
| - | Handling Charges | - | The Cost of labour for loading, filling. |
| - | Godown Charges | - | The cost include rent of godown, electricity, maintenance etc. |
| - | Storage and unforseen expenses. | - | The Cost include storage labour, fumigation. |
| - | Departmental Charges | - | Salaries of the staff, and other over head. |
| - | Interest | - | Amount of interest paid on loans. |

D. Processor.

| | | | |
|---|---|---|---|
| - | Direct Cost | - | Include salaries/Wages of direct contract labour, electricity, telephone repair and maintenance. |
| - | Fixed Cost | - | Salaries and Wages of administrative staff, rent, tax, and other miscelleneous cost. |

| | | | |
|---|---|---|---|
| - | Financial Cost | - | The interest cost of pay loans. |
| - | Depreciation | - | The cost of depreciation of machinery, building and vehicles. |
| - | Transportation Cost | - | The cost to transport the quantity from one place to another. |
| - | Storage Cost | - | Include the rent of stores and maintenance. |
| - | Other Costs | - | Include cost of losses, entertainment and other un-forseen expenses etc. |

E. Whole Saler/Retailer.

| | | | |
|---|---|---|---|
| - | Hired Labour | - | The cost of loading, unloading filling, unfilling etc. |
| - | Shop rent | - | The amount of shop rent or rental value. |
| - | Electricity | - | The cost of electricity. |
| - | Telephone | - | The cost of telephone. |
| - | Taxes | - | Any local or other taxes paid. |
| - | Other Cost | - | The cost of entertainment and other miscelleneous cost. |
| - | Transportation | - | The cost to transport the quantity from one place to an other. |

## TABLE III-20

CLASSIFICATION OF GROSS MARKETING MARGIN BY MAJOR MARKETING SERVICES BY MARKETING CHANNEL
(WHEAT)

(Rs.Per 40 K.g)

| Marketing Services | Marketing Channels | | | | | | | | Average |
|---|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII | VIII | |
| Labour | 1.61 | 1.98 | 1.57 | 0.84 | 1.45 | 1.64 | 1.69 | 1.34 | 1.52 |
| Storage | 0.79 | 0.89 | 0.81 | 0.02 | 0.79 | 0.03 | 0.79 | 0.19 | 0.54 |
| Transport | 7.17 | 7.14 | 8.58 | 4.91 | 7.79 | 4.06 | 6.83 | 6.13 | 6.58 |
| Packing | 6.73 | 6.73 | 7.43 | 0.70 | 6.73 | 0.09 | 7.30 | — | 4.46 |
| Rents | 0.38 | 0.99 | 0.45 | 0.45 | 0.36 | 0.42 | 0.42 | 1.32 | 0.60 |
| Taxes | 0.38 | 0.38 | 0.38 | 0.06 | 0.38 | 0.59 | 0.85 | 0.10 | 0.39 |
| Credit Cost | 9.33 | 9.33 | 9.37 | 0.04 | 9.33 | — | 9.33 | 0.09 | 5.85 |
| Processing | 2.03 | 2.03 | 2.03 | 2.03 | 2.03 | 0.53 | 0.53 | 2.97 | 1.77 |
| Net Margin | 33.89 | 30.00 | 33.18 | 33.18 | 28.67 | 31.23 | 31.67 | 20.44 | 30.28 |
| Misc. | 1.51 | 5.33 | 3.27 | 1.83 | 3.93 | 2.99 | 1.74 | 5.16 | 3.22 |
| G. Total | 63.82 | 64.80 | 67.07 | 44.06 | 61.46 | 41.58 | 61.15 | 37.74 | 55.21 |
| Subsidy | 23.01 | 23.01 | 23.01 | — | 23.01 | — | 23.01 | — | 14.38 |
| Total | 40.81 | 41.79 | 44.06 | 44.06 | 38.45 | 41.558 | 38.14 | 37.74 | 124.80 |

Table III- 21

Summary Table Showing Physical Losses Of Each Stage OF Market System From Farm To Consumer
( W h e a t )

| | Percentage of losses | | | | |
|---|---|---|---|---|---|
| | Grower's level | Second stage market functionary | Processor | Wholesaler/ retailer | Total |
| Punjab | 1.08 | 0.02 | 2.03 | 0.03 | 3.16 |
| Sindh | 0.95 | 0.02 | 2.05 | 0.02 | 3.04 |
| N.W.F.P | 1.39 | - | 0.75 | 0.02 | 2.16 |
| Pakistan | 1.08 | 0.02 | 1.93 | 0.03 | 3.06 |

APPENDIX IV-I

AVERAGE HOUSEHOLD COMPOSITION FOR SAMPLE DISTRICTS - RICE SAMPLE GROWERS

CROP RICE

| District | Farm Size | No. of Farmers | Adult Above 10 Years | | | Children | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Sialkot | Small | 57 | 3.28 | 2.35 | 5.63 | 1.42 | 1.40 | 2.82 | 4.70 | 3.75 | 8.45 |
| | Medium | 12 | 3.08 | 2.92 | 6.00 | 1.67 | 1.25 | 2.92 | 4.75 | 4.17 | 8.92 |
| | Large | 6 | 4.00 | 2.67 | 6.67 | 1.83 | 1.67 | 3.50 | 5.83 | 4.34 | 10.17 |
| | Total | 75 | 3.31 | 2.47 | 5.78 | 1.49 | 1.40 | 2.89 | 4.80 | 3.87 | 8.67 |
| Gujranwala | Small | 36 | 2.69 | 2.83 | 5.52 | 1.64 | 1.97 | 3.61 | 4.33 | 4.80 | 9.13 |
| | Medium | 23 | 2.87 | 2.96 | 5.83 | 1.96 | 1.83 | 3.79 | 4.83 | 4.79 | 9.62 |
| | Large | 16 | 3.25 | 3.00 | 6.25 | 1.63 | 1.19 | 2.82 | 4.88 | 4.19 | 9.07 |
| | Total | 75 | 2.87 | 2.91 | 5.78 | 1.73 | 1.76 | 3.49 | 4.60 | 4.67 | 9.27 |
| Punjab | Small | 93 | 3.05 | 2.54 | 5.59 | 1.51 | 1.62 | 3.13 | 4.56 | 4.16 | 8.72 |
| | Medium | 35 | 2.94 | 2.94 | 5.88 | 1.86 | 1.63 | 3.49 | 4.80 | 4.57 | 9.37 |
| | Large | 22 | 3.45 | 2.91 | 6.36 | 1.68 | 1.32 | 3.00 | 5.13 | 4.23 | 9.35 |
| | Total | 150 | 3.09 | 2.69 | 5.78 | 1.61 | 1.55 | 3.19 | 4.70 | 4.27 | 8.97 |
| Larkana | Small | 70 | 1.61 | 2.70 | 4.31 | 1.56 | 2.33 | 3.89 | 3.17 | 5.03 | 8.20 |
| | Medium | 5 | 1.20 | 3.60 | 4.50 | 1.00 | 3.40 | 4.40 | 2.20 | 7.00 | 9.20 |
| | Large | – | – | – | – | – | – | – | – | – | – |
| | Total | 75 | 1.59 | 2.76 | 4.35 | 1.52 | 2.40 | 3.92 | 3.11 | 5.16 | 8.27 |
| Jacobabad | Small | 70 | 2.14 | 2.19 | 4.33 | 1.76 | 1.77 | 3.53 | 3.90 | 3.95 | 7.85 |
| | Medium | 5 | 3.20 | 3.40 | 6.60 | 2.40 | 2.00 | 4.40 | 5.60 | 5.40 | 11.00 |
| | Large | 1 | 3.00 | 2.00 | 5.00 | 4.00 | 2.00 | 6.00 | 7.00 | 4.00 | 11.00 |
| | Total | 76 | 2.22 | 2.26 | 4.48 | 1.83 | 1.79 | 3.62 | 4.05 | 4.05 | 8.10 |
| Sind | Small | 140 | 1.88 | 2.44 | 4.32 | 1.66 | 2.05 | 3.71 | 3.54 | 4.49 | 8.03 |
| | Medium | 10 | 2.20 | 3.50 | 5.70 | 1.70 | 2.70 | 4.40 | 3.90 | 6.20 | 10.10 |
| | Large | 1 | 3.00 | 2.00 | 5.00 | 4.00 | 2.00 | 6.00 | 7.00 | 4.00 | 11.00 |
| | Total | 151 | 1.91 | 2.51 | 4.42 | 1.68 | 2.09 | 3.77 | 3.59 | 4.60 | 8.19 |
| Pakistan | Small | 233 | 2.35 | 2.48 | 4.83 | 1.60 | 1.88 | 3.48 | 3.95 | 4.36 | 8.31 |
| | Medium | 45 | 2.78 | 3.07 | 5.85 | 1.82 | 1.87 | 3.69 | 4.60 | 4.94 | 9.54 |
| | Large | 23 | 3.43 | 2.87 | 6.30 | 1.78 | 1.35 | 3.13 | 5.21 | 4.22 | 9.43 |
| | Total | 301 | 2.50 | 2.60 | 5.10 | 1.64 | 1.84 | 3.48 | 4.14 | 4.44 | 8.58 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Medium | 10.[illegible] | 10.24 | 54.97 | 4.51 | 24.21 | 14.75 | 79.18 |
| Large | 45.9[illegible] | 30.35 | 66.11 | 10.43 | 22.72 | 40.78 | 88.83 |
| Total | 10.8[illegible] | 5.16 | 47.51 | 3.88 | 35.73 | 9.04 | 83.24 |

APPENDIX IV-3

SHARE OF DIFFERENT USES OF TOTAL OUTPUT OF BASMATI RICE BY SAMPLE GROWERS OF DIFFERENT SIZES FOR EACH SAMPLE DISTRICT

CROP: RICE (40 kg)

| District | Farm Size | Gross Production | Domestic Consumption | | Payment in Kind | | Kept for Seed | | Losses | | Total Uses | | Marketed | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quantity | %age | Quantity | %age | Quantity | %age | Quantity | %age | Quantity | %age | Quantity | %age |
| Sialkot | Small | 86.37 | 14.05 | 16 | 11.67 | 14 | 1.64 | 2 | 0.41 | - | 27.77 | 32 | 58.60 | 68 |
| | Medium | 222.00 | 27.50 | [illegible] | 22.33 | 10 | 2.50 | 1 | 0.43 | - | 52.76 | 24 | 169.24 | 76 |
| | Large | 509.67 | 41.50 | [illegible] | 17.17 | 3 | 3.67 | 1 | 0.33 | - | 62.67 | 12 | 447.00 | [illegible] |
| | Total | 141.93 | 18.40 | [illegible] | 13.81 | 10 | 1.94 | 1 | 0.41 | - | 34.56 | [illegible] | 107.37 | [illegible] |
| Gujranwala | Small | 74.40 | 14.61 | [illegible] | 14.40 | 19 | 1.34 | 2 | 0.06 | - | 30.41 | [illegible] | 43.99 | [illegible] |
| | Medium | 197.26 | 19.74 | [illegible] | 33.09 | 17 | 2.26 | 1 | - | | 55.09 | [illegible] | 142.17 | 72 |
| | Large | 468.60 | 29.07 | [illegible] | 67.80 | 14 | 7.10 | 2 | 0.67 | - | 104.64 | [illegible] | 363.95 | [illegible] |
| | Total | 194.11 | 19.20 | [illegible] | 31.26 | 16 | 2.82 | 2 | 0.17 | - | 53.45 | [illegible] | 140.66 | [illegible] |
| Punjab | Small | 81.82 | 14,27 | [illegible] | 12.71 | 16 | 1.53 | 2 | 0.29 | - | 26.80 | [illegible] | 53.01 | 65 |
| | Medium | 205.74 | 22.40 | [illegible] | 29.40 | 14 | 2.34 | 1 | 0.14 | - | 54.28 | [illegible] | 151.46 | 74 |
| | Large | 480.33 | 32.62 | - | 53.33 | 11 | 6.12 | 1 | 0.58 | - | 92.65 | [illegible] | 387.65 | [illegible] |
| | Total | 167,67 | 18.79 | [illegible] | 22.42 | 13 | 2.37 | 2 | 0.31 | - | 43.89 | [illegible] | 123.75 | 74 |

APPENDIX IV-4

SHARES OF DIFFERENT USES OF THE TOTAL OUTPUT OF IRRI RICE BY SAMPLE GROWERS OF DIFFERENT SIZE GROUPS OF EACH SAMPLE DISTRICT

CROP: RICE (40 Kg.)

| District | Farm Size | Gross Production | Domestic Consumption | | Payment in Kind | | Kept for Seed | | Losses | | Total Uses | | Marketed | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quantity | %age | Quantity | %age | Quantity | %age | Quantity | %age | Quantity | %age | Quantity | %age |
| Gujranwala | Small | 76.50 | 8.50 | 11 | 5.50 | 7 | 2.25 | 3 | - | - | 16.25 | [illegible] | 60.25 | 79 |
| | Medium | 95.50 | 2.62 | 3 | 1.62 | 2 | 2.58 | 3 | - | - | 6.82 | [illegible] | 89.68 | 92 |
| | Large | 534.50 | 5.67 | 1 | 15.42 | 3 | 9.25 | 2 | 0.83 | - | 31.17 | [illegible] | 503.33 | 94 |
| | Total | 274.53 | 4.69 | 2 | 7.86 | 3 | 5.29 | 2 | 0.34 | - | 18.18 | - | 256.35 | 93 |
| Larkana | Small | 183.93 | 53.13 | 29 | 44.37 | 24 | 2.70 | 1 | - | - | 100.20 | 54 | 83.73 | 46 |
| | Medium | 500.00 | 148.00 | 30 | 132.00 | 26 | 14.00 | 3 | - | - | 294.00 | 59 | 206.00 | 41 |
| | Large | - | - | - | - | - | - | | - | - | - | - | - | - |
| | Total | 205.00 | 59.45 | 29 | 50.21 | 24 | 3.45 | 2 | - | - | 113.11 | 55 | 91.89 | 45 |
| Jacobabad | Small | 160.14 | 25.38 | 16 | 36.21 | 23 | 4.63 | 3 | - | - | 66.22 | 41 | 93.92 | 59 |
| | Medium | 298/00 | 76.00 | 26 | 45.00 | 15 | 9.00 | 3 | - | - | 130.00 | 44 | 168.00 | 56 |
| | Large | 1050.00 | 90.00 | 9 | 260.00 | 25 | 15.00 | 1 | - | - | 365.00 | 35 | 685.00 | 65 |
| | Total | 180.92 | 29.56 | 16 | 39.73 | 22 | 5.05 | 3 | - | - | 74,34 | 41 | 106.58 | 59 |
| Sub-Total | Small | 172.04 | 39.25 | 23 | 40.29 | 23 | 3.66 | 2 | - | - | 83.20 | 48 | 86.84 | 52 |
| | Medium | 399,00 | 112,00 | 28 | 88.50 | 22 | 11.50 | 3 | - | - | 212.00 | 53 | 187.00 | 47 |
| | Large | 1050.00 | 90.00 | 9 | 260.00 | 25 | 15.00 | 1 | - | - | 365.00 | 35 | 685.00 | 65 |
| | Total | 192,88 | 44.41 | 23 | 44.94 | 23 | 4.26 | 2 | - | - | 93.61 | 48 | 99.27 | 52 |
| Total | Small | 169.38 | 38,40 | 23 | 39.32 | 23 | 3.63 | 2 | - | - | 81.35 | 48 | 88.03 | 52 |
| | Medium | 227,46 | 50.17 | 22 | 39,39 | 17 | 6.46 | 3 | - | - | 96.02 | 42 | 131.44 | 58 |
| | Large | 574.15 | 12.15 | 2 | 34.23 | 6 | 9.69 | 2 | 0.28 | - | 56.35 | 10 | 517.30 | 90 |
| | Total | 206.04 | 36.01 | 18 | 38.96 | 19 | 4.43 | 2 | 0.06 | - | 81.46 | 39 | 124.58 | 61 |

APPENDIX IV-5

%AGE CLASSIFICATION OF TOTAL BASMATI RICE SOLD BY MONTHS BY SAMPLE GROWERS OF DIFFERENT FARM SIZES AND AVERAGE MONTHLY SALE PRICES FOR EACH DISTRICT - RICE BASMATI

CROP: RICE

| District | Farm Size | %age of Total Quantity Sold in | | | | | Average Sales Prices (Rs. 40 Kg.) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | October | November | December | January | Total | October | November | December | January | Total |
| Sialkot | Small | – | 97 | – | 3 | 100 | – | 144.40 | – | 135.00 | 144.09 |
| | Medium | – | 67 | 17 | 16 | 100 | – | 134.50 | 135.00 | 135.00 | 134.53 |
| | Large | – | 100 | – | – | 100 | – | 133.69 | – | – | 133.69 |
| | Total | – | 90 | 5 | 5 | 100 | – | 138.61 | 135.00 | 135.00 | 138.[illegible] |
| Gujranwala | Small | 16 | 84 | – | – | 100 | 113.80 | 133.38 | – | – | 130.24 |
| | Medium | 12 | 88 | – | – | 100 | 136.62 | 130.76 | – | – | 131.45 |
| | Large | – | 50 | – | 50 | 100 | – | 121.05 | – | 149.05 | 135.[illegible] |
| | Total | 6 | 67 | – | 27 | 100 | 127.73 | 127.42 | – | 149.05 | 133.30 |
| Punjab | Small | 5 | 93 | – | 2 | 100 | 113.80 | 141.28 | – | 135.00 | 139.74 |
| | Medium | 7 | 80 | 7 | 6 | 100 | 136.62 | 131.96 | 135.00 | 135.00 | 132.63 |
| | Large | – | 66 | – | 34 | 100 | – | 127.33 | – | 149.45 | 134.73 |
| | Total | 4 | 77 | 2 | 17 | 100 | 127.73 | 133.16 | 135.00 | 147.53 | 135.43 |

APPENDIX IV-6

PERCENTAGE CLASSIFICATION OF TOTAL IRR RICE SOLD BY MONTHS BY SAMPLE GROWERS OF DIFFERENT FARM SIZES AND AVERAGE MONTHLY SALE PRICES FOR EACH DISTRICT

CROP: RICE

| District | Farm Size | %age of Total Quantity Sold in | | | | | | | | | Average Sales Price (Rs. per 40 Kg.) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Oct. | Nov. | Dec. | Jan. | Feb. | March | April | May | Total | Oct. | Nov. | Dec. | Jan. | Feb. | March | April | May | Total |
| Gujranwala | Small | 8 | 92 | – | – | – | – | – | – | 100 | 70.00 | 57.32 | – | – | – | – | – | – | 58.32 |
| | Medium | 5 | 95 | – | – | – | – | – | – | 100 | 53.18 | 64.32 | – | – | – | – | – | – | 63.75 |
| | Large | 2 | 98 | – | – | – | – | – | – | 100 | 65.00 | 63.68 | – | – | – | – | – | – | 63.71 |
| | Total | 3 | 97 | – | – | – | – | – | – | 100 | 61.98 | 63.58 | – | – | – | – | – | – | 63.54 |
| Larkana | Small | – | – | 36 | 64 | – | – | – | – | 100 | – | – | 66.49 | 62.79 | – | – | – | – | 6[illegible].12 |
| | Medium | – | – | 9 | 91 | – | – | – | – | 100 | – | – | 65.00 | 63.54 | – | – | – | – | 63.67 |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | 32 | 68 | – | – | – | – | 100 | – | – | 66.40 | 62.94 | – | – | – | – | 6[illegible].04 |
| Jacobabad | Small | – | – | 33 | 64 | – | 1 | – | 2 | 100 | – | – | 70.04 | 60.26 | – | 65.00 | – | 45.00 | 63.19 |
| | Medium | – | – | – | 100 | – | – | – | – | 100 | – | – | – | 60.89 | – | – | – | – | 60.89 |
| | Large | – | – | – | 100 | – | – | – | – | 100 | – | – | – | 66.00 | – | – | – | – | 66.00 |
| | Total | – | – | 27 | 71 | – | 1 | – | 1 | 100 | – | – | 70.04 | 61.04 | | 65.00 | – | 45.00 | 63.23 |
| Sind | Small | – | – | 34 | 64 | – | 1 | – | 1 | 100 | – | – | 68.28 | 61.45 | – | 65.00 | – | 45.00 | 63.62 |
| | Medium | – | – | 5 | 95 | – | – | – | – | 100 | – | – | 65.00 | 62.29 | – | – | – | – | 62.42 |
| | Large | – | – | – | 100 | – | – | – | – | 100 | – | – | – | 66.00 | – | – | – | – | 66.00 |
| | Total | – | – | 29 | 70 | – | – | – | 1 | 100 | – | – | 68.21 | 61.90 | – | – | – | 45.00 | 63.59 |
| Pakistan | Small | – | 2 | 34 | 63 | – | – | – | 1 | 100 | – | 57.32 | 68.28 | 61.45 | – | – | – | 45.00 | 63.52 |
| | Medium | 2 | 36 | 3 | 59 | – | – | – | – | 100 | 53.18 | 64.32 | 65.00 | 62.29 | – | – | – | – | 62.43 |
| | Large | 2 | 88 | – | 10 | – | – | – | – | 100 | 65.00 | 63.68 | – | 66.00 | – | – | – | – | 63.94 |
| | Total | 1 | 32 | 19 | 47 | – | – | – | 1 | 100 | 61.98 | 63.58 | 68.21 | 61.90 | – | – | – | 45.00 | 63.58 |

APPENDIX IV-7

AVERAGE STORAGE CAPACITY UTILIZATION CLASSIFIED BY TYPE FOR SAMPLE GROWERS OF EACH DISTRICT — BASMATI RICE

CROP: RICE : (40 kg)

| District | Farm Size | Average Quantity Kept for Storage * | Total Storage Capacity of all Type | %age of Storage Capacity Utilization for Rice to Total Capacity | (1) Standard Storage Capacity | | (2) Sub-Standard Storage Capacity | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Capacity | %age of Total Capacity | Capacity | %age of Total Capacity |
| Sialkot | Small | 15.69 | 89.00 | 18 | 36.00 | 40 | 43.00 | 60 |
| | Medium | 30.03 | 77.00 | 39 | 48.00 | 62 | 29.00 | 38 |
| | Large | 45.17 | 124.00 | 36 | 105.00 | 85 | 19.00 | 15 |
| | Total | 20.34 | 90.00 | 23 | 51.00 | 57 | 39.00 | 43 |
| Gujranwala | Small | 15.95 | 28.00 | 57 | 11.00 | 39 | 17.00 | 61 |
| | Medium | 22.02 | 49.00 | 45 | 15.00 | 31 | 34.00 | 69 |
| | Large | 36.27 | 69.00 | 52 | 59.00 | 86 | 10.00 | 14 |
| | Total | 22.02 | 42.00 | 52 | 21.00 | 50 | 21.00 | 50 |
| Punjab | Small | 15.82 | 64.00 | 25. | 32.00 | 50 | 32.00 | 50 |
| | Medium | 24.72 | 58.00 | 43 | 26.00 | 45 | 32.00 | 55 |
| | Large | 38.72 | 86.00 | 45 | 73.00 | 85 | 13.00 | 15 |
| | Total | 21.16 | 66.00 | 32 | 37.00 | 56 | 29.00 | 44 |

1. Pacca room, pacca bharola and drum/box
2. Katcha room, katcha bharola and other

* Quantity kept for domestic consumption and kept for seeds.

APPENDIX IV-8

AVERAGE STORAGE CAPACITY CLASSIFIED BY TYPE FOR SAMPLE GROWERS OF EACH PROVINCE
[illegible] - RICE

CROP: RICE (40 kg)

| District | Farm Size | * Average Quantity Kept for Storage | Total Storage Capacity of all Type | %age of Storage Capacity Utilization for Rice to Total Capacity | Standard Storage Capacity | | Sub-Standard Storage Capacity | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Capacity | %age of Total Capacity | Capacity | %age of Total Capacity |
| Gujranwala | Small | 10.75 | 10.00 | 108 | - | - | 10.00 | 100 |
| | Medium | 5.20 | 51.00 | 10 | 11.00 | 22 | 40.00 | 76 |
| | Large | 14.92 | 75.00 | 20 | 68.00 | 91 | 7.00 | 9 |
| | Total | 9.98 | 56.00 | 18 | 34.00 | 61 | 22.00 | 39 |
| Larkana | Small | 55.83 | 67.00 | 83 | 5.00 | 7 | 62.00 | 93 |
| | Medium | 162.00 | 154.00 | 105 | - | - | 154.00 | 100 |
| | Large | - | - | - | - | - | - | - |
| | Total | 62.90 | 73.00 | 86 | 5.00 | 7 | 68.00 | 93 |
| Jacobabad | Small | 30.01 | 32.00 | 94 | 1.00 | 3 | 31.00 | 97 |
| | Medium | 85.00 | 88.00 | 97 | - | - | 88.00 | 100 |
| | Large | 105.00 | 100.00 | 105 | - | - | 100.00 | 100 |
| | Total | 34.61 | 36.00 | 96 | 1.00 | 3 | 35.00 | 97 |
| Sub-Total | Small | 42.91 | 49.00 | 88 | 3.00 | 6 | 46.00 | 94 |
| | Medium | 123.50 | 121.00 | 102 | - | - | 121.00 | 100 |
| | Large | 105 | 100 | 105 | - | - | 100.00 | 100 |
| | Total | 48.67 | 55.00 | 88 | 3.00 | 5 | 52.00 | 95 |
| Total | Small | 42.03 | 45.00 | 88 | 3.00 | 6 | 45.00 | 94 |
| | Medium | 56.63 | 82.00 | 69 | 7.00 | 9 | 75.00 | 91 |
| | Large | 21.84 | 77.00 | 28 | 63.00 | 82 | 14.00 | 18 |
| | Total | 42.44 | 54.00 | 79 | 7.00 | 13 | 47.00 | 87 |

1. Pacca Rooms, Pacca Benrala and Drum/Box
2. Katcha Room, Katcha Benrala & other

* Qty: Kept for domestic consumption + kept for seed

APPENDIX IV-9

MARKETING CHANNELS FOR SAMPLE GROWERS OF EACH SAMPLE DISTRICT

CROP: RICE (%age)

| District | Farm Size | Rice Basmati | | | | | | | | Rice Irri | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Local Sold | Village Shop-keeper | Village Beopari | Pacca Arhati | Katcha Arhati | Katcha/ Pacca Arhati | Rice Mills | Total | Local Sold | Village Shop-keeper | Village Beopari | Pacca Arhati | Katcha Arhati | Katcha/ Pacca Arhati | Rice Mills | Total |
| Sialkot | Small | - | 7 | 53 | 4 | - | - | 36 | 100 | | | | | | | | 100 |
| | Medium | - | - | 53 | - | - | - | 47 | 100 | | | | | | | | 100 |
| | Large | - | - | 100 | - | - | - | - | 100 | | | | | | | | 100 |
| | Total | - | 3 | 68 | 2 | - | - | 27 | 100 | | | | | | | | 100 |
| Gujranwala | Small | - | - | 6 | 68 | 26 | - | - | 100 | | | | 50 | 50 | | | 100 |
| | Medium | | - | - | 18 | 82 | - | - | 100 | | | | 20 | 80 | | | 100 |
| | Large | - | - | 3 | 19 | 26 | - | 52 | 100 | - | - | 14 | 7 | 65 | - | 14 | 100 |
| | Total | - | - | 3 | 33 | 41 | - | 23 | 100 | - | - | 12 | 11 | 66 | - | 11 | 100 |
| Punjab | Small | - | 5 | 41 | 10 | 19 | - | 25 | 100 | - | - | - | 50 | 50 | - | - | 100 |
| | Medium | - | - | 20 | 11 | 51 | - | 18 | 100 | - | - | - | 20 | 80 | - | - | 100 |
| | Large | - | - | 35 | 13 | 17 | - | 35 | 100 | - | - | 14 | 7 | 65 | - | 14 | 100 |
| | Total | - | 1 | 32 | 12 | 28 | - | 27 | 100 | - | - | 12 | 11 | 66 | - | 11 | 100 |
| Larkana | Small | | | | | | | | - | 4 | - | 3 | 24 | - | - | 69 | 100 |
| | Medium | | | | | | | | - | - | - | - | 64 | - | - | 36 | 100 |
| | Large | | | | | | | | - | - | - | - | - | - | - | - | 100 |
| | Total | | | | | | | | - | 3 | - | 3 | 30 | - | - | 64 | 100 |
| Jacobabad | Small | | | | | | | | - | 4 | - | - | 11 | 27 | - | 58 | 100 |
| | Medium | | | | | | | | - | - | - | - | - | - | - | 100 | 100 |
| | Large | | | | | | | | - | - | - | - | - | - | - | 100 | 100 |
| | Total | | | | | | | | - | 3 | - | - | 9 | 22 | - | 66 | 100 |
| Sind | Small | | | | | | | | - | 3 | - | 1 | 12 | 10 | - | 74 | 100 |
| | Medium | | | | | | | | - | - | - | - | 35 | - | - | 65 | 100 |
| | Large | | | | | | | | - | - | - | - | - | - | - | 100 | 100 |
| | Total | | | | | | | | - | 2 | - | - | 14 | 9 | - | 75 | 100 |
| Pakistan | Small | - | 5 | 41 | 10 | 19 | - | 25 | 100 | 3 | - | 2 | 18 | 14 | - | 64 | 100 |
| | Medium | - | - | 20 | 11 | 51 | - | 18 | 100 | - | - | - | 30 | 30 | - | 40 | 100 |
| | Large | - | - | 35 | 13 | 17 | - | 35 | 100 | - | - | 13 | 7 | 58 | - | 22 | 100 |
| | Total | - | 1 | 32 | 12 | 28 | - | 22 | 100 | 2 | - | 5 | 16 | 30 | - | 47 | 100 |

## APPENDIX IV-16

## CLASSIFICATION OF MARKETING COSTS OF GROWERS FOR SALES TO DIFFERENT FUNCTIONARIES AND THE FARM GATE PRICES

### RICE BASMATI

Rs./40 Kg.

| Province | Farm Size | PACCA ARHATI: Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE: 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price | KATCHA ARHATI: Average Marketing Price | Marketing Cost | %AGE OF MARKETING COST: 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sialkot | Small | 135.00 | 5.64 | – | 35 | – | 18 | 36 | 11 | 100 | 129.36 | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | | – | – | – | – | – | – | – | – | – | – | – |
| | Total | 135.00 | 5.64 | – | 35 | – | 18 | 36 | 11 | 100 | 129.36 | – | – | – | – | – | – | – | – | – | – |
| Gujranwala | Small | – | – | – | – | – | – | – | – | – | – | 134.81 | 12.40 | 10 | 22 | 5 | 25 | 10 | 28 | 100 | 122.41 |
| | Medium | 133.26 | 10.94 | 14 | 21 | 4 | 19 | 12 | 30 | 100 | 122.32 | 130.64 | 9.62 | – | 26 | 5 | 28 | 12 | 29 | 100 | 121.02 |
| | Large | 130.00 | 10.65 | – | 9 | 5 | 24 | 32 | 30 | 100 | 119.32 | 131.75 | 10.64 | – | 16 | 5 | 29 | 12 | 38 | 100 | 121.11 |
| | Total | 131.56 | 10.82 | 7 | 17 | 5 | 21 | 20 | 30 | 100 | 121.15 | 132.40 | 10.24 | 4 | 20 | 5 | 28 | 11 | 32 | 100 | 122.16 |
| Punjab | Small | 135.00 | 5.64 | – | 35 | – | 18 | 36 | 11 | 100 | 129.36 | 134.81 | 12.40 | 10 | 22 | 5 | 25 | 10 | 28 | 100 | 122.41 |
| | Medium | 133.26 | 10.94 | 14 | 21 | 4 | 19 | 12 | 30 | 100 | 122.32 | 130.64 | 9.62 | – | 26 | 5 | 28 | 12 | 29 | 100 | 121.02 |
| | Large | 130.00 | 10.65 | – | 9 | 5 | 24 | 32 | 30 | 100 | 119.32 | 131.75 | 10.64 | – | 16 | 5 | 29 | 12 | 38 | 100 | 121.11 |
| | Total | 132.65 | 10.52 | 6 | 18 | 3 | 19 | 30 | 24 | 100 | 122.13 | 132.40 | 10.24 | 4 | 20 | 5 | 28 | 11 | 32 | 100 | 122.16 |

1. Preparation Charges 2. Transportation Charges 3. Octroi 4. Commission 5. Paladari, Weighmen & Chunger 6. Cost of Deduction 7. Total

APPENDIX IV-10 (Contd.)

| Province | Farm Size | RICE MILL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE | | | | | | | Farm Gate Price |
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Sialkot | Small | 132.72 | 3.15 | 100 | – | – | – | – | – | 100 | 129.57 |
| | Medium | 134.29 | 2.00 | 100 | – | – | – | – | – | 100 | 132.29 |
| | Large | – | – | – | – | – | – | – | – | – | – |
| | Total | 133.50 | 2.22 | 100 | – | – | – | – | – | 100 | 131.28 |
| Gujranwala | Small | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – |
| | Large | 148.67 | 2.56 | 100 | – | – | – | – | – | 100 | 146.11 |
| | Total | 148.67 | 2.56 | 100 | – | – | – | – | – | 100 | 146.11 |
| Punjab | Small | 132.72 | 3.15 | 100 | – | – | – | – | – | 100 | 129.52 |
| | Medium | 134.29 | 2.00 | 100 | – | – | – | – | – | 100 | 132.29 |
| | Large | 148.67 | 2.56 | 100 | – | – | – | – | – | 100 | 146.11 |
| | Total | 144.20 | 2.47 | 100 | – | – | – | – | – | 100 | 141.73 |

APPENDIX IV-11

CLASSIFICATION OF MARKETING COSTS OF GROWERS FOR SALES TO DIFFERENT FUNCTIONARIES AND THE FARM GATE PRICES FOR EACH DISTRICT

RICE IRRI

| Province | Farm Size | PACCA ARHATI | | | | | | | | | | KATCHA ARHATI | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE | | | | | | | Farm Gate Price | Average Marketing Price | Marketing Cost | %AGE OF MARKETING COST | | | | | | | Farm Gate Price |
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| ujran- | Small | 61.55 | 6.01 | 21 | 15 | 8 | 29 | – | 26 | 100 | 55.54 | 55.00 | 6.63 | 20 | 30 | 8 | 21 | – | 21 | 100 | 48.37 |
| ala | Medium | 61.47 | 8.21 | 16 | 25 | 7 | 20 | 12 | 20 | 100 | 54.26 | 64.72 | 8.87 | 15 | 32 | 6 | 18 | 11 | 18 | 100 | 55.85 |
| | Large | 54.95 | 5.58 | – | 18 | 9 | 26 | 15 | 32 | 100 | 49.37 | 64.48 | 7.06 | – | 31 | 8 | 23 | 7 | 31 | 100 | 57.42 |
| | Total | 55.89 | 6.49 | 11 | 20 | 8 | 24 | 10 | 27 | 100 | 52.40 | 63.59 | 7.25 | 3 | 31 | 8 | 22 | 8 | 26 | 100 | 56.55 |
| arkana | Small | 59.40 | 4.67 | – | 28 | 6 | 44 | 11 | 11 | 100 | 54.73 | – | – | – | – | – | – | – | – | – | – |
| | Medium | 65.00 | 4.58 | – | 33 | 6 | 43 | – | 18 | 100 | 60.42 | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | 64.37 | 4.60 | – | 32 | 6 | 43 | 1 | 18 | 100 | 59.77 | – | – | – | – | – | – | – | – | – | – |
| accba- | Small | 63.53 | 4.99 | – | 29 | 8 | 39 | 12 | 12 | 100 | 58.53 | 56.38 | 7.48 | – | 28 | 6 | 36 | 16 | 14 | 100 | 48.90 |
| ad | Medium | – | – | | – | – | – | – | – | – | – | | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | 63.52 | 4.99 | – | 29 | 8 | 39 | 12 | 12 | 100 | 58.53 | 56.38 | 7.48 | – | 28 | 6 | 36 | 16 | 14 | 100 | 48.90 |
| ind | Small | 61.27 | 4.00 | – | 28 | 7 | 43 | 11 | 12 | 100 | 57.27 | 56.38 | 7.48 | – | 28 | 6 | 36 | 16 | 14 | 100 | 48.90 |
| | Medium | 65.00 | 4.58 | – | 33 | 6 | 43 | – | 18 | 100 | 60.42 | – | – | – | – | – | – | – | – | | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | 64.61 | 4.52 | – | 32 | 6 | 43 | 1 | 18 | 100 | 60.09 | 56.38 | 7.48 | – | 28 | 6 | 36 | 16 | 14 | 100 | 48.90 |
| akis- | Small | 61.39 | 5.23 | 9 | 24 | 7 | 37 | 7 | 16 | 100 | 56.16 | 55.91 | 7.21 | 6 | 29 | 7 | 31 | 11 | 16 | 100 | 48.70 |
| an | Medium | 64.73 | 5.88 | 3 | 26 | 6 | 34 | 15 | 16 | 100 | 58.85 | 64.72 | 8.87 | 15 | 32 | 6 | 18 | 11 | 18 | 100 | 55.85 |
| | Large | 54.95 | 5.58 | – | 18 | 9 | 26 | 15 | 32 | 100 | 49.37 | 64.48 | 7.06 | – | 31 | 8 | 23 | 7 | 31 | 100 | 57.42 |
| | Total | 61.45 | 5.44 | 3 | 25 | 7 | 34 | 14 | 17 | 100 | 56.01 | 63.59 | 7.29 | 3 | 30 | 8 | 23 | 8 | 28 | 100 | 56.36 |

APPENDIX IV-11 (Contd.)

CLASSIFICATION OF MARKETING COSTS OF GROWERS FOR SALES TO DIFFERENT FUNCTIONARIES AND THE FARM GATE PRICES

| Province | Farm Size | RICE MILL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE | | | | | | | Farm Gate Price |
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| ujran-wala | Small | - | - | - | - | - | - | - | - | - | - |
| | Medium | - | - | - | - | - | - | - | - | - | - |
| | Large | 55.00 | - | - | - | - | - | - | - | - | 55.00 |
| | Total | 55.00 | - | - | - | - | - | - | - | - | 55.00 |
| arkana | Small | 65.66 | 1.85 | - | 69 | 16 | - | - | 15 | 100 | 63.81 |
| | Medium | 61.33 | 2.04 | - | 72 | 13 | - | - | 15 | 100 | 59.29 |
| | Large | - | - | - | - | - | - | - | - | - | - |
| | Total | 63.42 | 1.95 | - | 71 | 14 | - | - | 15 | 100 | 61.47 |
| acoba-ad | Small | 60.80 | 3.32 | - | 48 | 10 | - | 21 | 21 | 100 | 57.48 |
| | Medium | 58.05 | 3.09 | - | 68 | 11 | - | 21 | - | 100 | 54.96 |
| | Large | 66.00 | 3.60 | - | 83 | 9 | - | 8 | - | 100 | 62.10 |
| | Total | 64.04 | 3.70 | - | 72 | 9 | - | 17 | 2 | 100 | 60.34 |
| ind | Small | 63.16 | 2.47 | - | 58 | 13 | - | 15 | 14 | 100 | 60.69 |
| | Medium | 59.23 | 2.71 | - | 69 | 12 | - | 15 | 4 | 100 | 56.52 |
| | Large | 66.00 | 3.60 | - | 83 | 9 | - | 8 | - | 100 | 62.40 |
| | Total | 64.69 | 3.35 | - | 80 | 9 | - | 10 | 1 | 100 | 61.34 |
| akis-an | Small | 63.16 | 2.47 | - | 58 | 13 | - | 15 | 14 | 100 | 60.69 |
| | Medium | 59.23 | 2.71 | - | 69 | 12 | - | 15 | 4 | 100 | 56.52 |
| | Large | 66.00 | 3.60 | - | 83 | 9 | - | 8 | - | 100 | 62.40 |
| | Total | 64.69 | 3.35 | - | 80 | 9 | - | 10 | 1 | 100 | 61.34 |

1. Preparation Charges 2. Transportation Charges 3. Octroi 4. Commission 5. Paladari, Weighmen & Chunger 6. Cost of Deduction 7. Total

APPENDIX IV-12

PERCENTAGE CLASSIFICATION OF QUANTITIES TRANSPORTED BY DIFFERENT MODE FOR SAMPLE GROWERS OF DIFFERENT FARM SIZE FOR EACH PROVINCE

RICE BASMATI

| | Farm Size | Tractor/Trolley | | Truck | | Bullocks/ Camel Carts | | Horse Drawn Carts | | Pack Animal | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. |
| Sialkot | Small | 61 | 58 | - | - | - | - | 39 | 42 | - | - | 100 | 100 |
| | Medium | 100 | 100 | - | - | - | - | - | - | - | - | 100 | 100 |
| | Large | 1000 | 100 | - | - | - | - | - | - | - | - | 100 | 100 |
| | Total | 72 | 93 | - | - | - | - | 28 | 7 | - | - | 100 | 100 |
| Gujranwal | Small | 8 | 35 | - | - | - | - | 92 | 65 | - | - | 100 | 100 |
| | Medium | 39 | 32 | - | - | - | - | 57 | 21 | 4 | 47 | 100 | 100 |
| | Large | 93 | 58 | - | - | - | - | 7 | 42 | - | - | 100 | 100 |
| | Total | 39 | 45 | - | - | - | - | 60 | 35 | 1 | 20 | 100 | 100 |
| Punjab | Small | 38 | 58 | - | - | - | - | 62 | 42 | - | - | 100 | 100 |
| | Medium | 56 | 34 | - | - | - | - | 41 | 21 | 3 | 45 | 100 | 100 |
| | Large | 94 | 61 | - | - | - | - | 6 | 39 | - | - | 100 | 100 |
| | Total | 53 | 50 | - | - | - | - | 46 | 32 | 1 | 18 | 100 | 100 |

APPENDIX IV-13

PERCENTAGE CLASSIFICATION OF QUANTITIES TRANSPORTED BY DIFFERENT MODE FOR SAMPLE GROWERS OF DIFFERENT FARM SIZE FOR EACH PROVINCE

RICE IRRI

| | Farm Size | Tractor/ Trolley | | Truck | | Bullocks/ Camel Carts | | Horse Drawn Carts | | Pack Animal | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. | %age of Farmer | %age of Qty. |
| Gujranwala | Small | - | - | - | - | - | - | 100 | 100 | - | - | 100 | 100 |
| | Medium | 31 | 54 | - | - | - | - | 69 | 46 | - | - | 100 | 100 |
| | Large | 91 | 86 | - | - | - | - | 9 | 14 | - | - | 100 | 100 |
| | Total | 50 | 64 | - | - | - | - | 50 | 36 | - | - | 100 | 100 |
| arkana | Small | 98 | 86 | - | - | - | - | 2 | 14 | - | - | 100 | 100 |
| | Medium | 100 | 100 | - | - | - | - | - | - | - | - | 100 | 100 |
| | Large | - | - | - | - | - | - | - | - | - | - | - | - |
| | Total | 98 | 96 | - | - | - | - | 2 | 4 | - | - | 100 | 100 |
| acobabad | Small | 90 | 60 | - | - | 1 | 9 | 9 | 31 | - | - | 100 | 100 |
| | Medium | 100 | 100 | - | - | - | - | - | - | - | - | 100 | 100 |
| | Large | 100 | 100 | - | - | - | - | - | - | - | - | 100 | 100 |
| | Total | 91 | 93 | - | - | 1 | 2 | 8 | 5 | - | - | 100 | 100 |
| ind | Small | 94 | 60 | - | - | 1 | 9 | 5 | 31 | - | - | 199 | 100 |
| | Medium | 100 | 100 | - | - | - | - | - | - | - | - | 100 | 100 |
| | Large | 100 | 100 | - | - | - | - | - | - | - | - | 100 | 100 |
| | Total | 94 | 94 | - | - | 1 | 2 | 5 | 4 | - | - | 100 | 100 |
| akistan | Small | 91 | 59 | - | - | 1 | 9 | 8 | 32 | - | - | 100 | 100 |
| | Medium | 61 | 66 | - | - | - | - | 39 | 34 | - | - | 100 | 100 |
| | Large | 92 | 73 | - | - | - | - | 8 | 27 | - | - | 100 | 100 |
| | Total | 87 | 69 | - | - | 1 | 1 | 12 | 30 | - | - | 100 | 100 |

APPENDIX IV-14

AVERAGE TRANSPORTATION COST OF DIFFERENT MODES FOR SAMPLE GROWERS OF DIFFERENT FARM SIZES FOR EACH DISTRICT

(Rs.per 40 Kg/Km.)

| District | Farm Size | Rice Basmati | | | | Rice Irri | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Tractor/ Trolley | Bullock Cart | Rehra | Pack Animal | Tractor/ Trolley | Bullock Cart | Rehra | Pack Animal |
| Sialkot | Small | 0.18 | - | 0.25 | | | | | |
| | Medium | 0.22 | | - | | | | | |
| | Large | 0.19 | | - | | | | | |
| | Total | 0.20 | | 0.25 | | | | | |
| Gujranwala | Small | 0.22 | | 0.31 | | - | | 0.15 | |
| | Medium | 0.20 | | 0.49 | 0.40 | 0.18 | | 0.61 | |
| | Large | 0.23 | | 0.33 | - | 0.20 | | 0.33 | |
| | Total | 0.22 | | 0.40 | 0.40 | 0.19 | | 0.41 | |
| Punjab | Small | 0.21 | | 0.28 | - | - | | 0.15 | |
| | Medium | 0.21 | | 0.49 | 0.40 | 0.18 | | 0.61 | |
| | Large | 0.20 | | 0.33 | - | 0.20 | | 0.33 | |
| | Total | 0.20 | | 0.38 | 0.40 | 0.19 | | 0.41 | |
| Larkana | Small | | | | | 0.32 | | 0.19 | |
| | Medium | | | | | 0.35 | | - | |
| | Large | | | | | - | | - | |
| | Total | | | | | 0.34 | | 0.19 | |
| Jacobabad | Small | | | | | 0.19 | 0.13 | 0.20 | |
| | Medium | | | | | 0.27 | - | - | |
| | Large | | | | | 0.60 | | 0.20 | |
| | Total | | | | | 0.27 | 0.13 | 0.20 | |
| Sind | Small | | | | | **0.24** | **0.13** | **0.20** | |
| | Medium | | | | | **0.30** | - | - | |
| | Large | | | | | **0.60** | - | - | |
| | Total | | | | | **0.30** | **0.13** | **0.20** | |
| Pakistan | Small | **0.21** | | 0.28 | - | 0.24 | 0.13 | 0.19 | |
| | Medium | 0.21 | | 0.49 | 0.40 | 0.24 | - | 0.61 | |
| | Large | 0.20 | | 0.33 | - | 0.28 | - | 0.33 | |
| | Total | 0.20 | - | 0.38 | 0.40 | 0.25 | 0.13 | 0.33 | |

APPENDIX IV-15

COST COMPONENTS OF OPERATING COSTS OF SECOND STAGE MARKET FUNCTIONARIES
Rice Basmati

Rs./40 Kg.

| Province | | Labour | Rents | Packing Cost | Total |
|---|---|---|---|---|---|
| Punjab | Village Beopari | 1.81 | 0.27 | 0.22 | 2.30 |
| | Katcha Arhati | 1.26 | 0.71 | - | 1.97 |
| | Pacca Arhati | 1.15 | 0.40 | 0.07 | 1.62 |

SMATI

| ge Storage (Rs.) |
|---|
| - |
| 0.26 |
| 0.03 |

APPENDIX IV-17

AVERAGE TRANSPORT COST FOR DIFFERENT TYPES OF ACTORS

RICE BASMATI

Rs./40 kg.

| Province | Type of Actor | Average Distance (Km.) | Average Transport Cost Per (Km.) Per 40 Kg. Rs. | Average Transport Cost (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | 5.00 | 0.05 | 0.25 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 1.42 | 0.07 | 0.10 |



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AVERAGE LOSSES FOR DIFFERENT TYPES OF ACTORS

RICE BASMATI
Rs./40 Kg.

| Province | Type of Actor | Average Quantity of Losses (Kg.) | Average %age of Losses (%) | Average Cost of Losses (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | 0.025 | 0.063 | 0.09 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.022 | 0.055 | 0.07 |

APPENDIX IV-19

COST COMPONENTS OF OPERATING COSTS OF SECOND STAGE MARKET FUNCTIONARIES

RICE IRRI

Rs./40 Kg.

| Province | | Labour | Rents | Packing Cost | Total |
|---|---|---|---|---|---|
| Punjab | Village Beopari | 1.36 | - | - | 1.36 |
| | Katchai Arhati | 1.60 | 0.63 | - | 2.23 |
| | Pacca Arhati | 1.23 | 0.41 | 0.54 | 2.18 |
| Sindh | Village Beopari | - | - | - | - |
| | Katcha Arhati | 0.50 | 0.15 | - | 0.65 |
| | Pacca Arhati | 0.32 | 0.07 | 0.01 | 0.40 |
| Pakistan | Village Beopari | 1.36 | - | - | 1.36 |
| | Katcha Arhati | 0.57 | 0.18 | - | 0.75 |
| | Pacca Arhati | 0.37 | 0.09 | 0.03 | 0.49 |

APPENDIX IV-20

AVERAGE STORAGE COST FOR DIFFERENT TYPES OF ACTORS

RICE IRRI

| Province | Type of Actor | Average Period of Storage (day) | Average Storage Cost Rs./40 Kg./Month | Average Storage Cost (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | - | - | - |
| | Katcha Arhati | 10 | 0.32 | 0.10 |
| | Pacca Arhati | 11 | 0.28 | 0.10 |
| Sind | Village Beopari | - | - | - |
| | Katcha Arhati | 2 | 0.30 | 0.02 |
| | Pacca Arhati | 2 | 0.20 | 0.01 |
| Pakistan | Village Beopari | - | - | - |
| | Katcha Arhati | 3 | 0.30 | 0.03 |
| | Pacca Arhati | 3 | 0.22 | 0.02 |



5T

APPENDIX IV-21

AVERAGE TRANSPORTATION COST FOR DIFFERENT MODES FOR SECOND STAGE MARKET ACTORS

RICE IRRI

| Province | Type of Actor | Average Distance (Km.) | Average Transport Cost per(Km.) | Average Transport Cost (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | 8.33 | 0.06 | 0.50 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 5.12 | 0.08 | 0.41 |
| Sind | Village Beopari | - | - | - |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 1.75 | 0.04 | 0.07 |
| Pakistan | Village Beopari | 8.33 | 0.06 | 0.50 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 2.25 | 0.04 | 0.09 |



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APPENDIX IV-22

AVERAGE LOSSES FOR DIFFERENT TYPES OF ACTORS

RICE IRRI

| Province | Type of Actor | Average Quantity of Losses (Kg.) | Average %age of Losses (%) | Average Cost of Losses (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | - | - | - |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.150 | 0.375 | 0.23 |
| Sind | Village Beopari | - | - | - |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.009 | 0.022 | 0.01 |
| Pakistan | Village Beopari | - | - | - |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.014 | 0.035 | 0.02 |

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APPENDIX IV-23

CHARACTERISTICS OF PROCESSOR OF RICE

| | Punjab | | Sind | |
|---|---|---|---|---|
| | Modern | Semi Modern | Modern | Semi Modern |
| 1. Capacity Utilization (%) | 55 | 47 | 71 | 49 |
| 2. Detailed of fixed assets (Rs. in '000') | | | | |
| – Land | 640* | 109 | – | 120 |
| – Building | 19100* | 203 | – | 550 |
| – Machinery | 35989* | 140 | – | 350 |
| – Other fixed cost | 3031* | 29 | – | 20 |
| Total | 58760* | 481 | – | 1040 |
| 3. Rice Milled on Different Account (%) | | | | |
| – On own account | 100 | 67 | 100 | 100 |
| – On government account | – | – | – | – |
| – For Other | – | 33 | – | – |
| 4. Recovery ratio (%) | | | | |
| – Head rice | 53.00 | 47.9 | 53.90 | 48.2 |
| – Broken rice | 18.50 | 15.6 | 20.25 | 17.5 |
| – Husk/bran | 25.00 | 28.20 | 18.25 | 25.60 |
| – Drying and cleaning | 6.50 | 8.3 | 7.60 | 7.7 |

* Included assets of one PNP units in Shikarpur (Sind)

APPENDIX IV-24

BREAKDOWN OF AVERAGE OPERATING COSTS OF WHOLESALERS

Rs./40 Kg.

| | Operating Costs | | | | | | |
|---|---|---|---|---|---|---|---|
| | Labour Cost | Shop Rent | Electricity | Telephone | Tax | Other Cost | Total |
| Punjab | 0.13 | 0.10 | 0.01 | 0.04 | 0.01 | 0.06 | 0.35 |
| Sind | 0.13 | 0.03 | 0.01 | 0.01 | - | 0.04 | 0.22 |
| Pakistan | 0.13 | 0.06 | 0.01 | 0.02 | 0.01 | 0.05 | 0.28 |

APPENDEIX IV_25

## BREAKDOWN OF AVERAGE OPERATING COSTS OF RETAILERS

| | Operating Costs | | | | | | |
|---|---|---|---|---|---|---|---|
| | Labour Cost | Shop Rent | Electricity | Telephone | Tax | Other Cost | Total |
| Punjab | 0.93 | 1.01 | 0.16 | - | 0.10 | 0.39 | 2.59 |
| Sind | 0.46 | 0.17 | 0.06 | - | - | 0.12 | 0.81 |
| Pakistan | 0.74 | 0.67 | 0.12 | - | 0.06 | 0.28 | 1.87 |

APPENDIX IV.26

FARM GATE PRICES AND MARKETING MARGINS FOR DIFFERENT MARKETING CHANNELS
RICE BASMATI

RS.40 Kg.

| | PUNJAB | | | | | |
|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI |
| **A. Farmer** | | | | | | |
| - Farm Gate Price | 135.34 | 135.34 | 122.16 | 122.16 | 122.13 | 141.73 |
| o Preparation Charges | - | - | 0.40 | 0.40 | 0.63 | - |
| o Transportation Charges | - | - | 2.05 | 2.05 | 1.89 | 2.47 |
| o Octroi | - | - | 0.51 | 0.51 | 0.32 | - |
| o Commission | - | - | 2.87 | 2.87 | 2.00 | - |
| o Miscellaneous Cost | - | - | 1.13 | 1.13 | 3.16 | - |
| o Cost of Deduction | - | - | 3.28 | 3.28 | 2.52 | - |
| o Total Cost | - | - | 10.24 | 10.24 | 10.52 | 2.47 |
| o Marketing Price | 135.34 | 135.34 | 132.40 | 132.40 | 132.65 | 144.20 |
| **B. Village Beopari** | | | | | | |
| - Sale Price | 141.69 | 141.69 | - | - | - | - |
| - Purchase Price | 135.34 | 135.34 | - | - | - | - |
| - Gross Margin | 6.35 | 6.35 | - | - | - | - |
| o Labour Cost | 1.81 | 1.81 | - | - | - | - |
| o Shop Rent | 0.27 | 0.27 | - | - | - | - |
| o Packing Cost | 0.22 | 0.22 | - | - | - | - |
| o Storage Cost | - | - | - | - | - | - |
| o Losses | 0.09 | 0.09 | - | - | - | - |
| o Transportation Cost | 0.25 | 0.25 | - | - | - | - |
| o Credit cost | - | - | - | - | - | - |
| o Other Cost | 0.01 | 0.01 | - | - | - | - |
| o Total Cost | 2.65 | 2.65 | - | - | - | - |
| - Net Margin | 3.70 | 3.70 | - | - | - | - |
| **C. Katcha Arhati** | | | | | | |
| - Sale Price | - | - | 142.12 | 142.12 | - | - |
| - Purchase Price | - | - | 132.40 | 132.40 | - | - |
| - Gross Margin | - | - | 9.72 | 9.72 | - | - |
| o Labour Cost | - | - | 1.26 | 1.26 | - | - |
| o Shop Rent | - | - | 0.71 | 0.71 | - | - |
| o Packing Cost | - | - | - | - | - | - |
| o Storage Cost | - | - | 0.26 | 0.26 | - | - |
| o Losses | - | - | - | - | - | - |
| o Transportation Cost | - | - | - | - | - | - |
| o Credit cost | - | - | 0.15 | 0.15 | - | - |
| o Other Cost | - | - | 0.16 | 0.16 | - | - |
| o Total Cost | - | - | 2.54 | 2.54 | - | - |
| - Net Margin | - | - | 7.18 | 7.18 | | |

Rs./40 Kg.

| | PUNJAB | | | | | |
|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI |
| **D. Pacca Arhati** | | | | | | |
| - Sale Price | - | 146.11 | 146.11 | - | 146.11 | - |
| - Purchase Price | - | 141.69 | 142.12 | - | 132.65 | - |
| - Gross Margin | - | 4.42 | 3.99 | - | 13.46 | - |
| o Labour Cost | - | 1.15 | 1.15 | - | 1.15 | - |
| o Shop Rent | - | 0.40 | 0.40 | - | 0.40 | - |
| o Packing Cost | - | 0.07 | 0.07 | - | 0.07 | - |
| o Storage Cost | - | 0.03 | 0.03 | - | 0.03 | - |
| o Losses | - | 0.07 | 0.07 | - | 0.07 | - |
| o Transportation Cost | - | 0.10 | 0.10 | - | 0.10 | - |
| o Credit cost | - | 0.05 | 0.05 | - | 0.05 | - |
| o Other Cost | - | 0.05 | 0.05 | - | 0.05 | - |
| o Total Cost | - | 1.92 | 1.92 | - | 1.92 | - |
| - Net Margin | - | 2.50 | 2.07 | - | 11.54 | - |
| **E. Processors** | | | | | | |
| - Purchase Price of Paddy | 141.69 | 146.11 | 146.11 | 142.12 | 146.11 | 144.20 |
| - Sale Price: | | | | | | |
| o Head Rice (21 Kg.) | 155.18 | 155.18 | 155.18 | 155.18 | 155.18 | 155.18 |
| o Broken Rice (7 Kg.) | 26.18 | 26.18 | 26.18 | 26.18 | 26.18 | 26.18 |
| o Total: | 181.36 | 181.36 | 181.36 | 181.36 | 181.36 | 181.36 |
| - Gross Margin | 39.67 | 35.25 | 35.25 | 39.24 | 35.25 | 37.16 |
| o Direct Cost | 7.61 | 7.61 | 7.61 | 7.61 | 7.61 | 7.61 |
| o Fixed Cost | 6.80 | 6.80 | 6.80 | 6.80 | 6.80 | 6.80 |
| o Financial Cost | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 |
| o Depreciation | 1.32 | 1.32 | 1.32 | 1.32 | 1.32 | 1.32 |
| o Transportation Cost | 2.66 | 2.66 | 2.66 | 2.66 | 2.66 | 2.66 |
| o Storage Cost | 1.09 | 1.09 | 1.09 | 1.09 | 1.09 | 1.09 |
| o Other Cost | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 |
| o Total Cost | 21.49 | 21.49 | 21.49 | 21.49 | 21.49 | 21.49 |
| - Less Cost of by-products | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| - Net Cost | 18.79 | 18.79 | 18.79 | 18.79 | 18.79 | 18.79 |
| - Net Margin | 20.88 | 16.46 | 16.46 | 20.45 | 16.46 | 18.37 |

Rs./40 Kg.

| | PUNJAB | | | | | |
|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI |
| **F. Wholesaler** | | | | | | |
| - Sale Price | | | | | | |
| o Head Rice | 181.29 | 181.29 | 181.29 | 181.29 | 181.29 | 181.29 |
| o Broken Rice | 30.93 | 30.93 | 30.93 | 30.93 | 30.93 | 30.93 |
| Total: | 212.22 | 212.22 | 212.22 | 212.22 | 212.22 | 212.22 |
| - Purchase price: | | | | | | |
| o Head Rice | 155.18 | 155.18 | 155.18 | 155.18 | 155.18 | 155.18 |
| o Broken Rice | 26.18 | 26.18 | 26.18 | 26.18 | 26.18 | 26.18 |
| Total: | 181.36 | 181.36 | 181.36 | 181.36 | 181.36 | 181.36 |
| - Gross Margin | 30.86 | 30.86 | 30.86 | 30.86 | 30.86 | 30.86 |
| o Hired Labour | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| o Shop Rent | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| o Electricity | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| o Telephone | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| o Tax | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| o Other Cost | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 |
| o Transport Cost | 3.20 | 3.20 | 3.20 | 3.20 | 3.20 | 3.20 |
| - Total Cost | 3.55 | 3.55 | 3.55 | 3.55 | 3.55 | 3.55 |
| - Net Margin | 27.31 | 27.31 | 27.31 | 27.31 | 27.31 | 27.31 |
| **G. Retailer** | | | | | | |
| - Sale Price | | | | | | |
| o Head Rice | 207.69 | 207.69 | 207.69 | 207.69 | 207.69 | 207.69 |
| o Broken Rice | 40.25 | 40.25 | 40.25 | 40.25 | 40.25 | 40.25 |
| Total: | 247.94 | 247.94 | 247.94 | 247.94 | 247.94 | 247.94 |
| - Purchase Price | | | | | | |
| o Head Rice | 181.29 | 181.29 | 181.29 | 181.29 | 181.29 | 181.29 |
| o Broken Rice | 30.93 | 30.93 | 30.93 | 30.93 | 30.93 | 30.93 |
| Total: | 212.22 | 212.22 | 212.22 | 212.22 | 212.22 | 212.22 |
| - Gross Margin | 35.72 | 35.72 | 35.72 | 35.72 | 35.72 | 35.72 |
| o Hired Labour | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| o Shop Rent | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| o Electricity | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| o Telephone | - | - | - | - | - | - |
| o Tax | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| o Other Cost | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 |
| o Transport Cost | 1.07 | 1.07 | 1.07 | 1.07 | 1.07 | 1.07 |
| - Total Cost | 3.66 | 3.66 | 3.66 | 3.66 | 3.66 | 3.66 |
| - Net Margin | 32.06 | 32.06 | 32.06 | 32.06 | 32.06 | 32.06 |

Note:- Definations of the costs are given in table III-17a on page A-31a to A-31c

APPENDIX IV.27

FARM GATE PRICES AND MARKETING MARGIN FOR DIFFERENT MARKETING CHANNELS

RICE IRRI

Rs./40 Kg.

| | PUNJAB | | | | SIND | | |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII |
| **A. Farmer** | | | | | | | |
| - Farm Gate Price | 64.00 | 56.55 | 52.40 | 55.00 | 48.90 | 60.09 | 61.34 |
| o Preparation Charges | - | 0.22 | 0.71 | - | - | - | - |
| o Transportation Charges | - | 2.25 | 1.30 | - | 2.09 | 1.45 | 2.68 |
| o Octroi | - | 0.58 | 0.52 | - | 0.45 | 0.27 | 0.30 |
| o Commission | - | 1.60 | 1.56 | - | 2.69 | 1.94 | - |
| o Miscellaneous Cost | - | 0.58 | 0.65 | - | 1.20 | 0.05 | 0.34 |
| o Cost of Deduction | - | 2.02 | 1.75 | - | 1.05 | 0.81 | 0.03 |
| o Total Cost | - | 7.25 | 6.49 | - | 7.48 | 4.52 | 3.35 |
| o Marketing Price | 64.00 | 63.80 | 58.89 | 55.00 | 56.38 | 64.61 | 64.69 |
| **B. Village Beopari** | | | | | | | |
| - Sale Price | 70.00 | - | - | - | - | - | - |
| - Purchase Price | 64.00 | - | - | - | - | - | - |
| - Gross Margin | 6.00 | - | - | - | - | - | - |
| o Labour Cost | 1.36 | - | - | - | - | - | - |
| o Shop Rent | - | - | - | - | - | - | - |
| o Packing Cost | - | - | - | - | - | - | - |
| o Storage Cost | - | - | - | - | - | - | - |
| o Losses | - | - | - | - | - | - | - |
| o Transportation Cost | 0.50 | - | - | - | - | - | - |
| o Credit cost | - | - | - | - | - | - | - |
| o Other Cost | - | - | - | - | - | - | - |
| o Total Cost | 1.86 | - | - | - | - | - | - |
| - Net Margin | 4.14 | - | - | - | - | - | - |
| **C. Katcha Arhati** | | | | | | | |
| - Sale Price | - | 69.18 | - | - | 66.00 | - | - |
| - Purchase Price | - | 63.80 | - | - | 58.38 | - | - |
| - Gross Margin | - | 5.38 | - | - | 9.62 | - | - |
| o Labour Cost | - | 1.60 | - | - | 0.50 | - | - |
| o Shop Rent | - | 0.63 | - | - | 0.15 | - | - |
| o Packing Cost | - | - | - | - | - | - | - |
| o Storage Cost | - | 0.10 | - | - | 0.02 | - | - |
| o Losses | - | - | - | - | - | - | - |
| o Transportation Cost | - | - | - | - | - | - | - |
| o Credit cost | - | 0.32 | - | - | - | - | - |
| o Other Cost | - | 0.37 | - | - | 0.12 | - | - |
| o Total Cost | - | 3.02 | - | - | 0.79 | - | - |

Rs./40 Kg.

| | PUNJAB | | | | SIND | | |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII |
| D. Pacca Arhati | | | | | | | |
| - Sale Price | 75.00 | 75.00 | 75.00 | - | - | 67.76 | - |
| - Purchase Price | 70.00 | 69.18 | 58.89 | - | - | 64.61 | - |
| - Gross Margin | 5.00 | 5.82 | 16.11 | - | - | 3.15 | - |
| o Labour Cost | 1.23 | 1.23 | 1.23 | - | - | 0.32 | - |
| o Shop Rent | 0.41 | 0.41 | 0.41 | - | - | 0.07 | - |
| o Packing Cost | 0.54 | 0.54 | 0.54 | - | - | 0.01 | - |
| o Storage Cost | 0.10 | 0.10 | 0.10 | - | - | 0.01 | - |
| o Losses | 0.23 | 0.23 | 0.23 | - | - | 0.01 | - |
| o Transportation Cost | 0.41 | 0.41 | 0.41 | - | - | 0.07 | - |
| o Credit cost | 0.01 | 0.01 | 0.01 | - | - | - | - |
| o Other Cost | - | - | - | - | - | - | - |
| o Total Cost | 2.93 | 2.93 | 2.93 | - | - | 0.49 | - |
| - Net Margin | 2.07 | 2.89 | 13.18 | - | - | 2.66 | - |
| E. Processors | | | | | | | |
| - Purchase Price | 75.00 | 75.00 | 75.00 | 55.00 | 66.00 | 67.76 | 64.69 |
| - Sale Price | | | | | | | |
| o Head Rice (21 Kg.) | 63.00 | 63.00 | 63.00 | 63.00 | 58.80 | 58.80 | 58.80 |
| o Broken Rice (8 Kg.) | 22.79 | 22.79 | 22.79 | 22.79 | 22.79 | 22.79 | 22.79 |
| Total: | 85.79 | 85.79 | 85.79 | 85.79 | 81.59 | 81.59 | 81.59 |
| - Gross Margin | 10.79 | 10.79 | 10.79 | 30.79 | 15.59 | 13.83 | 16.90 |
| o Direct Cost | 4.72 | 4.72 | 4.72 | 4.72 | 7.77 | 7.77 | 7.77 |
| o Fixed Cost | 2.53 | 2.53 | 2.53 | 2.53 | 2.63 | 2.63 | 2.63 |
| o Financial Cost | - | - | - | - | 1.09 | 1.09 | 1.09 |
| o Depreciation | 0.15 | 0.15 | 0.15 | 0.15 | 0.24 | 0.24 | 0.24 |
| o Transportation Cost | 1.32 | 1.32 | 1.32 | 1.32 | 0.65 | 0.65 | 0.65 |
| o Storage Cost | 0.20 | 0.20 | 0.20 | 0.20 | 0.27 | 0.27 | 0.27 |
| o Other Cost | 0.23 | 0.23 | 0.23 | 0.23 | 0.18 | 0.18 | 0.18 |
| o Total Cost | 9.15 | 9.15 | 9.15 | 9.15 | 12.83 | 12.83 | 12.83 |
| o Less Cost of By-Products | 3.75 | 3.75 | 3.75 | 3.75 | 3.99 | 3.99 | 3.99 |
| - Net Cost | 5.40 | 5.40 | 5.40 | 5.40 | 8.84 | 8.84 | 8.84 |
| - Net Margin | 5.39 | 5.39 | 5.39 | 25.39 | 6.75 | 4.99 | 8.06 |

APPENDIX IV.27 (Contd.)

Rs./40 Kg.

| | PUNJAB | | | | SIND | | |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII |
| **F. Wholesaler** | | | | | | | |
| - Sale Price | | | | | | | |
| o Head Rice | 74.55 | 74.55 | 74.55 | 74.55 | 70.98 | 70.98 | 70.98 |
| o Broken Rice | 27.87 | 27.87 | 27.87 | 27.87 | 27.87 | 27.87 | 27.87 |
| Total: | 102.42 | 102.42 | 102.42 | 102.42 | 98.85 | 98.85 | 98.85 |
| - Purchase Price | | | | | | | |
| o Head Rice | 63.00 | 63.00 | 63.00 | 63.00 | 58.80 | 58.80 | 58.80 |
| o Broken Rice | 22.79 | 22.79 | 22.79 | 22.79 | 22.79 | 22.79 | 22.79 |
| Total: | 85.79 | 85.79 | 85.79 | 85.79 | 81.59 | 81.59 | 81.59 |
| - Gross Margin | 16.63 | 16.63 | 16.63 | 16.63 | 17.26 | 17.26 | 17.26 |
| o Hired Labour | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| o Shop Rent | 0.10 | 0.10 | 0.10 | 0.10 | 0.03 | 0.03 | 0.03 |
| o Electricity | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| o Telephone | 0.04 | 0.04 | 0.04 | 0.04 | 0.01 | 0.01 | 0.01 |
| o Tax | 0.01 | 0.01 | 0.01 | 0.01 | - | - | - |
| o Other Cost | 0.06 | 0.06 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 |
| o Transportation Cost | 3.20 | 3.20 | 3.20 | 3.20 | 3.10 | 3.10 | 3.10 |
| Total: | 3.55 | 3.55 | 3.55 | 3.55 | 3.32 | 3.32 | 3.32 |
| - Net Margin | 13.08 | 13.08 | 13.08 | 13.08 | 13.94 | 13.94 | 13.94 |
| **G. Retailer** | | | | | | | |
| - Sale Price | | | | | | | |
| o Head Rice | 96.73 | 96.73 | 96.73 | 96.73 | 95.68 | 95.68 | 95.68 |
| o Broken Rice | 27.55 | 27.55 | 27.55 | 27.55 | 27.55 | 27.55 | 27.55 |
| Total: | 124.28 | 124.28 | 124.28 | 124.28 | 123.23 | 123.23 | 123.23 |
| - Purchase Price | | | | | | | |
| o Head Rice | 74.55 | 74.55 | 74.55 | 74.55 | 70.98 | 70.98 | 70.98 |
| o Broken Rice | 27.87 | 27.87 | 27.87 | 27.87 | 27.87 | 27.87 | 27.87 |
| Total: | 102.42 | 102.42 | 102.42 | 102.42 | 98.85 | 98.85 | 98.85 |
| - Gross Margin | 21.86 | 21.86 | 21.86 | 21.86 | 24.38 | 24.38 | 24.38 |
| o Hired Labour | 0.93 | 0.93 | 0.93 | 0.93 | 0.46 | 0.46 | 0.46 |
| o Shop Rent | 0.01 | 0.01 | 0.01 | 0.01 | 0.17 | 0.17 | 0.17 |
| o Electricity | 0.16 | 0.16 | 0.16 | 0.16 | 0.06 | 0.06 | 0.06 |
| o Telephone | - | - | - | - | - | - | - |
| o Tax | 0.10 | 0.10 | 0.10 | 0.10 | - | - | - |
| o Other Cost | 0.39 | 0.39 | 0.39 | 0.39 | 0.12 | 0.12 | 0.12 |
| o Transportation Cost | 1.07 | 1.07 | 1.07 | 1.07 | 1.81 | 1.81 | 1.81 |
| Total: | 3.66 | 3.66 | 3.66 | 3.66 | 2.62 | 2.62 | 2.62 |
| - Net Margin | 18.20 | 18.20 | 18.20 | 18.20 | 21.76 | 21.76 | 21.76 |

Note:- Definations of the costs are given in table III-17a on page A-31a to A-31c

Table IV - 28

CLASSIFICATION OF GROSS MARKETING MARGIN BY MAJOR MARKETING SERVICES BY MARKETING CHANNELS
(Rice Basmatti)

(Rs.Per 40 Kg.)

| Marketing Services | PUNJAB | | | | | | Average |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | |
| Labour | 2.87 | 4.02 | 3.47 | 2.32 | 2.21 | 1.06 | 2.66 |
| Storage | 1.00 | 1.03 | 1.29 | 0.65 | 1.03 | 0.68 | 0.95 |
| Transport | 4.52 | 4.62 | 6.42 | 6.32 | 6.26 | 6.74 | 5.81 |
| Packing | 0.22 | 0.29 | 0.47 | 0.40 | 0.70 | --- | 0.35 |
| Rent | 1.38 | 1.78 | 2.22 | 1.82 | 1.51 | 1.11 | 1.64 |
| Taxes | 0.11 | 0.11 | 0.62 | 0.62 | 0.43 | 0.11 | 0.33 |
| Credit Cost | --- | 0.05 | 0.20 | 0.15 | 0.05 | --- | 0.08 |
| Process.Cost | 18.79 | 18.79 | 18.79 | 18.79 | 18.79 | 18.79 | 18.79 |
| Net Margin | 82.95 | 81.03 | 84.08 | 86.61 | 86.37 | 76.74 | 82.96 |
| Misc. | 0.76 | 0.88 | 8.22 | 8.10 | 8.46 | 0.66 | 4.51 |
| Total | 112.60 | 125.60 | 125.78 | 125.78 | 125.81 | 106.21 | 118.08 |

Table IV - 29

CLASSIFICATION OF GROSS MARKETING MRGIN BY MAJOR
MARKETING SERVICES BY MARKETING CHANNELS
(Rice Irri)

(Rs.Per 40 K.g)

| Marketing Services | Punjab | | | | Sind | | | Aver-age |
|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII | |
| Labour | 3.65 | 3.89 | 2.29 | 1.06 | 1.09 | 0.91 | 0.59 | 1.93 |
| Storage | 0.60 | 0.06 | 0.60 | — | 0.44 | 0.51 | — | 0.39 |
| Transport | 55.18 | 6.93 | 5.98 | 4.27 | 7.00 | 6.43 | 7.59 | 6.20 |
| Packing | 0.54 | 0.76 | 1.25 | — | — | 0.01 | — | 0.37 |
| Rent | 1.52 | 2.15 | 1.52 | 1.11 | 0.35 | 0.27 | 0.20 | 1.02 |
| Taxes | 0.11 | 0.69 | 0.63 | 0.11 | 0.45 | 0.27 | 0.30 | 0.37 |
| Credit Cost | 0.01 | 0.33 | 0.01 | — | — | — | — | 0.05 |
| Processing | 5.40 | 5.40 | 5.40 | 6.40 | 6.64 | 6.64 | 6.64 | 6.87 |
| Net Margin | 42.33 | 41.52 | 49.36 | 56.67 | 50.66 | 42.66 | 43.70 | 46.77 |
| Misc. | 0.69 | 5.46 | 4.65 | 0.66 | 5.30 | 3.05 | 0.61 | 2.97 |
| Total | 60.26 | 67.73 | 71.66 | 69.26 | 74.33 | 63.14 | 61.69 | 66.94 |

Table IV- 30

Summary Table Showing Physical Losses Of Each Stage OF Market System From Farm To Consumer
( R i c e   B a s m a t t i )

| | Percentage of losses | | | | |
|---|---|---|---|---|---|
| | Grower's level | Second stage market functionary | Processor | Wholesaler/ retailer | Total |
| Punjab | 1.47 | 0.06 | 2.15 | 0.03 | 3.71 |
| Sindh | - | - | - | - | - |
| Pakistan | 1.47 | 0.06 | 2.15 | 0.03 | 3.71 |

Table IV- 31

Summary Table Showing Physical Losses Of Each Stage OF Market System From Farm To Consumer
( R i c e I r r i )

| | Percentage of losses | | | | |
|---|---|---|---|---|---|
| | Grower's level | Second stage market fun-ctionary | Processor | Wholesaler/ retailer | Total |
| Punjab | 1.09 | - | 2.05 | 0.02 | 3.16 |
| Sindh | - | 0.03 | 2.10 | 0.03 | 2.16 |
| Pakistan | 0.14 | 0.03 | 2.08 | 0.03 | 2.28 |



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APPENDIX V-1

AVERAGE HOUSEHOLD COMPOSITION FOR SAMPLE DISTRICTS

CROP: GRAM

| District | Farm Size | No. of Farmers | Adult Above 10 Years | | | Children | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Bhakkar | Small | 6 | 2.17 | 1.67 | 3.84 | 0.83 | 1.17 | 2.00 | 3.00 | 2.84 | 5.84 |
| | Medium | 9 | 1.78 | 1.89 | 3.67 | 1.11 | 1.56 | 2.67 | 2.89 | 3.45 | 6.34 |
| | Large | 15 | 2.87 | 2.33 | 5.20 | 1.67 | 1.13 | 2.80 | 4.54 | 3.46 | 8.00 |
| | Total | 30 | 2.40 | 2.07 | 4.47 | 1.33 | 1.27 | 2.60 | 3.73 | 3.34 | 7.07 |
| Khushab | Small | 15 | 2.27 | 2.27 | 4.54 | 1.00 | 0.47 | 1.47 | 3.27 | 2.74 | 6.01 |
| | Medium | 9 | 2.44 | 3.56 | 6.00 | 1.11 | 1.11 | 2.22 | 3.55 | 4.67 | 8.22 |
| | Large | 13 | 2.92 | 2.46 | 5.38 | 1.38 | 2.23 | 3.61 | 4.30 | 4.69 | 8.99 |
| | Total | 37 | 2.54 | 2.65 | 5.19 | 1.16 | 1.24 | 2.40 | 3.70 | 3.89 | 7.59 |
| Sub-Total | Small | 21 | 2.24 | 2.10 | 4.34 | 0.95 | 0.67 | 1.62 | 3.19 | 2.77 | 5.96 |
| | Medium | 18 | 2.11 | 2.72 | 4.83 | 1.11 | 1.33 | 2.44 | 3.22 | 4.06 | 7.28 |
| | Large | 28 | 2.89 | 2.39 | 5.28 | 1.54 | 1.64 | 3.18 | 4.43 | 4.03 | 8.46 |
| | Total | 67 | 2.48 | 2.39 | 4.87 | 1.24 | 1.25 | 2.49 | 3.72 | 3.64 | 7.36 |
| Bannu | Small | 7 | 4.86 | 3.86 | 8.72 | 2.71 | 2.57 | 5.28 | 7.57 | 6.43 | 14.00 |
| | Medium | 5 | 4.80 | 2.60 | 7.40 | 2.60 | 2.00 | 4.60 | 7.40 | 4.60 | 12.00 |
| | Large | 8 | 4.75 | 4.00 | 8.75 | 2.50 | 1.88 | 4.38 | 7.25 | 5.88 | 13.13 |
| | Total | 20 | 4.80 | 3.60 | 8.40 | 2.60 | 2.15 | 4.75 | 7.40 | 5.75 | 13.15 |
| Jacobabad | Small | 21 | 3.14 | 2.24 | 5.38 | 2.29 | 1.24 | 3.53 | 5.43 | 3.48 | 8.91 |
| | Medium | 2 | 2.50 | 3.00 | 5.50 | 3.00 | 1.00 | 4.00 | 5.50 | 4.00 | 9.50 |
| | Large | 7 | 3.00 | 2.57 | 5.57 | 2.00 | 1.86 | 3.86 | 5.00 | 4.43 | 9.43 |
| | Total | 30 | 3.07 | 2.37 | 5.44 | 2.27 | 1.37 | 3.64 | 5.34 | 3.74 | 9.08 |
| Total | Small | 49 | 3.00 | 2.41 | 5.41 | 1.78 | 1.18 | 2.96 | 4.78 | 3.59 | 8.37 |
| | Medium | 25 | 2.68 | 2.72 | 5.40 | 1.56 | 1.44 | 3.00 | 4.24 | 4.16 | 8.40 |
| | Large | 43 | 3.26 | 2.72 | 5.98 | 1.79 | 1.72 | 3.51 | 5.05 | 4.44 | 9.49 |
| | Total | 117 | 3.03 | 2.59 | 5.62 | 1.74 | 1.44 | 3.18 | 4.77 | 4.03 | 8.80 |

APPENDIX V-2

PERCENTAGE SHARE OF AREA UNDER GRAM IN THE TOTAL AREA OF DIFFERENT SIZES OF SAMPLE HOLDINGS OF EACH DISTRICT

CROP: GRAM

| Districts | Farm Size | No. of Farmers | Average Cultivated Area per Farmer Acre | Reference Crop | | Average Yield Per Acre/40 Kg. |
|---|---|---|---|---|---|---|
| | | | | Acre Area | Percentage | |
| Bhakkar | Small | 6 | 9.33 | 8.50 | 91.07 | 2.37 |
| | Medium | 9 | 20.00 | 17.89 | 89.44 | 1.70 |
| | Large | 15 | 103.07 | 58.27 | 56.53 | 2.03 |
| | Total | 30 | 59.40 | 36.20 | 60.94 | 1.99 |
| Khushab | Small | 15 | 9.07 | 6.67 | 73.53 | 3.17 |
| | Medium | 9 | 16.67 | 8.50 | 51.00 | 3.02 |
| | Large | 13 | 50.58 | 38.85 | 76.81 | 2.18 |
| | Total | 37 | 25.50 | 18.42 | 72.23 | 2.42 |
| Sub-Total | Small | 21 | 9,14 | 7,19 | 78,65 | 2,90 |
| | Medium | 18 | 18,33 | 13,19 | 71,97 | 2,12 |
| | Large | 28 | 78.70 | 49.25 | 62.58 | 2.08 |
| | Total | 67 | 40.68 | 26.38 | 64.85 | 2.16 |
| Bannu | Small | 7 | 10.75 | 8.50 | 79.07 | 6.43 |
| | Medium | 5 | 21.00 | 4.65 | 22.14 | 2.34 |
| | Large | 8 | 38.28 | 18.69 | 48.82 | 7.14 |
| | Total | 20 | 24.32 | 11.61 | 47.74 | 7.19 |
| Jacobabad | Small | 21 | 4.73 | 3,67 | 77,58 | 4,01 |
| | Medium | 2 | 14.00 | 12.00 | 85.71 | 7.21 |
| | Large | 7 | 38.21 | 23.36 | 61.12 | 7.96 |
| | Total | 30 | 13.16 | 8.82 | 67.00 | 6.74 |
| Total | Small | 49 | 8.14 | 5.87 | 72.11 | 3.93 |
| | Medium | 25 | 18.52 | 11.39 | 61.50 | 3.15 |
| | Large | 43 | 64.59 | 39.35 | 60.92 | 3.10 |
| | Total | 117 | 31.10 | 19.35 | 62.22 | 3.21 |

APPENDIX V-3

PERCENTAGE SHARES OF DIFFERENT USES OF THE TOTAL OUTPUT OF SAMPLE GROWERS OF DIFFERENT SIZES OF EACH DISTRICT

CROP: GRAM MAUNDS

| District | Farm Size | Gross Production | Domestic Consumption | | Payment in Kind | | Kept for Seed | | Total Uses | | Marketed | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quantity | %age | Quantity | %age | Quantity | %age | Quantity | %age | Qty | %age |
| Bhakkar | Small | 20.17 | 0.33 | 2 | 5.17 | 25 | 3.67 | 18 | 9.17 | 45 | 11.00 | 55 |
| | Medium | 30.33 | 0.56 | 2 | 7.33 | 24 | 7.78 | 26 | 15.57 | 52 | 14.66 | 48 |
| | Large | 118.00 | 3.27 | 3 | 12.40 | 10 | 24.87 | 21 | 40.54 | 34 | 77.46 | 66 |
| | Total | 72.13 | 1.87 | 3 | 9.43 | 13 | 15.50 | 21 | 26.50 | 37 | 45.33 | 63 |
| Khushab | Small | 21.13 | 1.20 | 6 | 2.33 | 11 | 3.27 | 15 | 6.50 | 31 | 14.33 | 69 |
| | Medium | 25.67 | 0.78 | 3 | 2.89 | 11 | 7.11 | 28 | 10.78 | 42 | 14.89 | 58 |
| | Large | 84.62 | 0.62 | 1 | 13.00 | 15 | 14.08 | 17 | 27.70 | 33 | 56.92 | 67 |
| | Total | 44.54 | 0.89 | 2 | 6.22 | 14 | 8.00 | 18 | 15.11 | 34 | 29.43 | 66 |
| Sub-Total | Small | 20.86 | 0.95 | 5 | 3.14 | 15 | 3.38 | 16 | 7.27 | 36 | 13.39 | 64 |
| | Medium | 28.00 | 0.67 | 2 | 5.11 | 18 | 7.44 | 27 | 13.22 | 47 | 14.78 | 53 |
| | Large | 102.50 | 2.03 | 2 | 12.68 | 12 | 19.86 | 19 | 34.57 | 33 | 67.93 | 67 |
| | Total | 56.90 | 1.32 | 2 | 7.66 | 13 | 11.36 | 20 | 20.34 | 35 | 36.56 | 65 |
| Bannu | Small | 54.64 | 5.00 | 9 | 6.18 | 11 | 7.43 | 14 | 18.61 | 34 | 36.03 | 66 |
| | Medium | 43.75 | 11.00 | 25 | 10.35 | 24 | 3.05 | 7 | 24.40 | 56 | 19.35 | 44 |
| | Large | 133.53 | 7.13 | 5 | 42.88 | 32 | 11.78 | 9 | 61.79 | 46 | 71.74 | 54 |
| | Total | 83.48 | 7.35 | 9 | 21.90 | 26 | 8.08 | 10 | 37.33 | 45 | 46.15 | 55 |
| Jacobabad | Small | 14.71 | 0.62 | 4 | – | – | 1.29 | 9 | 1.91 | 13 | 12.80 | 87 |
| | Medium | 86.50 | 0.50 | 1 | – | – | 1.50 | 2 | 2.00 | 3 | 84.50 | 97 |
| | Large | 185.86 | 2.86 | 1 | 0.86 | 1 | 9.29 | 5 | 13.01 | 7 | 172.85 | 93 |
| | Total | 59.43 | 1.13 | 2 | 0.20 | – | 3.17 | 5 | 4.50 | 7 | 54.93 | 93 |
| Total | Small | 23.05 | 1.39 | 6 | 2.23 | 10 | 3.06 | 13 | 6.68 | 29 | 16.37 | 71 |
| | Medium | 35.83 | 2.72 | 8 | 5.75 | 16 | 6.09 | 17 | 14.56 | 41 | 21.27 | 59 |
| | Large | 121.84 | 3.12 | 3 | 16.37 | 13 | 16.63 | 14 | 36.12 | 30 | 85.72 | 70 |
| | Total | 62.09 | 2.33 | 4 | 8.18 | 13 | 8.70 | 14 | 19.11 | 31 | 42.90 | 69 |

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APPENDIX V-4

CLASSIFICATION OF TOTAL QUANTITY SOLD BY MONTHS BY SAMPLE GROWERS OF
DIFFERENT FARM SIZES AND AVERAGE SALE PRICES FOR EACH District

CROP: GRAM

Percentage of Quantity Sold in

| istrict | Farm Size | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. | Jan. | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| akkar | Small | | 23 | 77 | | | | | | | | 100 |
| | Medium | | 50 | 50 | | | | | | | | 100 |
| | Large | | | 90 | [illegible] | | | | | | | 100 |
| | Total | | 6 | 85 | [illegible] | | | | | | | 100 |
| ushab | Small | | 25 | 16 | 34 | 25 | | | | | | 100 |
| | Medium | 21 | 63 | 9 | | 7 | | | | | | 100 |
| | Large | | 83 | | [illegible] | 15 | | | | | | 100 |
| | Total | 3 | 69 | 4 | [illegible] | 16 | | | | | | 100 |
| b-Total | Small | | 24 | 31 | [illegible] | 19 | | | | | | 100 |
| | Medium | 11 | 56 | 29 | | 4 | | | | | | 100 |
| | Large | | 32 | 55 | [illegible] | 6 | | | | | | 100 |
| | Total | 1 | 34 | 49 | [illegible] | 7 | | | | | | 100 |
| uu | Small | | | 18 | [illegible] | 13 | 55 | 8 | | | | 100 |
| | Medium | | 3 | 19 | | | | 78 | | | | 100 |
| | Large | 21 | 5 | 38 | | | 15 | 1 | 9 | 11 | | 100 |
| | Total | 13 | 3 | 31 | [illegible] | 4 | 24 | 11 | 5 | 7 | | 100 |
| obabad | Small | | 83 | 16 | | 1 | | | | | | 100 |
| | Medium | | 95 | | | | | | | | 5 | 100 |
| | Large | | 100 | | | | | | | | | 100 |
| | Total | | 97 | 2 | | | | | | | 1 | 100 |
| al | Small | | 36 | 22 | [illegible] | 11 | 17 | 3 | | | | 100 |
| | Medium | 5 | 59 | 18 | | 2 | | 15 | | | 1 | 100 |
| | Large | 3 | 59 | 35 | [illegible] | 3 | 2 | | 1 | 2 | | 100 |
| | Total | 3 | 48 | 31 | [illegible] | 4 | 5 | 2 | 1 | 1 | | 100 |

Average Sale Price Per (40 Kg.)

| istrict | Farm Size | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. | Jan. | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| akkar | Small | | 160.00 | 240.78 | | | | | | | | 222.42 |
| | Medium | | 167.24 | 155.81 | | | | | | | | 161.41 |
| | Large | | | 242.59 | 280.00 | | | | | | | 246.64 |
| | Total | | 165.90 | 237.54 | 280.00 | | | | | | | 237.21 |
| ushab | Small | | 215.09 | 167.57 | 168.49 | 168.05 | | | | | | 179.71 |
| | Medium | 186.00 | 207.40 | 177.05 | | 150.00 | | | | | | 193.44 |
| | Large | | 225.34 | | 180.00 | 174.34 | | | | | | 216.65 |
| | Total | 186.00 | 222.60 | 170.00 | 170.23 | 171.05 | | | | | | 206.78 |
| b-Total | Small | | 202.54 | 210.98 | 168.49 | 168.05 | | | | | | 189.90 |
| | Medium | 186.00 | 189.73 | 159.08 | | 150.00 | | | | | | 178.88 |
| | Large | | 225.34 | 242.59 | 270.64 | 174.34 | | | | | | 234.95 |
| | Total | 186.00 | 217.07 | 234.89 | 235.47 | 171.06 | | | | | | 223.68 |
| uu | Small | | | 240.00 | 300.00 | 270.37 | 258.11 | 330.00 | | | | 264.43 |
| | Medium | | 275.00 | 200.00 | | | | 272.52 | | | | 258.84 |
| | Large | 212.00 | 200.00 | 213.76 | | | 360.00 | 336.00 | 344.00 | 264.00 | | 252.80 |
| | Total | 212.00 | 206.50 | 217.10 | 300.00 | 270.37 | 297.64 | 287.81 | 344.00 | 264.00 | | 256.29 |
| obabad | Small | | 206.71 | 123.06 | | 103.00 | | | | | | 193.44 |
| | Medium | | 240.00 | | | | | | | | 108.00 | 232.97 |
| | Large | | 242.50 | | | | | | | | | 243.00 |
| | Total | | 236.74 | 123.06 | | 103.00 | | | | | 108.00 | 232.74 |
| al | Small | | 205.53 | 196.48 | 190.90 | 205.36 | 258.11 | 330.00 | | | | 214.37 |
| | Medium | 186.00 | 216.10 | 167.01 | | 150.00 | | 272.92 | | | 108.00 | 210.58 |
| | Large | 212.00 | 235.74 | 237.56 | 270.64 | 174.34 | 360.00 | 336.00 | 344.00 | 264.00 | | 240.00 |
| | Total | 20 .12 | 229.61 | 228.35 | 239.73 | 186.10 | 297.64 | 287.81 | 344.00 | 264.00 | 108.00 | 232.82 |

APPENDIX V-5

AVERAGE STORAGE CAPACITY CLASSIFIED BY TYPE FOR SAMPLE GROWERS BY DISTRICT

CROP: GRAM (40 Kg.)

| District | Farm Size | Avg.Qty. kept for Storage | Total Storage Capacity of all Type | %age of Storage Utilization to Total Capacity | Standard Storage Capacity | | Sub Standard Storage Capacity | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Capacity | %age to Total Capacity | Capacity | %age to Total Capacity | Losses (%age) |
| Bhakkar | Small | 4.00 | 392 | 1 | 75 | 19 | 317 | 81 | - |
| | Medium | 8.34 | 467 | 2 | 267 | 57 | 200 | 43 | - |
| | Large | 28.14 | 600 | 5 | 480 | 80 | 120 | 20 | 2 |
| | Total | 17.37 | 518 | 3 | 335 | 65 | 183 | 35 | 2 |
| Khushab | Small | 4.47 | - | - | - | - | - | - | - |
| | Medium | 7.89 | - | - | - | - | - | - | - |
| | Large | 14.70 | 846 | 1 | 846 | 100 | - | - | - |
| | Total | 8.89 | 846 | 1 | 846 | 100 | - | - | - |
| Sub-Total | Small | 4.33 | 111 | 4 | 21 | 19 | 90 | 81 | - |
| | Medium | 8.11 | 233 | 3 | 133 | 57 | 100 | 43 | - |
| | Large | 21.57 | 714 | 3 | 650 | 91 | 64 | 9 | 1 |
| | Total | 12.55 | 396 | 3 | 314 | 79 | 82 | 21 | 1 |
| Bannue | Small | 12.43 | 119 | 10 | - | - | 119 | 100 | |
| | Medium | 14.05 | 58 | 24 | - | - | 58 | 100 | |
| | Large | 18.91 | 339 | 5 | - | - | 339 | 100 | |
| | Total | 15.43 | 192 | 8 | - | - | 192.00 | 100 | |
| Jacobabad | Small | 1.91 | 11 | 17 | - | - | 11 | 100 | |
| | Medium | 2.00 | 8 | 25 | - | - | 8 | 100 | |
| | Large | 12.15 | 183 | 7 | - | - | 183 | 100 | |
| | Total | 4.39 | 51 | 8 | - | - | 51 | 100 | |
| Total | Small | 4.45 | 70 | 6 | 9 | 13 | 61 | 87 | |
| | Medium | 8.81 | 180 | 5 | 96 | 53 | 84 | 47 | |
| | Large | 19.75 | 557 | 4 | 423 | 76 | 134 | 24 | 1 |
| | Total | 11.01 | 274 | 4 | 180 | 66 | 94 | 34 | 1 |

APPENDIX V-6

MARKETING CHANNELS FOR SAMPLE GROWERS OF EACH DISTRICT

CROP: GRAM (%AGE )

| Districts. | Farm Size | Local Sold | Village Shopkeer | Village Beopari | Pacca Arhatti | Katcha Arhatti |
|---|---|---|---|---|---|---|
| Bhakkar | Small | - | - | 100 | - | - |
| | Medium | - | - | 100 | - | - |
| | Large | - | - | 100 | - | - |
| | Total | - | - | 100 | - | - |
| Khushab | Small | - | 21 | 79 | - | - |
| | Medium | - | 12 | 88 | - | - |
| | Large | - | 19 | 81 | - | - |
| | Total | - | 18 | 82 | - | - |
| Sub Total | Small | - | 16 | 84 | - | - |
| | Medium | - | 6 | 94 | - | - |
| | Large | - | 7 | 93 | - | - |
| | Total | - | 8 | 92 | - | - |
| Bannu | Small | - | - | 6 | - | 94 |
| | Medium | - | - | 19 | - | 81 |
| | Large | 29 | - | 5 | - | 66 |
| | Total | 18 | - | 7 | - | 75 |
| Jaccobabad | Small | - | - | - | 71 | 29 |
| | Medium | - | - | - | 95 | 5 |
| | Large | - | | - | 99 | 1 |
| | Total | - | - | - | 94 | 6 |
| Total | Small | - | 6 | 31 | 24 | 39 |
| | Medium | - | 3 | 51 | 30 | 16 |
| | Large | 5 | 4 | 49 | 32 | 10 |
| | Total | 3 | 4 | 46 | 31 | 16 |

APPENDIX V.7

CLASSIFICATION OF MARKETING COSTS OF GROWERS FOR SALES TO DIFFERENT FUNCTIONARIES AND THE FARM GATE PRICES FOR EACH PROVINCES

GRAM

| Province | Farm Size | PACCA ARHATI Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price | KATCHA ARHATI Average Marketing Price | Marketing Cost | %AGE OF MARKETING COST 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bhakkar | Small | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Khushab | Small | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Punjab | Small | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Bannu | Small | – | – | – | – | – | – | – | – | – | – | 262.25 | 7.05 | – | 23 | – | 52 | [illegible] | – | 100 | 255.20 |
| | Medium | – | – | – | – | – | – | – | – | – | – | 262.57 | 8.69 | – | 30 | – | 62 | 8 | – | 100 | 253.88 |
| | Large | – | – | – | – | – | – | – | – | – | – | 278.15 | 10.86 | – | 17 | – | 53 | [illegible] | [illegible] | 100 | 267.29 |
| | Total | – | – | – | – | – | – | – | – | – | – | 270.15 | 9.63 | – | 20 | – | 52 | [illegible] | [illegible] | 100 | 260.52 |
| Jacobabad | Small | 269.59 | 18.23 | 5 | 8 | 3 | 47 | – | 37 | 100 | 251.36 | 126.61 | 9.33 | – | 20 | 5 | 22 | [illegible] | [illegible] | 100 | 117.28 |
| | Medium | 280.00 | 17.80 | 6 | 8 | 2 | 47 | – | 37 | 100 | 262.20 | 108.00 | 6.74 | 19 | 30 | 6 | 30 | [illegible] | – | 100 | 101.26 |
| | Large | 293.15 | 19.46 | 5 | 8 | 1 | 42 | – | 44 | 100 | 273.69 | 108.00 | 6.50 | 20 | 16 | 6 | 31 | [illegible] | 12 | 100 | 101.50 |
| | Total | 280.54 | 19.17 | 5 | 8 | 2 | 43 | – | 42 | 100 | 261.37 | 114.24 | 7.57 | 11 | 21 | 6 | 27 | [illegible] | 13 | 100 | 106.67 |
| Pakistan | Small | 269.59 | 18.23 | 5 | 8 | 3 | 47 | – | 37 | 100 | 251.36 | 235.12 | 7.45 | – | 22 | 1 | 45 | [illegible] | [illegible] | 100 | 227.67 |
| | Medium | 280.00 | 17.80 | 6 | 8 | 2 | 47 | – | 37 | 100 | 262.20 | 214.60 | 8.70 | 4 | 28 | 2 | 58 | [illegible] | – | 100 | 205.90 |
| | Large | 293.15 | 19.46 | 5 | 8 | 1 | 42 | – | 44 | 100 | 273.69 | 254.84 | 10.81 | 2 | 16 | – | 52 | [illegible] | [illegible] | 100 | 224.03 |
| | Total | 280.54 | 19.17 | 5 | 8 | 2 | 43 | – | 42 | 100 | 261.37 | 242.87 | 9.16 | 2 | 20 | 1 | 51 | [illegible] | [illegible] | 100 | 233.71 |

540

TABLE V-8

PERCENTAGE CLASSIFICATION OF QUANTITIES TRANSPORTED BY DIFFERENT MODE FOR SAMPLE GROWERS OF DIFFERENT FARM SIZE FOR EACH PROVINCE

GRAM

| | Farm Size | Tractor/Trolley | | Truck | | Bullocks/ Camel Carts | | Horse Drawn Carts | | Pack Animal | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | % of Farmers | %age of Qty. | % of Farmers | %age of Qty. | % of Farmers | %age of Qty. | % of Farmers | %age of Qty. | %. of Farmers | %age of Qty. | % of Farmers | %age of Qty. |
| Bhakkar | Small | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| | Medium | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| | Large | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| | Total | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| Khushab | Small | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| | Medium | – | – | – | – | – | – | – | – | – | – | – | – |
| | Large | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| | Total | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| Punjab | Small | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| | Medium | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| | Large | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| | Total | 100 | 100 | – | – | – | – | – | – | – | – | 100 | 100 |
| Bannu | Small | – | – | 86 | 17 | – | – | 16 | 83 | – | – | 100 | 100 |
| | Medium | – | – | 75 | 91 | 25 | 9 | – | – | – | – | 100 | 100 |
| | Large | – | – | 83 | 57 | – | – | 17 | 43 | – | – | 100 | 100 |
| | Total | – | – | 82 | 41 | 6 | 1 | 12 | 58 | – | – | 100 | 100 |
| Jacobabad | Small | 90 | 35 | 5 | 41 | – | – | 5 | 24 | – | – | 100 | 100 |
| | Medium | 50 | 95 | – | – | – | – | 50 | 5 | – | – | 100 | 100 |
| | Large | 86 | 95 | – | – | – | – | 14 | 5 | – | – | 100 | 100 |
| | Total | 87 | 90 | 3 | 4 | – | – | 10 | 6 | – | – | 100 | 100 |
| Pakistan | Small | 80 | 14 | 16 | 23 | – | – | 4 | 63 | – | – | 100 | 100 |
| | Medium | [illegible] | 52 | 25 | 33 | 8 | 3 | 8 | 12 | – | – | 100 | 100 |
| | Large | [illegible] | 57 | 24 | 29 | – | – | 9 | 14 | – | – | 100 | 100 |
| | Total | [illegible] | 46 | 19 | 28 | 1 | 1 | 7 | 25 | – | – | 100 | 100 |

APPENDIX V - 9

AVERAGE TRANSPORTTION COSTS BY DIFFERENT MODE OF TRANSPORTATION BY DISTRICTS

CROP: GRAM (RS./40 Kg./Km)

| Districts. | Farm Size | Tractor Trolly | Truck | Bullock/ Camel Cart | Rehra |
|---|---|---|---|---|---|
| Bhakkar | Small | 0.18 | – | – | – |
| | Medium | 0.11 | – | – | – |
| | Large | 0.20 | – | – | – |
| | Total | 0.18 | – | – | – |
| Khushab | Small | 0.41 | – | – | – |
| | Medium | – | – | – | – |
| | Large | 0.60 | – | – | – |
| | Total | 0,54 | – | – | – |
| Sub-Total | Small | 0.40 | – | – | – |
| | Medium | 0.11 | – | – | – |
| | Large | 0.23 | | – | – |
| | Total | 0.26 | – | – | – |
| Bannue | Small | – | 0.22 | – | 0.16 |
| | Medium | – | 0.31 | 0.20 | – |
| | Large | – | 0.18 | – | 0.24 |
| | Total | – | 0.21 | 0.20 | 0.17 |
| Jaccababad | Small | 0.17 | 0.10 | – | 0.20 |
| | Medium | 0.15 | – | – | 0.20 |
| | Large | 0.15 | – | – | 0.10 |
| | Total | 0.15 | 0.10 | – | 0.16 |
| Total | Small | 0.26 | 0.20 | – | 0.18 |
| | Medium | 0.15 | 0.31 | 0.20 | 0.20 |
| | Large | 0.18 | 0.18 | – | 0.18 |
| | Total | 0.19 | 0.21 | 0.20 | 0.19 |

TABLE V-10

FARMGATE PRICES AND MARKETING MARGINS FOR DIFFERENT MARKETING CHANNEL FOR GRAM AND MUNG

| | GRAM | | | | MUNG | | | |
|---|---|---|---|---|---|---|---|---|
| | PUNJAB | SIND | NWFP | | PUNJAB | | SIND | NWFP |
| | I | II | III | IV | I | II | III | IV |
| **A. Farmer** | | | | | | | | |
| – Farm Gate Price | 268.60 | 261.37 | 323.90 | 260.82 | 220.30 | 246.18 | 220.09 | 238.00 |
| o Preparation Charges | – | 0.96 | – | – | – | 1.38 | – | – |
| o Transportation Charges | – | 1.53 | – | 1.92 | – | 0.92 | – | – |
| o Octroi | – | 0.39 | – | – | – | – | – | – |
| o Commission | – | 8.24 | – | 5.01 | – | 7.95 | – | – |
| o Miscellaneous Cost | – | – | – | 2.12 | – | 0.91 | – | – |
| o Cost of Deduction | – | 8.05 | – | 0.58 | – | 4.12 | – | – |
| o Total Cost | – | 19.17 | – | 9.63 | – | 15.28 | – | – |
| o Marketing Price | 268.60 | 280.54 | 323.90 | 270.45 | 220.30 | 261.46 | 220.09 | 238.00 |
| **B. Village Beopari** | | | | | | | | |
| – Sale Price | 295.79 | – | 338.00 | – | 236.74 | – | 250.00 | 263.00 |
| – Purchase Price | 268.60 | – | 323.90 | – | 220.30 | – | 220.09 | 238.00 |
| – Gross Margin | 27.19 | – | 14.10 | – | 16.44 | – | 29.91 | 25.00 |
| o Labour Cost | – | – | 0.64 | – | 0.85 | – | 0.51 | 0.44 |
| o Shop Rent | – | – | 0.75 | – | 0.65 | – | 0.14 | 0.32 |
| o Packing Cost | 0.22 | – | – | – | 0.18 | – | 0.10 | 0.20 |
| o Storage Cost | – | – | – | – | – | – | – | – |
| o Losses | 0.01 | – | 0.14 | – | 0.20 | – | 0.20 | 0.07 |
| o Transportation Cost | 0.02 | – | 0.24 | – | 0.20 | – | 0.14 | 0.13 |
| o Credit cost | – | – | – | – | – | – | – | – |
| o Other Cost | 0.02 | – | 0.05 | – | 0.03 | – | – | 0.04 |
| o Total Cost | 0.27 | – | 1.82 | – | 2.11 | – | 1.09 | 1.20 |
| – Net Margin | 26.92 | – | 12.28 | – | 14.33 | – | 28.82 | 23.80 |
| **C. Katcha Arhati** | | | | | | | | |
| – Sale Price | – | – | – | 300.15 | – | – | – | – |
| – Purchase Price | – | – | – | 270.45 | – | – | – | – |
| – Gross Margin | – | – | – | 29.70 | – | – | – | – |
| o Labour Cost | – | – | – | 0.54 | – | – | – | – |
| o Shop Rent | – | – | – | 0.77 | – | – | – | – |
| o Packing Cost | – | – | – | – | – | – | – | – |
| o Storage Cost | – | – | – | 0.10 | – | – | – | – |
| o Losses | – | – | – | – | – | – | – | – |
| o Transportation Cost | – | – | – | – | – | – | – | – |
| o Credit cost | – | – | – | – | – | – | – | – |
| o Other Cost | – | – | – | 0.12 | – | – | – | – |
| o Total Cost | – | – | – | 1.53 | – | – | – | – |
| – Net Margin | – | – | – | 28.17 | – | – | – | – |

TABLE V-10 (Contd.)

Rs./40 Kg.

| | GRAM | | | | MUNG | | | |
|---|---|---|---|---|---|---|---|---|
| | PUNJAB | SIND | NWFP | | PUNJAB | | SIND | NWFP |
| | I | II | III | IV | I | II | III | IV |
| D. Pacca Arhati | | | | | | | | |
| - Sale Price | 331.35 | 304.54 | - | 330.00 | 253.75 | 273.35 | - | - |
| - Purchase Price | 295.79 | 280.54 | - | 300.15 | 236.74 | 261.46 | - | - |
| - Gross Margin | 35.56 | 24.00 | - | 29.85 | 17.01 | 11.89 | - | - |
| o Labour Cost | 0.88 | 0.20 | - | 0.63 | 0.66 | 0.66 | - | - |
| o Shop Rent | 0.72 | 0.07 | - | 0.41 | 0.40 | 0.40 | - | - |
| o Packing Cost | - | - | - | - | 0.20 | 0.20 | - | - |
| o Storage Cost | 0.15 | 0.06 | - | 0.09 | 0.05 | 0.05 | - | - |
| o Losses | 0.16 | 0.03 | - | 0.11 | 0.18 | 0.18 | - | - |
| o Transportation Cost | 0.16 | 0.05 | - | 0.16 | 0.14 | 0.14 | - | - |
| o Credit cost | - | - | - | - | - | - | - | - |
| o Other Cost | 0.08 | 0.05 | - | - | - | - | - | - |
| o Total Cost | 2.15 | 0.46 | - | 1.40 | 1.63 | 1.63 | - | - |
| - Net Margin | 33.41 | 23.54 | - | 28.45 | 15.38 | 10.26 | - | - |
| E. Processors | | | | | | | | |
| - Purchase Price | 331.75 | 304.54 | 338.00 | 330.00 | 253.75 | 273.35 | 250.00 | 263.00 |
| - Sale Price | | | | | | | | |
| o Dal Washed | 371.53 | 371.53 | 371.53 | 371.53 | 314.31* | 314.31* | 314.31* | 341.31* |
| o Dal Unwashed | - | - | - | - | 11.56* | 11.56* | 11.56* | 11.56* |
| Total: | 371.53 | 371.53 | 371.53 | 371.53 | 325.87 | 325.87 | 325.87 | 325.87 |
| - Gross Margin | 40.18 | 66.99 | 37.53 | 41.53 | 72.12 | 52.52 | 75.87 | 62.87 |
| o Direct Cost | 1.42 | 1.42 | 1.42 | 1.42 | 5.50 | 5.50 | 5.50 | 5.50 |
| o Fixed Cost | 0.43 | 0.43 | 0.43 | 0.43 | 2.05 | 2.05 | 2.05 | 2.05 |
| o Financial Cost | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 |
| o Depreciation | 0.51 | 0.51 | 0.51 | 0.51 | 1.95 | 1.95 | 1.95 | 1.95 |
| o Transportation Cost | - | - | - | - | 0.02 | 0.02 | 0.02 | 0.02 |
| o Storage Cost | - | - | - | - | 0.02 | 0.02 | 0.02 | 0.02 |
| o Other Cost | 0.44 | 0.44 | 0.44 | 0.44 | 1.98 | 1.98 | 1.98 | 1.98 |
| o Total Cost | 2.83 | 2.83 | 2.83 | 2.83 | 11.54 | 11.54 | 11.54 | 11.54 |
| o Less Cost of By-Products | - | - | - | - | 5.35 | 5.35 | 5.35 | 5.35 |
| - Net Cost | 2.83 | 2.83 | 2.83 | 2.83 | 6.19 | 6.19 | 6.19 | 6.19 |
| - Net Margin | 37.35 | 64.16 | 30.70 | 38.70 | 65.93 | 46.33 | 69.68 | 56.68 |

* 31.4 Kg. Dal Washed, 1 Kg. Dal Unwashed and 6.30 Kg. by-products.



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Table V - 10 Contd.

Rs./40 Kg.

| | GRAM | | | | MUNG | | | |
|---|---|---|---|---|---|---|---|---|
| | PUNJAB | SIND | NWFP | | PUNJAB | | SIND | NWFP |
| | I | II | III | IV | I | II | III | IV |
| **F. Wholesaler** | | | | | | | | |
| - Sale Price | | | | | | | | |
| o Dal Washed | 400.50 | 400.50 | 400.50 | 400.50 | 334.18 | 334.18 | 334.18 | 334.18 |
| o Dal Unwashed | - | - | - | - | 11.97 | 11.97 | 11.97 | 11.97 |
| Total: | 400.50 | 400.50 | 400.50 | 400.50 | 346.15 | 346.15 | 346.15 | 346.15 |
| - Purchase Price | | | | | | | | |
| o Dal Washed | 371.53 | 371.53 | 371.53 | 371.53 | 314.31 | 314.31 | 314.31 | 314.31 |
| o Dal Unwashed | - | - | - | - | 11.56 | 11.56 | 11.56 | 11.56 |
| Total: | 371.53 | 371.53 | 371.53 | 371.53 | 325.87 | 325.87 | 325.87 | 325.87 |
| - Gross Margin | 28.97 | 28.97 | 28.97 | 28.97 | 20.28 | 20.28 | 20.28 | 20.28 |
| o Hired Labour | 0.63 | 0.63 | 0.63 | 0.63 | 0.19 | 0.19 | 0.19 | 0.19 |
| o Shop Rent | 0.29 | 0.29 | 0.29 | 0.29 | 0.09 | 0.09 | 0.09 | 0.09 |
| o Electricity | 0.04 | 0.04 | 0.04 | 0.04 | 0.01 | 0.01 | 0.01 | 0.01 |
| o Telephone | 0.23 | 0.23 | 0.23 | 0.23 | 0.07 | 0.07 | 0.07 | 0.07 |
| o Tax | 0.12 | 0.12 | 0.12 | 0.12 | 0.04 | 0.04 | 0.04 | 0.04 |
| o Other Cost | 0.13 | 0.13 | 0.13 | 0.13 | 0.04 | 0.04 | 0.04 | 0.04 |
| o Transportation Cost | 1.05 | 1.05 | 1.05 | 1.05 | 1.88 | 1.88 | 1.88 | 1.88 |
| Total: | 2.49 | 2.49 | 2.49 | 2.49 | 2.32 | 2.32 | 2.32 | 2.32 |
| - Net Margin | 26.48 | 26.48 | 26.48 | 26.48 | 17.96 | 17.96 | 17.96 | 17.96 |
| **G. Retailer** | | | | | | | | |
| - Sale Price | | | | | | | | |
| o Dal Washed | 434.54 | 434.54 | 434.54 | 434.54 | 359.61 | 359.61 | 359.61 | 359.61 |
| o Dal Unwashed | - | - | - | - | 12.25 | 12.25 | 12.25 | 12.25 |
| Total: | 434.54 | 434.54 | 434.54 | 434.54 | 371.86 | 371.86 | 371.86 | 371.86 |
| - Purchase Price | | | | | | | | |
| o Dal Washed | 400.50 | 400.50 | 400.50 | 400.50 | 334.18 | 334.18 | 334.18 | 334.18 |
| o Dal Unwashed | - | - | - | - | 11.97 | 11.97 | 11.97 | 11.97 |
| Total: | 400.50 | 400.50 | 400.50 | 400.50 | 346.15 | 346.15 | 346.15 | 346.15 |
| - Gross Margin | 34.04 | 34.04 | 34.04 | 34.04 | 25.71 | 25.71 | 25.71 | 25.71 |
| o Hired Labour | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| o Shop Rent | 0.86 | 0.86 | 0.86 | 0.86 | 0.84 | 0.84 | 0.84 | 0.84 |
| o Electricity | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |
| o Telephone | 0.08 | 0.08 | 0.08 | 0.08 | 0.10 | 0.10 | 0.10 | 0.10 |
| o Tax | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| o Other Cost | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 |
| o Transportation Cost | 2.89 | 2.89 | 2.89 | 2.89 | 2.97 | 2.97 | 2.97 | 2.97 |
| Total: | 5.36 | 5.36 | 5.36 | 5.36 | 5.44 | 5.44 | 5.44 | 5.44 |
| - Net Margin | 28.68 | 28.68 | 28.68 | 28.88 | 20.27 | 20.27 | 20.27 | 20.27 |

Note:- Definations of the costs are given in table III.17a on page [illegible]

TABLE V - 11

COMPONENTS OF OPERATING COSTS OF SECOND STAGE MARKET FUNCTIONARIES

GRAM

| Province | | Rs./40 KG | | | |
|---|---|---|---|---|---|
| | | Labour | Rents | Packing Cost | Total |
| Punjab | Village Beopari | - | - | 0.22 | 0.22 |
| | Katcha Arhti | - | - | - | - |
| | Pacca Arhti | 0.88 | 0.72 | - | 1.60 |
| NWFP | Village Beopari | 0.64 | 0.75 | - | 1.39 |
| | Katcha Arhti | 0.54 | 0.77 | - | 1.31 |
| | Pacca Arhti | 0.63 | 0.41 | - | 1.04 |
| Sind | Village Beopari | - | - | - | - |
| | Katcha Arhti | - | - | - | - |
| | Pacca Arhti | 0.20 | 0.07 | - | 0.27 |
| Pakistan | Village Beopari | 0.14 | 0.16 | 0.08 | 0.38 |
| | Katcha Arhti | 0.54 | 0.77 | - | 1.31 |
| | Pacca Arhti | 0.40 | 0.28 | - | 0.68 |



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TABLE V - 12

AVERAGE STORAGE COST FOR DIFFERENT TYPES OF ACTORS

GRAM

| Province | Type of Actor | Average Storage Period (day) | Average Storage Cost Per Month (per 40 Kg.) | Average Storage Cost (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | - | - | - |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 20 | 0.22 | 0.15 |
| NWFP | Village Beopari | - | - | - |
| | Katcha Arhati | 10 | 0.29 | 0.10 |
| | Pacca Arhati | 11 | 0.25 | 0.09 |
| Sind | Village Beopari | - | - | - |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 8 | 0.24 | 0.06 |
| Pakistan | Village Beopari | - | - | - |
| | Katcha Arhati | 10 | 0.29 | 0.10 |
| | Pacca Arhati | 10 | 0.24 | 0.08 |

TABLE V-13

AVERAGE LOSSES FOR DIFFERENT TYPES OF ACTORS

GRAM

| Province | Type of Actor | Average Quantity of Losses (Kg.) | Agerage %age of Losses (%) | Average Cost of Losses (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | 0.003 | 0.008 | 0.01 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.030 | 0.075 | 0.16 |
| NWFP | Village Beopari | 0.025 | 0.062 | 0.14 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.020 | 0.050 | 0.11 |
| Sind | Village Beopari | - | - | - |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.007 | 0.017 | 0.03 |
| Pakistan | Village Beopari | 0.006 | 0.015 | 0.03 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.008 | 0.020 | 0.06 |

TABLE V - 14

AVERAGE TRANSPORTATION COST FOR DIFFERENT MODES FOR SECOND STAGE MARKET ACTOR

GRAM

| Province | Type of Actor | Average Distance (Km.) | Average Cost Per (Km.) / 40 Kg. | Average Transport Cost (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | 0.10 | 0.26 | 0.02 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.53 | 0.30 | 0.16 |
| NWFP | Village Beopari | 1.20 | 0.20 | 0.24 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.58 | 0.28 | 0.16 |
| Sind | Village Beopari | - | - | - |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.36 | 0.14 | 0.05 |
| Pakistan | Village Beopari | 0.23 | 0.22 | 0.05 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.55 | 0.17 | 0.09 |

Table V - 16

CLASSIFICATION OF GROSS MARKETING MARGIN
BY MAJOR MARKETING SERVICESBY
(Gram)

(Rs.Per 40 Kg.)

| | Marketing Channels | | | | Aver-age |
|---|---|---|---|---|---|
| | I | II | III | IV | |
| Labour | 2.35 | 1.67 | 2.11 | 2.64 | 2.19 |
| Storage | 0.65 | 0.56 | 0.50 | 0.69 | 0.60 |
| Transport | 4.12 | 5.52 | 4.18 | 6.02 | 4.96 |
| Packing | 0.22 | 0.96 | --- | --- | 0.30 |
| Rent | 1.87 | 1.22 | 1.90 | 2.33 | 1.83 |
| Taxes | 0.24 | 0.63 | 0.24 | 0.24 | 0.34 |
| Credit Cost | --- | ---- | --- | --- | --- |
| Processing | 2.83 | 2.83 | 2.83 | 2.83 | 2.83 |
| Net Margin | 152.34 | 142.36 | 97.64 | 149.98 | 135.58 |
| Misc. | 1.32 | 17.42 | 1.24 | 8.99 | 7.24 |
| Total | 165.94 | 173.17 | 110.64 | 173.72 | 155.87 |

Table V- 17

Summary Table Showing Physical Losses Of Each Stage OF Market System From Farm To Consumer
( G r a m )

| | Percentage of losses | | | | |
|---|---|---|---|---|---|
| | Grower's level | Second stage market functionary | Processor | Wholesaler/ retailer | Total |
| Punjab | 1.00 | 0.03 | 2.01 | 0.02 | 3.06 |
| Sindh | - | 0.01 | 2.01 | 0.02 | 2.04 |
| N.W.F.P | - | 0.05 | 2.01 | 0.02 | 2.08 |
| Pakistan | 1.00 | 0.03 | 2.01 | 0.02 | 3.06 |



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TABLE V. 18

COST COMPONENT OF OPERATING COSTS OF SECOND STAGE MARKET FUNCTIONNARIES

MUNG

| Province | | Labour | Rents | Packing Cost | Total |
|---|---|---|---|---|---|
| Punjab | Village Beopari | 0.85 | 0.65 | 0.18 | 1.68 |
| | Katcha Arhti | - | - | - | - |
| | Pacca Arhti | 0.66 | 0.40 | 0.20 | 1.26 |
| Sind | Village Beopari | 0.51 | 0.14 | 0.10 | 0.75 |
| | Katcha Arhti | - | - | - | - |
| | Pacca Arhti | - | - | - | - |
| NWFP | Village Beopari | 0.44 | 0.32 | 0.20 | 0.96 |
| | Katcha Arhti | - | - | - | - |
| | Pacca Arhti | - | - | - | - |
| Pakistan | Village Beopari | 0.51 | 0.34 | 0.19 | 1.04 |
| | Katcha Arhti | - | - | - | - |
| | Pacca Arhti | 0.66 | 0.40 | 0.26 | 1.26 |

| age Storage st (Rs.) |
|---|
| - |
| - |
| 0.05 |
| - |
| - |
| - |
| - |
| - |
| - |
| - |
| - |
| - |

TABLE V.20

AVERAGE TRANSPORTATION COST FOR DIFFERENT MODES FOR SECOND STAGE MARKET ACTOR

MUNG

| Province | Type of Actor | Average Distance (Km.) | Average Cost Per Km. (Rs.) | Average Cost Rs. |
|---|---|---|---|---|
| Punjab | Village Beopari | 0.54 | 0.37 | 0.20 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.48 | 0.29 | 0.14 |
| Sind | Village Beopari | 0.35 | 0.40 | 0.14 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | - | - | - |
| NWFP | Village Beopari | 0.52 | 0.25 | 0.13 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | - | - | - |
| Pakistan | Village Beopari | 0.44 | 0.32 | 0.14 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.48 | 0.29 | 0.14 |

TABLE V.21

AVERAGE LOSSES FOR DIFFERENT TYPES OF ACTORS

MUNG

| Province | Type of Actor | Average Qty. of Losses (Kg.) | Average %age of Losses (%) | Average Cost of Losses (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | 0.030 | 0.075 | 0.20 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.027 | 0.067 | 0.18 |
| Sind | Village Beopari | 0.032 | 0.080 | 0.20 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | - | - | - |
| NWFP | Village Beopari | 0.012 | 0.030 | 0.07 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | - | - | - |
| Pakistan | Village Beopari | 0.022 | 0.055 | 0.14 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.027 | 0.067 | 0.18 |

Table V - 22

CLASSIFICATION OF GROSS MARKETING MARGIN
BY MAJOR MARKETING SERVICE BY
(Mung)

(Rs. Per 40 Kg.)

| | Marketing Channels | | | | Aver-age |
|---|---|---|---|---|---|
| | I | II | III | IV | |
| Labour | 2.54 | 1.69 | 1.54 | 1.47 | 1.81 |
| Storage | 0.75 | 0.75 | 0.70 | 0.70 | 0.73 |
| Transport | 5.19 | 5.91 | 4.99 | 4.98 | 5.27 |
| Packing | 0.38 | 1.58 | 0.10 | 0.20 | 0.57 |
| Rent | 1.98 | 1.33 | 1.07 | 1.25 | 1.41 |
| Taxes | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Credit Cost | --- | --- | --- | --- | --- |
| Processing | 6.19 | 6.19 | 6.19 | 6.19 | 6.19 |
| Net Margin | 133.17 | 94.12 | 136.03 | 118.01 | 120.33 |
| Misc. | 1.20 | 13.95 | 0.99 | 0.90 | 4.26 |
| Total | 151.56 | 125.68 | 151.77 | 133.86 | 140.73 |



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Table V- 23

Summary Table Showing Physical Losses Of Each Stage OF Market System From Farm To Consumer
( M u n g )

| | Percentage of losses | | | | |
|---|---|---|---|---|---|
| | Grower's level | Second stage market functionary | Processor | Wholesaler/ retailer | Total |
| Punjab | 0.61 | 0.08 | 2.03 | 0.02 | 2.74 |
| Sindh | . 0.67 | 0.10 | 2.03 | 0.02 | 2.82 |
| N.W.F.P | 0.71 | 0.03 | 2.03 | 0.02 | 2.79 |
| Pakistan | 0.63 | 0.08 | 2.03 | 0.02 | 2.76 |

TABLE V.24

AVERAGE HOUSEHOLD COMPOSITION FOR SAMPLE DISTRICTS

CROP: MASH

| District | Farm Size | No. of Farmers | Adult Above 10 Years | | | Children | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Sialkot | Small | 18 | 3.61 | 2.22 | 5.83 | 1.17 | 0.78 | 1.95 | 4.78 | 3.00 | 7.78 |
| | Medium | 9 | 3.56 | 3.00 | 6.56 | 2.44 | 1.33 | 3.77 | 6.00 | 4.33 | 10.33 |
| | Large | 9 | 3.44 | 3.00 | 6.44 | 1.44 | 1.33 | 2.77 | 4.88 | 4.33 | 9.21 |
| | Total | 36 | 3.56 | 2.61 | 6.17 | 1.56 | 1.06 | 2.62 | 5.12 | 3.67 | 8.79 |
| Rawalpindi | Small | 32 | 3.41 | 2.63 | 6.04 | 1.44 | 1.28 | 2.72 | 4.85 | 3.91 | 8.76 |
| | Medium | 7 | 4.14 | 2.71 | 6.85 | 1.43 | 1.29 | 2.72 | 5.57 | 4.00 | 9.57 |
| | Large | 3 | 5.67 | 2.67 | 8.34 | 1.67 | 1.33 | 3.00 | 7.34 | 4.00 | 11.34 |
| | Total | 42 | 3.69 | 2.64 | 6.33 | 1.45 | 1.29 | 2.74 | 5.14 | 3.93 | 9.07 |
| Total | Small | 50 | 3.48 | 2.48 | 5.96 | 1.34 | 1.10 | 2.44 | 4.82 | 3.58 | 8.40 |
| | Medium | 16 | 3.81 | 2.88 | 6.69 | 2.00 | 1.31 | 3.31 | 5.81 | 4.19 | 10.00 |
| | Large | 12 | 4.00 | 2.92 | 6.92 | 1.50 | 1.33 | 2.83 | 5.50 | 4.25 | 9.75 |
| | Total | 78 | 3.63 | 2.63 | 6.26 | 1.50 | 1.18 | 2.68 | 5.13 | 3.81 | 8.94 |

APPENDIX V.25

PERCENTAGE SHARE OF AREA OF MASH IN THE TOTAL AREA OF DIFFERENT SIZES OF SAMPLE HOLDING OF EACH DISTRICT

CROP: MASH

| District | Farm Size | No. of Farmers | Average Cultivated Area per Farmer Acre | Reference Crop | | Average Yield Per Acre 40 Kg. |
|---|---|---|---|---|---|---|
| | | | | Area (Acre) | Percentage | |
| Sialkot | Small | 18 | 7.56 | 2.02 | 26.72 | 2.82 |
| | Medium | 9 | 19.00 | 6.00 | 31.58 | 2.74 |
| | Large | 9 | 37.56 | 7.78 | 20.71 | 2.80 |
| | Total | 36 | 17.92 | 4.45 | 24.86 | 2.79 |
| Rawalpindi | Small | 32 | 7.80 | 1.89 | 24.25 | 2.66 |
| | Medium | 7 | 17.00 | 2.64 | 15.55 | 2.64 |
| | Large | 3 | 46.08 | 5.00 | 10.85 | 1.50 |
| | Total | 42 | 12.07 | 2.24 | 18.55 | 2.47 |
| Total | Small | 50 | 7.71 | 1.94 | 25.12 | 2.72 |
| | Medium | 16 | 18.13 | 4.53 | 25.00 | 2.72 |
| | Large | 12 | 39.69 | 7.08 | 17.85 | 2.57 |
| | Total | 78 | 14.77 | 3.26 | 22.08 | 2.67 |

TABLE V-26

SHARE OF DIFFERENT USES OF TOTAL OUTPUT OF MASH BY SAMPLE GROWERS OF DIFFERENT SIZES FOR EACH DISTRICT

CROP: MASH 40 Kg.

| District | Farm Size | No. of Farmers | Gross Production | Domestic Consumption | | Payment in Kind | | Kept for Seed | | Total Uses | | Marketed | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Quantity | %age | Quantity | %age | Quantity | %age | Quantity | %age | Quantity | %age |
| Sialkot | Small | 18 | 5.69 | 0.99 | 18 | 0.42 | 7 | 0.33 | 6 | 1.74 | 31 | 3.95 | 69 |
| | Medium | 9 | 16.44 | 1.29 | 8 | 0.71 | 4 | 0.34 | 2 | 2.57 | 16 | 13.87 | 84 |
| | Large | 9 | 21.78 | 2.24 | 10 | 4.07 | 19 | 0.91 | 4 | 7.21 | 33 | 14.57 | 67 |
| | Total | 36 | 12.40 | 1.38 | 11 | 1.41 | 12 | 0.47 | 4 | 3.32 | 27 | 9.09 | 73 |
| Rawalpindi | Small | 32 | 5.03 | 0.50 | 10 | 0.42 | 8 | 0.53 | 10 | 1.47 | 29 | 3.56 | 71 |
| | Medium | 7 | 6.96 | 0.46 | 7 | 0.43 | 6 | 0.64 | 9 | 1.53 | 22 | 5.44 | 78 |
| | Large | 3 | 7.50 | 0.67 | 9 | 0.47 | 6 | 1.00 | 14 | 2.60 | 35 | 4.86 | 65 |
| | Total | 42 | 5.53 | 0.50 | 9 | 0.43 | 8 | 0.58 | 10 | 1.56 | 28 | 3.97 | 72 |
| Total | Small | 50 | 5.27 | 0.68 | 13 | 0.42 | 8 | 0.46 | 9 | 1.57 | 30 | 3.70 | 70 |
| | Medium | 16 | 12.30 | 0.93 | 7 | 0.59 | 5 | 0.47 | 4 | 2.12 | 17 | 10.18 | 83 |
| | Large | 12 | 18.21 | 1.85 | 10 | 3.17 | 17 | 0.93 | 5 | 6.06 | 33 | 12.14 | 67 |
| | Total | 78 | 8.70 | 0.91 | 10 | 0.88 | 10 | 0.53 | 6 | 2.37 | 27 | 6.33 | 77 |

TABLE V-27

PERCENTAGE CLASSIFICATION OF TOTAL MASH SOLD BY MONTH BY SAMPLE GROWERS OF DIFFERENT FARM SIZES AND AVERAGE MONTHLY SALE PRICES FOR EACH DISTRICT

CROP: MASH

| istrict | Farm Size | Percentage of Total Quantity Sold in | | | | | | | | | Average Sale Price (Rs. per 40 kg.) | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. | |
| ialkot | Small | - | - | - | - | - | 5 | - | 59 | 36 | - | - | | - | - | 220.00 | - | 223.93 | 232.35 | 226.72 |
| | Medium | - | - | - | - | - | 7 | 61 | 22 | 10 | - | - | - | - | - | 220.00 | 215.60 | 250.00 | 240.58 | 226.33 |
| | Large | - | - | 31 | - | - | - | 11 | 45 | 13 | - | - | 200.00 | - | - | - | 210.00 | 218.33 | 224.70 | 212.64 |
| | Total | - | - | 12 | - | - | 4 | 28 | 39 | 17 | - | - | 200.00 | - | - | 220.00 | 214.60 | 227.04 | 231.90 | 220.61 |
| awalpindi | Small | 2 | - | - | - | - | - | 11 | 67 | 20 | 200.00 | - | - | - | - | - | 253.06 | 257.41 | 242.00 | 252.58 |
| | Medium | - | - | - | - | 18 | - | 8 | 66 | 8 | - | - | - | - | 290.00 | - | 180.00 | 270.55 | 230.00 | 263.76 |
| | Large | - | - | - | - | - | - | - | 67 | 33 | - | - | - | - | - | - | - | 215.29 | 250.00 | 227.70 |
| | Total | 2 | - | - | - | 4 | - | 9 | 67 | 18 | 200.00 | - | - | - | 290.00 | - | 235.69 | 256.73 | 241.09 | 252.97 |
| otal | Small | 1 | - | - | - | - | 2 | 7 | 64 | 26 | 200.00 | - | - | - | - | 220.00 | 253.06 | 245.54 | 238.91 | 243.31 |
| | Medium | - | - | - | - | 4 | 5 | 48 | 33 | 10 | - | - | - | - | 290.00 | 220.00 | 214.20 | 259.71 | 238.57 | 235.18 |
| | Large | - | - | 28 | - | - | - | 10 | 47 | 15 | - | - | 200.00 | - | - | - | 210.00 | 218.00 | 238.32 | 214.09 |
| | Total | 1 | - | 8 | - | 2 | 2 | 21 | 49 | 17 | 200.00 | - | 200.00 | - | 290.00 | 220.00 | 218.13 | 240.73 | 235.50 | 232.47 |

APPENDIX V-28

AVERAGE STORAGE CAPACITY CLASSIFIED BY TYPE FOR SAMPLE GROWERS OF EACH DISTRICT

CROP: MASH 40 Kg.

| District | Farm Size | Avg. Quantity Kept for Storage | Total Storage Capacity of all Types | % of Storage Capacity Utilization to total Capacity | Standard * Storage Capacity | | Sub-Standard ** Storage Capacity | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Capacity | %age of total Capacity | Capacity | %age of total Capacity |
| Sialkot | Small | 1.32 | 172.00 | 0.76 | 134.00 | 78 | 38.00 | 22 |
| | Medium | 1.63 | 167.00 | 0.97 | 125.00 | 75 | 42.00 | 25 |
| | Large | 3.15 | 260.00 | 1.21 | 1.86 | 72 | 74.00 | 28 |
| | Total | 1.85 | 193.00 | 0.95 | 145.00 | 75 | 48.00 | 25 |
| Rawapindi | Small | 1.03 | 92.00 | 1.11 | 55.00 | 60 | 37.00 | 40 |
| | Medium | 1.10 | 114.00 | 0.96 | 39.00 | 34 | 75.00 | 66 |
| | Large | 2.67 | 155.00 | 1.72 | 150.00 | 97 | 5.00 | 3 |
| | Total | 1.08 | 100.00 | 1.08 | 59.00 | 59 | 41.00 | 41 |
| Total | Small | 1.14 | 121.00 | 0.94 | 83.00 | 69 | 38.00 | 31 |
| | Medium | 1.40 | 144.00 | 0.97 | 88.00 | 61 | 56.00 | 39 |
| | Large | 2.78 | 234.00 | 1.18 | 178.00 | 76 | 56.00 | 24 |
| | Total | 1.44 | 144.00 | 1.00 | 99.00 | 69 | 45.00 | 31 |

* Pacca room, pacca bharola, drum/box

** Katcha room, katcha bharola and other

APPENDIX V.29

CLASSIFICATION OF MARKETING COSTS OF GROWERS FOR SALES TO DIFFERENT FUNCTIONARIES AND THE FARM GATE PRICES FOR EACH PROVINCES

MASH

**PACCA ARHATI**

| ovince | Farm Size | Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price |
|---|---|---|---|---|---|---|---|---|---|---|---|
| alkot | Small | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – |
| | Large | 210.00 | 12.34 | – | 16 | – | 54 | 13 | 17 | 100 | 197.66 |
| | Total | 210.00 | 12.34 | – | 16 | – | 54 | 13 | 17 | 100 | 197.66 |
| wal-ndi | Small | 257.47 | 28.69 | – | 20 | – | 35 | 23 | 22 | 100 | 228.38 |
| | Medium | 250.76 | 2[illegible].63 | – | 21 | 8 | 34 | 5 | 32 | 100 | 228.13 |
| | Large | – | – | – | – | – | – | – | – | – | – |
| | Total | 253.34 | 2[illegible].97 | – | 21 | 4 | 34 | 13 | 28 | 100 | 229.37 |
| njab | Small | 257.47 | 28.69 | – | 20 | – | 35 | 23 | 22 | 100 | 228.38 |
| | Medium | 250.76 | 2[illegible].63 | – | 21 | 8 | 34 | 5 | 32 | 100 | 228.13 |
| | Large | 210.00 | 12.34 | – | 16 | – | 54 | 13 | 17 | 100 | 197.66 |
| | Total | 230.12 | 15.40 | – | 18 | 3 | 45 | 10 | 24 | 100 | 211.72 |

**KATCHA ARHATI**

| ovince | Farm Size | Average Marketing Price | Marketing Cost | %AGE OF MARKETING COST 1 | 2 | 3 | 4 | 5 | 6 | 7 | Farm Gate Price |
|---|---|---|---|---|---|---|---|---|---|---|---|
| alkot | Small | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | – | – | – | – |
| wal-ndi | Small | 225.45 | 19.8[illegible] | – | 19 | 7 | 35 | 4 | 35 | 100 | 205.63 |
| | Medium | 284.30 | 22.7[illegible] | – | 18 | 2 | 43 | 5 | 30 | 100 | 261.55 |
| | Large | 200.00 | 25.0[illegible] | – | 18 | 2 | 40 | – | 40 | 100 | 175.00 |
| | Total | 252.49 | 21.7[illegible] | – | 18 | 4 | 42 | 3 | 33 | 100 | 230.79 |
| njab | Small | 225.45 | 19.8[illegible] | – | 19 | 7 | 35 | 4 | 35 | 100 | 205.63 |
| | Medium | 284.30 | 22.7[illegible] | – | 18 | 2 | 43 | 5 | 30 | 100 | 261.55 |
| | Large | 200.00 | 25.0[illegible] | – | 18 | 2 | 40 | – | 40 | 100 | 175.00 |
| | Total | 252.49 | 21.7[illegible] | – | 18 | 4 | 42 | 3 | 33 | 100 | 230.79 |

APPENDIX V-30

MARKETING CHANNELS FOR SAMPLE GROWERS OF EACH DISTRICTS

CROP: MASH (%age)

| District | Farm Size | Local Sold | Shopkeeper | Village Beopari | Pacca Arhati | Katcha Arhati | Katcha/Pacca Arhati | Total |
|---|---|---|---|---|---|---|---|---|
| Sialkot | Small | - | - | 100 | - | - | - | 100 |
| | Medium | - | 5 | 95 | - | - | - | 100 |
| | Large | - | - | 89 | 11 | - | - | 100 |
| | Total | - | 2 | 94 | 4 | - | - | 100 |
| Rawalpindi | Small | - | 2 | 14 | 76 | 8 | - | 100 |
| | Medium | - | - | 15 | 60 | 25 | - | 100 |
| | Large | - | - | 86 | - | 14 | - | 100 |
| | Total | - | 1 | 20 | 66 | 13 | - | 100 |
| Total | Small | - | 1 | 43 | 50 | 6 | - | 100 |
| | Medium | - | 4 | 76 | 14 | 6 | - | 100 |
| | Large | - | - | 88 | 10 | 2 | - | 100 |
| | Total | - | 2 | 68 | 26 | 4 | - | 100 |

**TABLE V-31**

PERCENTAGE CLASSIFICATION OF QUANTITIES TRANSPORTED BY DIFFERENT MODE FOR SAMPLE GROWERS OF DIFFERENT FARM SIZE FOR EACH PROVINCE

MASH

| | Farm Size | Tractor/Trolley | | Truck | | Bullocks/ Camel Carts | | Horse Drawn Carts | | Pack Animal | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. |
| | Small | - | - | - | - | - | - | - | - | - | - | - | - |
| Sialkot | Medium | - | - | - | - | - | - | - | - | - | - | - | - |
| | Large | 100 | 100 | - | - | - | - | - | - | - | - | 100 | 100 |
| | Total | 100 | 100 | - | - | - | - | - | - | - | - | 100 | 100 |
| | Small | 10 | 26 | 68 | 37 | - | - | 19 | 28 | 3 | 9 | 100 | 100 |
| Rawalpindi | Medium | - | - | 83 | 81 | 17 | 19 | - | - | - | - | 100 | 100 |
| | Large | - | - | - | - | - | - | 100 | 100 | - | - | 100 | 100 |
| | Total | 8 | 11 | 67 | 42 | 2 | 6 | 21 | 37 | 2 | 4 | 100 | 100 |
| | Small | 10 | 26 | 68 | 37 | - | - | 19 | 28 | 3 | 9 | 100 | 100 |
| Punjab | Medium | - | - | 83 | 81 | 17 | 19 | - | - | - | - | 100 | 100 |
| | Large | 33 | 70 | - | - | - | - | 67 | 30 | - | - | 100 | 100 |
| | Total | 10 | 44 | 65 | 27 | 3 | 4 | 20 | 23 | 2 | 2 | 100 | 100 |

APPENDIX V-32

AVERAGE TRANSPORT COST OF DIFFERENT MODES FOR SAMPLE GROWER OF DIFFERENT FARM SIZES FOR EACH DISTRICT

CROP: MASH

| District | Farm Size | Tractor/ Trolley | Truck | Bullock Cart | Rehra | Pack Animal |
|---|---|---|---|---|---|---|
| Sialkot | Small | – | – | – | – | – |
| | Medium | – | – | – | – | – |
| | Large | 0.29 | – | – | – | – |
| | Total | 0.29 | – | – | – | – |
| Rawalpindi | Small | 0.18 | 0.28 | – | 0.13 | 0.13 |
| | Medium | – | 0.26 | 0.07 | – | – |
| | Large | – | – | – | 0.12 | – |
| | Total | 0.18 | 0.27 | 0.07 | 0.13 | 0.13 |
| Total | Small | 0.18 | 0.28 | – | 0.13 | 0.13 |
| | Medium | – | 0.26 | 0.07 | – | – |
| | Large | 0.29 | – | – | 0.12 | – |
| | Total | 0.19 | 0.27 | 0.07 | 0.13 | 0.13 |

TABLE V-33
FARM GATE PRICES AND MARKETING MARGINS FOR DIFFERENT MARKETING CHANNELS FOR MASH AND MASOOR

Rs./40 Kg.

| | MASH | | | MASOOR | | |
|---|---|---|---|---|---|---|
| | PUNJAB | | | PUNJAB | | |
| | I | II | III | I | II | III |
| A. Farmer | | | | | | |
| - Farm Gate Price | 222.01 | 230.79 | 211.72 | 227.43 | 204.78 | 228.33 |
| o Preparation Charges | - | - | - | - | - | - |
| o Transportation Charges | - | 3.91 | 3.31 | - | 2.74 | 5.45 |
| o Octroi | - | 0.87 | 0.55 | - | 0.61 | 0.91 |
| o Commission | - | 9.11 | 8.28 | - | 5.48 | 6.36 |
| o Miscellaneous Cost | - | 0.65 | 1.84 | - | - | - |
| o Cost of Deduction | - | 7.16 | 4.42 | - | 6.39 | 10.00 |
| o Total Cost | - | 21.70 | 18.40 | - | 15.22 | 22.72 |
| o Marketing Price | 222.01 | 252.49 | 230.12 | 227.43 | 220.00 | 251.05 |
| B. Village Beopari | | | | | | |
| - Sale Price | 246.95 | - | - | 262.38 | - | - |
| - Purchase Price | 222.01 | - | - | 227.43 | - | - |
| - Gross Margin | 24.94 | - | - | 34.95 | - | - |
| o Labour Cost | 0.73 | - | - | 1.34 | - | - |
| o Shop Rent | 0.50 | - | - | 0.74 | - | - |
| o Packing Cost | 0.29 | - | - | 0.44 | - | - |
| o Storage Cost | 0.02 | - | - | 0.40 | - | - |
| o Losses | 0.22 | - | - | 0.66 | - | - |
| o Transportation Cost | 0.50 | - | - | 1.54 | - | - |
| o Credit cost | - | - | - | - | - | - |
| o Other Cost | 0.11 | - | - | 0.17 | - | - |
| o Total Cost | 2.37 | - | - | 5.29 | - | - |
| - Net Margin | 22.57 | - | - | 29.66 | - | - |
| C. Katcha Arhati | | | | | | |
| - Sale Price | - | 274.50 | - | - | 256.85 | - |
| - Purchase Price | - | 252.49 | - | - | 220.00 | - |
| - Gross Margin | - | 22.01 | - | - | 36.85 | - |
| o Labour Cost | - | 1.28 | - | - | 0.75 | - |
| o Shop Rent | - | 1.00 | - | - | 0.85 | - |
| o Packing Cost | - | - | - | - | - | - |
| o Storage Cost | - | 0.27 | - | - | 0.08 | - |
| o Losses | - | - | - | - | - | - |
| o Transportation Cost | - | - | - | - | - | - |
| o Credit cost | - | - | - | - | - | - |
| o Other Cost | - | 0.19 | - | - | 0.12 | - |
| o Total Cost | - | 2.74 | - | - | 1.80 | - |

TABLE V-33 (Contd.)

| | MASH | | | MASOOR | | |
|---|---|---|---|---|---|---|
| | PUNJAB | | | PUNJAB | | |
| | I | II | III | I | II | III |
| D. Pacca Arhati | | | | | | |
| - Sale Price | 255.00 | - | 255.00 | 286.19 | - | 286.19 |
| - Purchase Price | 246.95 | - | 230.12 | 262.38 | - | 251.05 |
| - Gross Margin | 8.05 | - | 24.88 | 23.81 | - | 35.14 |
| o Labour Cost | 1.32 | - | 1.32 | 0.93 | - | 0.93 |
| o Shop Rent | 0.81 | - | 0.81 | 0.40 | - | 0.40 |
| o Packing Cost | 0.35 | - | 0.35 | 0.27 | - | 0.27 |
| o Storage Cost | 0.12 | - | 0.12 | 0.27 | - | 0.27 |
| o Losses | 0.35 | - | 0.35 | 0.19 | - | 0.19 |
| o Transportation Cost | 0.40 | - | 0.40 | 0.11 | - | 0.11 |
| o Credit cost | 0.06 | - | 0.06 | 0.03 | - | 0.03 |
| o Other Cost | 0.19 | - | 0.19 | 0.03 | - | 0.03 |
| o Total Cost | 3.60 | - | 3.60 | 2.23 | - | 2.23 |
| - Net Margin | 4.45 | - | 21.28 | 21.58 | - | 32.91 |
| E. Processors | | | | | | |
| - Purchase Price | 255.00 | 274.50 | 255.00 | 286.19 | 256.85 | 286.19 |
| - Sale Price | | | | | | |
| o Dal Washed | 304.89* | 304.89* | 304.89* | 312.60** | 312.60** | 312.60** |
| o Dal Unwashed | 8.60* | 8.60* | 8.60* | - | - | - |
| Total: | 313.49 | 313.49 | 313.49 | 312.60 | 312.60 | 312.60 |
| - Gross Margin | 58.49 | 38.99 | 58.49 | 26.41 | 55.75 | 26.41 |
| o Direct Cost | 4.60 | 4.60 | 4.60 | 8.05 | 8.05 | 8.05 |
| o Fixed Cost | 2.36 | 2.36 | 2.36 | 2.90 | 2.90 | 2.90 |
| o Financial Cost | 0.02 | 0.02 | 0.02 | - | - | - |
| o Depreciation | 2.05 | 2.05 | 2.05 | 2.73 | 2.73 | 2.73 |
| o Transportation Cost | 0.04 | 0.04 | 0.04 | 0.07 | 0.07 | 0.07 |
| o Storage Cost | 0.02 | 0.02 | 0.02 | 0.05 | 0.05 | 0.05 |
| o Other Cost | 2.49 | 2.49 | 2.49 | 3.10 | 3.10 | 3.10 |
| o Total Cost | 11.58 | 11.58 | 11.58 | 16.90 | 16.90 | 16.90 |
| o Less Cost of By-Products | 5.39 | 5.39 | 5.39 | 10.71 | 10.71 | 10.71 |
| - Net Cost | 6.19 | 6.19 | 6.19 | 6.19 | 6.19 | 6.19 |
| - Net Margin | 52.30 | 32.80 | 52.30 | 20.22 | 49.56 | 20.22 |

* (31.4 kg. Dal washed; 1 kg. Dal unwashed; 6.30 kg. by-products)

** 32.4 Kg. Dal washed; 6.30 Kg. by-products.

TABLE V- 33(Contd.)

Rs./40 Kg.

| | MASH | | | MASOOR | | |
|---|---|---|---|---|---|---|
| | PUNJAB | | | PUNJAB | | |
| | I | II | III | I | II | III |
| **F. Wholesaler** | | | | | | |
| - Sale Price | | | | | | |
| o Dal Washed | 345.50 | 345.50 | 345.50 | 342.84 | 342.84 | 342.84 |
| o Dal Unwashed | 8.75 | 8.75 | 8.75 | - | - | - |
| Total: | 354.25 | 354.25 | 354.25 | 342.84 | 342.84 | 342.84 |
| - Purchase Price | | | | | | |
| o Dal Washed | 304.89 | 304.89 | 304.89 | 312.60 | 312.60 | 312.60 |
| o Dal Unwashed | 8.60 | 8.60 | 8.60 | - | - | - |
| Total: | 313.49 | 313.49 | 313.49 | 312.60 | 312.60 | 312.60 |
| - Gross Margin | 40.76 | 40.76 | 40.76 | 30.24 | 30.24 | 30.24 |
| o Hired Labour | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 |
| o Shop Rent | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| o Electricity | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| o Telephone | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |
| o Tax | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| o Other Cost | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| o Transportation Cost | 2.46 | 2.46 | 2.46 | 1.78 | 1.78 | 1.78 |
| Total: | 2.90 | 2.90 | 2.90 | 2.22 | 2.22 | 2.22 |
| - Net Margin | 37.86 | 37.86 | 37.86 | 28.02 | 28.02 | 28.02 |
| **G. Retailer** | | | | | | |
| - Sale Price | | | | | | |
| o Dal Washed | 375.23 | 375.23 | 375.23 | 377.65 | 377.65 | 377.65 |
| o Dal Unwashed | 9.75 | 9.75 | 9.75 | - | - | - |
| Total: | 384.98 | 384.98 | 384.98 | 377.65 | 377.65 | 377.65 |
| - Purchase Price | | | | | | |
| o Dal Washed | 345.50 | 345.50 | 345.50 | 342.84 | 342.84 | 342.84 |
| o Dal Unwashed | 8.75 | 8.75 | 8.75 | - | - | - |
| Total: | 354.25 | 354.25 | 354.25 | 342.84 | 342.84 | 342.84 |
| - Gross Margin | 30.73 | 30.73 | 30.73 | 34.81 | 34.81 | 34.81 |
| o Hired Labour | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| o Shop Rent | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| o Electricity | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |
| o Telephone | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| o Tax | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| o Other Cost | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 |
| o Transportation Cost | 2.76 | 2.76 | 2.76 | 2.97 | 2.97 | 2.97 |
| Total: | 5.23 | 5.23 | 5.23 | 5.44 | 5.44 | 5.44 |

TABLE V-34

COST COMPONENT OF OPERATING COST OF SECOND STAGE MARKET FUNCTIONNARIES

Mash

| Province | | Rs./KG | | | |
|---|---|---|---|---|---|
| | | Labour | Rents | Packing Cost | Total |
| Punjab | Village Beopari | 0.73 | 0.50 | 0.29 | 1.52 |
| | Katcha Arhti | 1.28 | 1.00 | - | 2.28 |
| | Pacca Arhti | 1.32 | 0.81 | 0.35 | 2.48 |

## APPENDIX V.35

### AVERAGE STORAGE COST FOR DIFFERENT TYPES OF ACTORS

MASH

Rs./40 Kg.

| Province | Type of Actor | Averge Storage Period (days) | Average Storage Cost per month Rs./40 Kg. | Average Storage Cost (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | 2 | 0.30 | 0.02 |
| | Katcha Arhati | 19 | 0.42 | 0.27 |
| | Pacca Arhati | 11 | 0.33 | 0.12 |

## APPENDIX V.36

### AVERAGE TRANSPORTATION COST FOR DIFFERENT MODES FOR SECOND STAGE MARKET ACTOR

MASH

Rs./40 Kg.

| Province | Type of Actor | Average Distance in Km. | Average Cost Per Km. | Average Transportation Cost (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | 1.67 | 0.30 | 0.50 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 1.60 | 0.25 | 0.40 |

## APPENDIX V. 37

### AVERAGE LOSSES FOR DIFFERENT TYPES OF ACTORS

MASH

| Province | Type of Actor | Average Quantity Losses (Kg.) | Average %age of Losses (%) | Average Cost of Losses (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | 0.040 | 0.100 | 0.22 |
| | Katcha Arhati | – | – | – |
| | Pacca Arhati | 0.062 | 0.155 | 0.35 |

Table V - 38

CLASSIFICATION OF GROSS MARKETING MARGIN
BY MAJOR MARKETING SERVICE BY
(Mash)

(Rs./40 K.g)

| | Marketing Channels | | | Average Mash |
|---|---|---|---|---|
| | I | II | III | |
| Labour | 3.08 | 2.31 | 2.35 | 2.58 |
| Storage | 0.14 | 0.27 | 0.12 | 0.18 |
| Transport | 6.12 | 9.47 | 8.59 | 8.06 |
| Packing | 0.64 | 0.26 | 0.09 | 0.33 |
| Rent | 2.24 | 1.33 | 2.34 | 1.97 |
| Taxes | 0.16 | 1.03 | 0.71 | 0.63 |
| Credit Cost | 0.06 | --- | 0.06 | 0.04 |
| Processing | 6.19 | 6.19 | 6.19 | 6.19 |
| Net Margin | 142.68 | 115.43 | 136.94 | 131.68 |
| Misc. | 1.66 | 17.90 | 1587 | 11.81 |
| Total | 162.97 | 154.19 | 173.26 | 163.47 |

Table V- 39

Summary Table Showing Physical Losses Of Each Stage OF
Market System From Farm To Consumer
( M a s h )

| | Percentage of losses | | | | |
|---|---|---|---|---|---|
| | Grower's level | Second stage market functionary | Processor | Wholesaler/ retailer | Total |
| Punjab | 0.92 | 0.15 | 2.02 | 0.02 | 3.11 |

TABLE V. 40

AVERAGE HOUSEHOLD COMPOSITION FOR SAMPLE DISTRICTS

CROP : MASOOR

| District | Farm Size | No. of Farmers | Adult Above 10 Years | | | Children | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Rawalpindi | Small | 28 | 3.07 | 3.04 | 6.11 | 1.18 | 0.93 | 2.11 | 4.25 | 3.97 | 8.22 |
| | Medium | 9 | 2.89 | 3.67 | 6.56 | 0.78 | 0.56 | 1.34 | 3.67 | 4.23 | 7.90 |
| | Large | 1 | 3.00 | 2.00 | 5.00 | 4.00 | 1.00 | 5.00 | 7.00 | 3.00 | 10.00 |
| | Total | 38 | 3.03 | 3.16 | 6.19 | 1.16 | 0.84 | 2.00 | 4.19 | 4.00 | 8.19 |
| Sialkot | Small | 26 | 3.00 | 2.38 | 5.38 | 2.31 | 1.62 | 3.93 | 5.31 | 4.00 | 9.31 |
| | Medium | 10 | 3.20 | 3.10 | 6.30 | 2.50 | 1.40 | 3.90 | 5.70 | 4.50 | 10.20 |
| | Large | 2 | 4.50 | 4.50 | 9.00 | 4.00 | 3.00 | 7.00 | 8.50 | 7.50 | 16.00 |
| | Total | 38 | 3.13 | 2.68 | 5.81 | 2.45 | 1.63 | 4.08 | 5.58 | 4.31 | 9.89 |
| Total | Small | 54 | 3.04 | 2.72 | 5.76 | 1.72 | 1.26 | 2.98 | 4.76 | 3.98 | 8.74 |
| | Medium | 19 | 3.05 | 3.37 | 6.42 | 1.68 | 1.00 | 2.68 | 4.73 | 4.37 | 9.10 |
| | Large | 3 | 4.00 | 3.67 | 7.67 | 4.00 | 2.33 | 6.33 | 8.00 | 6.00 | 14.00 |
| | Total | 76 | 3.08 | 2.92 | 6.00 | 1.80 | 1.24 | 3.04 | 4.88 | 4.16 | 9.04 |

APPENDIX V.41

%AGE SHAPE OF AREA UNDER MASOOR IN THE TOTAL AREA OF DIFFERENT SAMPLE HOLDING OF EACH DISTRICT

CROP: MASOOR

| District | Farm Size | No. of Farmers | Average Cultivated Area per Farmer | Reference Crop | | Average Yield Per Acre/40 Kg. |
|---|---|---|---|---|---|---|
| | | | | Area | Percentage | |
| Rawalpindi | Small | 28 | 7.45 | 1.41 | 18.99 | 3.60 |
| | Medium | 9 | 19.00 | 4.11 | 21.64 | 2.84 |
| | Large | 1 | 38.00 | 3.00 | 7.89 | 1.00 |
| | Total | 38 | 10.99 | 2.09 | 19.07 | 3.15 |
| Sialkot | Small | 26 | 7.63 | 2.12 | 27.82 | 3.99 |
| | Medium | 10 | 16.70 | 3.20 | 19.16 | 5.28 |
| | Large | 2 | 40.00 | 9.50 | 23.75 | 2.89 |
| | Total | 38 | 11.72 | 2.79 | 23.84 | 4.19 |
| Total | Small | 54 | 7.53 | 1.75 | 23.29 | 3.83 |
| | Medium | 19 | 17.79 | 3.63 | 20.41 | 3.97 |
| | Large | 3 | 39.33 | 7.33 | 18.64 | 2.64 |
| | Total | 76 | 11.36 | 2.44 | 21.53 | 3.74 |

APPENDIX V.42

SHARE OF DIFFERENT USES OF TOTAL OUTPUT OF MASOOR BY SAMPLE GROWERS OF DIFFERENT SIZES FOR EACH DISTRICT

CROP: MASOOR (40 Kg)

| strict | Farm Size | No. of Farmers | Gross Production | Domestic Consumption | | Payment in Kind | | Kept for Seed | | Total Uses | | Marketed | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Quantity | %age | Quantity | %age | Quantity | %age | Quantity | %age | Quantity | %age |
| walpindi | Small | 28 | 5.07 | 0.45 | 9 | 0.30 | 6 | 0.51 | 10 | 1.26 | 25 | 3.81 | 75 |
| | Medium | 9 | 11.67 | 0.87 | 8 | 0.67 | 6 | 1.10 | 9 | 2.64 | 23 | 9.03 | 77 |
| | Large | 1 | 3.00 | 0.88 | 30 | 0.13 | 4 | 0.25 | 8 | 1.26 | 42 | 1.74 | 58 |
| | Total | 38 | 6.58 | 0.56 | 9 | 0.38 | 6 | 0.64 | 10 | 1.58 | 24 | 4.99 | 76 |
| lkot | Small | 26 | 8.46 | 0.48 | 6 | 0.73 | 5 | 0.42 | 5 | 1.63 | 19 | 6.83 | 81 |
| | Medium | 10 | 16.90 | 1.75 | 10 | 0.60 | 4 | 0.55 | 3 | 2.90 | 17 | 14.00 | 83 |
| | Large | 2 | 27.50 | 1.00 | 4 | 1.25 | 5 | 0.25 | 1 | 2.50 | 9 | 25.00 | 91 |
| | Total | 38 | 11.68 | 0.84 | 7 | 0.73 | 6 | 0.45 | 4 | 2.01 | 17 | 9.67 | 83 |
| al | Small | 54 | 6.70 | 0.47 | 7 | 0.51 | 5 | 0.47 | 7 | 1.44 | 22 | 5.26 | 78 |
| | Medium | 19 | 14.42 | 1.33 | 9 | 0.63 | 4 | 0.51 | 6 | 2.77 | 19 | 11.65 | 81 |
| | Large | 3 | 19.33 | 0.98 | 5 | 0.88 | 5 | 0.25 | 1 | 2.09 | 11 | 17.25 | 89 |
| | Total | 76 | 9.13 | 0.72 | 8 | 0.55 | 6 | 0.54 | 6 | 1.80 | 20 | 7.33 | 80 |

APPENDIX V. 43

%AGE CLASSIFIED OF TOTAL MASOOR SOLD BY MONTH BY SAMPLE GROWERS OF DIFFERENT FARM SIZE AND AVERAGE MONTHLY SALE PRICES FOR EACH DISTRICT

CROP: MASOOR

| District | Farm Size | %age Quantity Sold in Different Months | | | | | | | | | Average Price in Different Months | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Rawalpindi | Small | 6 | 10 | 25 | 50 | – | – | – | 9 | – | 244.61 | 261.04 | 236.34 | 214.89 | – | – | – | 266.00 | – | 231.40 |
| | Medium | – | – | 10 | 62 | – | – | 15 | – | 13 | – | – | 320.00 | 241.82 | – | – | 235.00 | – | 230.00 | 227.54 |
| | Large | – | – | – | – | – | – | 100 | – | – | – – | – | – | – | – | – | 220.00 | – | – | 220.00 |
| | Total | 3 | 6 | 19 | 54 | – | – | 7 | 5 | 6 | 224.61 | 261.04 | 256.24 | 227.99 | – | – | 233.10 | 266.00 | 230.00 | 235.07 |
| Sialkot | Small | 78 | 11 | – | 1 | – | – | – | 10 | – | 254.65 | 180.00 | – | 250.00 | – | – | – | 290.44 | – | 249.61 |
| | Medium | 79 | 8 | – | – | – | – | – | 13 | – | 243.54 | 275.00 | – | – | – | – | – | 255.55 | – | 247.78 |
| | Large | 68 | 32 | – | – | – | – | – | – | – | 220.00 | 240.00 | – | – | – | – | – | – | – | 225.40 |
| | Total | 77 | 13 | – | – | – | – | – | 10 | – | 246.17 | 224.06 | – | – | – | – | – | 272.50 | – | 245.81 |
| Total | Small | 51 | 11 | 10 | 19 | – | – | – | 9 | – | 254.20 | 206.10 | 236.34 | 215.80 | – | – | – | 281.38 | – | 227.77 |
| | Medium | 50 | 5 | 4 | 23 | – | – | 5 | 8 | 5 | 243.54 | 275.00 | 320.00 | 241.82 | – | – | 235.00 | 255.55 | 230.00 | 227.59 |
| | Large | 66 | 2 | – | – | – | – | 3 | – | – | 220.00 | 240.00 | – | – | – | – | 220.00 | – | – | 225.06 |
| | Total | 52 | 11 | 6 | 19 | – | – | 2 | 8 | 2 | 246.13 | 230.63 | 256.24 | 228.30 | – | – | 233.10 | 271.05 | 230.00 | 243.10 |

## APPENDIX V.44

### CLASSIFICATION OF MARKETING COST FOR SALE TO DIFFERENT CHANNELS FOR EACH DISTRICT — MASOOR

| ovince | Farm Size | PACCA ARHATI | | | | | | | | | | KATCHA ARHATI | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average Marketing Price | Marketing Cost | %AGE OF MARKETING PRICE | | | | | | | Farm Gate Price | Average Marketing Price | Marketing Cost | %AGE OF MARKETING COST | | | | | | | Farm Gate Price |
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| al-di | Small | 241.21 | 21.58 | – | 26 | 4 | 28 | – | 42 | 100 | 219.63 | – | – | – | – | – | – | – | – | – | – |
| | Medium | 263.74 | 24.60 | – | 25 | 3 | 27 | – | 45 | 100 | 239.14 | – | – | – | – | – | – | – | – | – | – |
| | Large | 220.00 | 18.44 | – | 19 | – | 30 | – | 51 | 100 | 201.56 | – | – | – | – | – | – | – | – | – | – |
| | Total | 251.05 | 22.72 | – | 24 | 4 | 28 | – | [illegible] | 100 | 228.33 | – | – | | – | – | – | – | – | – | – |
| lkot | Small | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | 220.00 | 15.22 | – | 18 | 4 | 36 | – | 42 | 100 | 204.78 |
| | Total | – | – | – | – | – | – | – | – | – | – | 220.00 | 15.22 | – | 18 | 4 | 36 | – | 42 | 100 | 204.78 |
| jab | Small | 241.21 | 21.58 | – | 26 | 4 | 28 | – | 42 | 100 | 219.63 | – | – | – | – | – | – | – | – | – | – |
| | Medium | 263.74 | 24.60 | – | 25 | 3 | 27 | – | 45 | 100 | 239.14 | – | – | – | – | – | – | – | – | – | – |
| | Large | 220.00 | 18.44 | – | 19 | – | 30 | – | 51 | 100 | 201.56 | 220.00 | 15.22 | – | 18 | 4 | 35 | – | 42 | 100 | 204.78 |
| | Total | 251.05 | 22.72 | – | 24 | 4 | 28 | – | 44 | 100 | 228.33 | 220.00 | 15.22 | – | 18 | 4 | 35 | – | 42 | 100 | 204.78 |

1. Preparation Charges 2. Transportation Charges 3. Octroi 4. Commission 5. Paladari, Weighmen & Changer 6. Cost of Deduction 7. Total

APPENDIX V. 45

AVERAGE STORAGE CAPACITY CLASSIFIED BY TYPE FOR SAMPLE GROWERS OF EACH DISTRICT

CROP: MASOOR 40 Kg.

| District | Farm | No. of Farmers | Avg. Quantity Kept for Storage | Total Storage Capacity of all Types | % of Storage Capacity Utilization to total Capacity | Standard * Storage Capacity | | Sub-Standard ** Storage Capacity | | Losses %) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Capacity | %age of total Capacity | Capacity | %age of total Capacity | |
| | Small | 28 | 0.96 | 124 | 0.76 | 102 | 82 | 22 | 18 | 2.08 |
| Rawalpindi | Medium | 9 | 1.97 | 183 | 1.08 | 159 | 87 | 24 | 13 | 5.58 |
| | Large | 1 | 1.13 | 150 | 0.75 | 150 | 100 | – | – | 33.63 |
| | Total | 38 | 1.20 | 138 | 0.87 | 116 | 84 | 22 | 16 | 4.17 |
| | Small | 26 | 0.90 | 124 | 0.37 | 12 | 10 | 112 | 90 | – |
| Sialkot | Medium | 10 | 2.30 | 88 | 1.48 | 27 | 31 | 61 | 69 | 21.74 |
| | Large | 2 | 1.25 | 78 | 1.60 | – | – | 78 | 100 | – |
| | Total | 38 | 1.29 | 112 | 1.15 | 15 | 13 | 97 | 87 | 10.08 |
| | Small | 54 | 0.94 | 124 | 0.76 | 59 | 48 | 65 | 52 | 2.13 |
| Total | Medium | 19 | 2.14 | 134 | 1.60 | 90 | 67 | 44 | 33 | 14.49 |
| | Large | 3 | 1.23 | 102 | 1.21 | 50 | 49 | 52 | 51 | 12.20 |
| | Total | 76 | 1.26 | 126 | 1.00 | 66 | 52 | 60 | 48 | 8.73 |

* Pacca room, pacca bharola, drum/box

** Katcha room, katcha bharola and other

APPENDIX V. 46

MARKETING CHANNELS FOR SAMPLE GROWERS OF EACH DISTRICT

CROP: MASOOR (%age)

| District | Farm Size | Local Sold | Shopkeeper | Village Beopari | Pacca Arhati | Katcha Arhati | Katcha/Pacca Arhati | Total |
|---|---|---|---|---|---|---|---|---|
| Rawalpindi | Small | - | - | 26 | 74 | - | - | 100 |
| | Medium | - | - | 20 | 80 | - | - | 100 |
| | Large | - | - | - | 100 | - | - | 100 |
| | Total | - | - | 23 | 77 | - | - | 100 |
| Sialkot | Small | - | 2 | 98 | - | - | - | 100 |
| | Medium | - | 15 | 85 | - | - | - | 100 |
| | Large | - | - | 32 | - | 68 | - | 100 |
| | Total | - | 7 | 84 | - | 9 | - | 100 |
| Total | Small | - | 1 | 72 | 27 | - | - | 100 |
| | Medium | - | 9 | 62 | 29 | - | - | 100 |
| | Large | - | - | 31 | 4 | 65 | - | 100 |
| | Total | - | 4 | 65 | 25 | 6 | - | 100 |

## APPENDIX V. 47

### AVERAGE FARM GATE PRICE FOR SALE THROUGH DIFFERENT CHANNELS OF MASOOR BY DISTRICTS

CROP : MASOOR

| District | Farm Size | Village Shopkeeper | | | Vilaige Beopari | | | Pacca Arhati | | | Katcha Arhati | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Marketed Price | Marketing Cost | Farm Gate Price | Marketed Price | Marketing Cost | Farm Gate Price | Marketed Price | Marketing Cost | Farm Gate Price | Marketed Price | Marketing Cost | Farm Gate Price |
| Rawalpindi | Small | - | - | - | 202.93 | - | 202.93 | 214.21 | 21.58 | 219.63 | - | - | - |
| | Medium | - | - | - | 180.00 | - | 180.00 | 263.74 | 24.60 | 239.14 | - | - | - |
| | Large | - | - | - | - | - | - | 220.00 | 18.44 | 201.56 | - | - | - |
| | Total | - | - | - | 189.58 | - | 184.58 | 251.05 | 22.72 | 228.33 | - | - | - |
| Sialkot | Small | 250.00 | - | 250.00 | 257.07 | - | 257.07 | - | - | - | - | - | - |
| | Medium | 245.00 | - | 245.00 | 242.81 | - | 242.81 | - | - | - | - | - | - |
| | Large | - | - | - | 240.00 | - | 240.00 | - | - | - | 220.00 | 15.22 | 214.78 |
| | Total | 245.43 | - | 245.43 | 244.33 | - | 244.33 | - | - | - | 220.00 | 15.22 | 214.78 |
| Total | Small | 250.00 | - | 250.00 | 237.38 | - | 237.38 | 241.21 | 21.58 | 219.63 | - | - | - |
| | Medium | 245.00 | - | 245.00 | 208.16 | - | 208.16 | 263.74 | 24.60 | 239.14 | - | - | - |
| | Large | - | - | - | 240.00 | - | 240.00 | 220.00 | 18.44 | 201.56 | 220.00 | 15.22 | 214.78 |
| | Total | 245.43 | - | 245.43 | 227.43 | - | 227.43 | 251.05 | 22.72 | 228.33 | 220.00 | 15.22 | 214.78 |

## APPENDIX V. 48

PERCENTAGE CLASSIFICATION OF QUANTITIES TRANSPORTED BY DIFFERENT MODE FOR SAMPLE GROWERS OF DIFFERENT FARM SIZE FOR EACH PROVINCE

MASOOR

| | Farm Size | Tractor/Trolley | | Truck | | Bullocks/ Camel Carts | | Horse Drawn Carts | | Pack Animal | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. | %age of Farmers | %age of Qty. |
| Rawalpindi | Small | 20 | 63 | 80 | 37 | – | – | – | – | – | – | 100 | 100 |
| | Medium | – | – | 100 | 100 | – | – | – | – | – | – | 100 | 100 |
| | Large | – | – | 100 | 100 | – | – | – | – | – | – | 100 | 100 |
| | Total | 14 | 30 | 86 | 70 | – | – | – | – | – | – | 100 | 100 |
| Sialkot | Small | – | – | – | – | – | – | – | – | – | – | – | – |
| | Medium | – | – | – | – | – | – | – | – | – | – | – | – |
| | Large | – | – | – | – | – | – | – | – | – | – | – | – |
| | Total | – | – | – | – | – | – | – | – | – | – | – | – |
| Punjab | Small | 20 | 63 | 30 | 37 | – | – | – | – | – | – | 100 | 100 |
| | Medium | – | – | 100 | 100 | – | – | – | – | – | – | 100 | 100 |
| | Large | – | – | 100 | 100 | – | – | – | – | – | – | 100 | 100 |
| | Total | 14 | 30 | 86 | 70 | – | – | – | – | – | – | 100 | 100 |

APPENDIX V.49

AVERAGE TRANSPORT COST OF DIFFERENT MODES FOR SAMPLE GROWERS OF DIFFERENT FARM SIZES FOR EACH DISTTRIC

CROP: MARROW (Rs./40 Kg./Km.)

| District | Farm Size | Tractor/Trolley | Truck |
|---|---|---|---|
| Rawalpindi | Small | 0.16 | 0.15 |
| | Medium | - | 0.17 |
| | Large | - | 0.11 |
| | Total | 0.16 | 0.16 |
| Sialkot | Small | - | - |
| | Medium | - | - |
| | Large | - | - |
| | Total | - | - |
| Total | Small | 0.16 | 0.15 |
| | Medium | - | 0.17 |
| | Large | - | 0.11 |
| | Total | 0.16 | 0.16 |



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## APPENDIX V.50

### COMPONENTS OF OPERATING COSTS OF SECOND STAGE MARKET FUNCTIONAIRES

Rs./40 Kg.

| | | Labour | Rents | Packing Cost | Total |
|---|---|---|---|---|---|
| Punjab | Village Beopari | 1.34 | 0.74 | 0.44 | 2.52 |
| | Katcha Arhati | 0.75 | 0.85 | - | 1.60 |
| | Pacca Arhati | 0.93 | 0.40 | 0.27 | 1.60 |

## APPENDIX V.51

### AVERAGE STORAGE COST FOR DIFFERENT TYPES OF ACTORS

MASOOR

| Province | | Average Storage Period (day) | Average Storage cost per month (Rs.) | Average Storage Cost (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | 36 | 0.33 | 0.40 |
| | Katcha Arhati | 12 | 0.20 | 0.08 |
| | Pacca Arhati | 35 | 0.23 | 0.27 |

## APPENDIX V.52

### AVERAGE TRANSPORTATION COST FOR DIFFERENT MODES FOR SECOND STAGE MARKET ACTOR

MASOOR

| Province | Type of Actor | Average Distance (Km.) | Average Transport Cost Per Km. | Average Transport Cost |
|---|---|---|---|---|
| Punjab | Village Beopari | 8.55 | 0.18 | 1.54 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.92 | 0.12 | 0.11 |

APPENDIX V-53

AVERAGE LOSSES FOR DIFFERENT TYPES OF ACTORS

MASOOR

| Province | Type of Actor | Average Quantity of Losses (Kg.) | Average %age of Losses (%) | Average Cost of Losses (Rs.) |
|---|---|---|---|---|
| Punjab | Village Beopari | 0.115 | 0.287 | 0.66 |
| | Katcha Arhati | - | - | - |
| | Pacca Arhati | 0.035 | 0.088 | 0.19 |

Table V - 54

CLASSIFICATION OF GROSS MARKETING MARGIN
BY MAJOR MARKETING SERVICE BY
(Masoor)

(Rs.Per 40 K.g)

| | Marketing Channels | | | Average Masoor |
|---|---|---|---|---|
| | I | II | III | |
| Labour | 3.30 | 1.78 | 1.96 | 2.35 |
| Storage | 0.67 | 0.08 | 0.27 | 2.34 |
| Transport | 6.40 | 7.89 | 9.91 | 8.07 |
| Packing | 0.71 | --- | 0.27 | 0.33 |
| Rent | 2.07 | 1.38 | 1.73 | 1.73 |
| Taxes | 0.16 | 0.77 | 1.07 | 0.67 |
| Credit Cost | 0.03 | --- | 0.03 | 0.02 |
| Processing | 6.19 | 6.19 | 6.19 | 6.19 |
| Net Margin | 128.85 | 142.00 | 110.52 | 127.12 |
| Misc. | 1.84 | 12.78 | 17.37 | 10.66 |
| Total | 150.22 | 172.87 | 149.32 | 157.48 |

Table V- 55

Summary Table Showing Physical Losses Of Each Stage OF Market System From Farm To Consumer
( M a s o o r )

| | Percentage of losses | | | | |
|---|---|---|---|---|---|
| | Grower's level | Second stage market fun-ctionary | Processor | Wholesaler/ retailer | Total |
| Punjab | 0.91 | 0.18 | 2.04 | 0.02 | 3.15 |



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## APPENDIX B

### Questionnairs Used in the Survey

1. Village Profile Schedule.
2. Grower's Schedule.
3. Market Profile
4. Market Dealer/Other Functionaries
5. Rice Processor .
6. Wheat Processor.
7. Pulses (Masoor, Mung, Mash, Gram).
8. Wholesaler Schedule.
9. Retailers Schedule.
10. Consumer's Schedule.

## VILLAGE PROFILE SCHEDULE

1. INTERVIEW INFORMATION

Date: Day [ ] Month [ ]

Investigator's Name: ----------------------------------------
Supervisor's Name : ----------------------------------------
Name of Respondent : ----------------------------------------

2. LOCATION:

Deh/Village Name: ----------------------
Village Hadbast Number: ----------------
Hamlet/Goth : ----------------------
Tehsil/Taluka : ----------------------
District : ----------------------

2(a) i) Total Village Population ---------- ii) No. of Farming Families ----------
iii) Total cultivated area ----------(acre)

3. Distance to:

| | Name of Place | Distance |
|---|---|---|
| Nearest Town | ------------- | -------- |
| Railway Station | ------------- | -------- |
| Procurement Centre, Passco | ------------- | -------- |
| Procurement Centre, Food Department | ------------- | -------- |
| Regulated Mandi | ------------- | -------- |

4. Area Under Crops Kharif 1987 & Rabi 1987-88

| Crops | Area (Acres) |
|---|---|
| Kharif (1987) | |
| Rice Basmati | |
| Rice Irri | |
| Rice Other | |
| Mung | |
| Mash | |
| Rabi (1987-88) | |
| Wheat | |
| Gram | |
| Masoor | |

5. Village Market Actors

| | | | | |
|---|---|---|---|---|
| Shopkeepers | Nos. [ ][ ] | | | |
| Beoparis | Nos. [ ][ ] | | | |
| Commission Agents | Nos. [ ][ ] | Place [ ] | Distance [ ] | |
| Flour Mill | No. [ ][ ] | Place [ ] | Distance [ ] | |
| Rice-Husking Mill | No. [ ][ ] | Place [ ] | Distance [ ] | |
| 'Dal' Making Mill | No. [ ][ ] | Place [ ] | Distance [ ] | |

## GROWER'S SCHEDULE

| | Day | Month |
|---|---|---|
| Date: | | |

1. Interview Information ------------------------------------------
   Investigator's Name: ------------------------------------------
   Supervisor's Name: ------------------------------------------

2. Location

   - Village/Deh Name: ------------------------------------------
   - Village/Hadbast Number: ------------------------------------------
   - Tehsil: ------------------------------------------
   - District: ------------------------------------------

3. Household Composition

   Name of Head of Family: ------------------------------------------

   Name of Respondent
   (If different from Head of Family): ------------------------

   Relationship of respondent to Head of Family: ..............

| | | | | | |
|---|---|---|---|---|---|
| Adult (above 10 Years | No. | | Male Adults | No. | |
| Children | No. | | Male Children | No. | |
| Total: | No. | | Total Male | No. | |

4. Farm Area

| | | | | | |
|---|---|---|---|---|---|
| Owned Are | Acre | | Rented in | | Acre |
| Rented out | Acre | | Self Cultivated Area | | Acre |

5. Cropping Pattern and Total Production

   Give the area and output of various crops for the last Kharif and Rabi Seasons (1987-88)

| Crops | Variety | Area (Acres) | TOTAL OUTPUT | |
|---|---|---|---|---|
| | | | Unit | Quantity |
| KHARIF (1987) Rice Basmati | | | | |
| Rice Irri | | | | |
| Rice Others | | | | |
| Mung | | | | |
| Mash | | | | |
| Sub-Total | | | | |
| Other Kharif Crops | | | | |
| Total Kharif Crops | | | | |
| RABI (1987-88) Wheat | | | | |
| Gram | | | | |
| Masoor | | | | |
| Sub-Total | | | | |
| Other Rabi Crops | | | | |
| Total Rabi Crops | | | | |
| GRAND TOTAL: | | | | |

6. Produce Balance Sheet

Give the produce balance sheet of specified crops for the last season in the following:

| Crops | Unit | Gross Production | Payment in Kind | Kept for Seed | Home Consumption | POST HARVEST LOSSES: TRANSPORTATION Handling | | | STORAGE Type | | | Others | Marketed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Others | Losses | | Period | Losses Kg. | | |
| | 1 | 2 | 3 | 4 | 5 | 6(i) | (ii) | (iii) | (i) | (ii) | (iii) | 7 | 8 |
| Kharif (1987) | | | | | | | | | | | | | |
| Rice Basmati | | | | | | | | | | | | | |
| Rice Irri | | | | | | | | | | | | | |
| Rice Other | | | | | | | | | | | | | |
| Mung | | | | | | | | | | | | | |
| Mash | | | | | | | | | | | | | |
| SUB-TOTAL | | | | | | | | | | | | | |
| Rabi (1987-88) | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Gram | | | | | | | | | | | | | |
| Masoor | | | | | | | | | | | | | |
| SUB-TOTAL | | | | | | | | | | | | | |
| TOTAL: | | | | | | | | | | | | | |

7. Storage Facilities

a) Indicate the type and capacity of storage facilities available to the household.

| Sr. No. | Storage Type | No. | CAPACITY Unit | Quantity |
|---|---|---|---|---|
| i) | Bharola | | | |
| | a) Pacca | | | |
| | b) Katcha | | | |
| ii) | Pacca Room | | | |
| | a) In bags | | | |
| | b) In heaps | | | |
| iii) | Katcha Room | | | |
| | a) In bags | | | |
| | b) In heaps | | | |
| iv) | Drums/Boxes | | | |
| v) | Other (specify) | | | |
| | TOTAL: | | | |

b) Are the available storage facilities adequate for storing produce?

Yes ☐ No ☐

If no, indicate the extent of shortage.

8. MARKETING OPERATIONS AND MODE OF SALE

Give the details of Marketing Charges and Transport Cost for Year 1986-37.

| CROPS | NAME & ADDRESS TO WHOM SOLD | Type of Market Actor | TIME OF SALE | | QUANTITY | | Price Obtained Per Maund | TOTAL TRANSPORT COST | | | | | | MARKETING EXPENSES | | | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Week | Month | Unit | Quantity | | Tractor Trolley | Truck | Bullock/Camel Cart | Rehra | Pack Animal | Total | Pre-paration | Octroi | Commission | Auction Fee | Brokerage | Storage | Palledar | Weighman | Changer | Cost of Deduction | Cost of Loan | Total | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| Rice Basmati | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rice Irri | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rice Other | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mung | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mash | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gram | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Masoor | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |

Type of Market Actor: 1. Village Shopkeeper 2. Village Beopari 3. Pacca Arhati/Wholesaler 4. Katcha Arhati 5. Katcha/Pacca Arhati 6. Food Department 7. Passco

MARKET PROFILE

1. **Interview Information:** Date: Day [ ] Month [ ]

Investigator's Name: ........................

Supervisor's Name: ______________________

Respondent's Name and Address: ______________________

______________________________________________

______________________________________________

2. **Location and Status**

Place

A = Regulated

Area Served (No. of villages)

B = Not regulated

3. Give the number of different type functionaries.

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ] 6 [ ] 7 [ ] 8 [ ] 9 [ ] 10 [ ]

Code No. 1. Kacha Arhtia
2. Pacca Arhtia/Whole salers
3. Kacha/Pacca Arhatia
4. Brokers
5. Auctioners
6. Pharia/Retailers
7. Palladars
8. Weigh men
9. Changers
10. Others (Specify)

4. **Storage Facilities**

| | Units | Capacity existing | %age Utilization | additional Requirements |
|---|---|---|---|---|
| In Market | | | | |
| Near Market | | | | |
| None | | | | |

5. **Market Charges**

Give particulars of the market charges fixed for sale transactions in the following table:

| ITEM | Who Pays for: Buyers | Sellers | Rate/Unit |
|---|---|---|---|
| Market Fee | | | |
| Auction Charges | | | |
| Commission Charges | | | |
| Brokerage | | | |
| Handling, Weighing, . PALLDAR | | | |
| Storage | | | |
| Chowkidari | | | |
| Any other (specify) CHANGER | | | |

6. Market Turnover

Give the market turnover of the following agricultural produce during 1987-88

| Name of Produce | Unit | Quantity | Value (Rs.) |
|---|---|---|---|
| Kharif (1987)<br>Rice Basmati | | | |
| Rice Irri | | | |
| Rice Other | | | |
| Mung | | | |
| Mash | | | |
| Sub-Total | | | |
| Total Kharif Crops | | | |
| Rabi (1987-88)<br>Wheat | | | |
| Gram | | | |
| Masoor | | | |
| Sub-Total | | | |
| Total Rabi Crops | | | |
| Grand Total: | | | |

7. Institutional Marketing

Does Passco and/or Provincial Food Department undertake **purchase/sale of** any commodity in this Mandi?

Yes No

If yes, give the quantities procured during 1987-88.

| | Item | Unit | Quantity |
|---|---|---|---|
| PASSCO | | | |
| | | | |
| | | | |
| Food Deptt. | | | |
| | | | |
| | | | |

## MIDDLE-MEN/MARKET DEALERS/OTHER FUNCTIONARIES SCHEDULE

| | Day | Month |
|---|---|---|
| Date: | | |

1. Interview Information

Investigator's Name: ____________________

Supervisor's Name : ____________________

2. Interviewee's Name: ____________________
and Address: ____________________

3. Functional Group

Village Shopkeeper

Village Beopari

Pacca Arhati/Wholesaler

Katcha Arhati

Katcha/Pacca Arhati

Broker

Retailer

Pharia

Any other

4. Area of Business Activities:

No. of Villages served:

5. Years in Business [ ]

6. COMMODITIES TRADED ON COMMISSION - 1987-88

6.1 Traded For:

| Commodities | Specify By Actor Type | No. of Clients | Quantity (Maunds) | Commission (Rs.) |
|---|---|---|---|---|
| Rice Basmati | | | | |
| Rice Irri | | | | |
| Rice Others | | | | |
| Mung | | | | |
| Mash | | | | |
| Wheat | | | | |
| Gram | | | | |
| Gram Kabali | | | | |
| Masoor | | | | |

Type of Market Actor. 1. Village Shopkeeper 2. Village Beopari
3. Pacca Arhati/Wholesaler 4. Katcha Arhati 5. Katcha/Pacca Arhati
6. Food Department 7. Passco



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6. COMMODITIES TRADED ON COMMISSION (1987 - 88)

6.2 TRADED TO

| Commodity | Specify by Actor Type | No. of Clients | Quantity (Mds) | Commission (Rs) |
|---|---|---|---|---|
| Rice Basmati | | | | |
| Rice Irri | | | | |
| Rice Others | | | | |
| Mung | | | | |
| Mash | | | | |
| Wheat | | | | |
| Gram | | | | |
| Gram Kabali | | | | |
| Masoor | | | | |

Type of Market Actor. 1. Village Shopkeeper 2. Village Beopari
3. Pacca Arhati/Wholesaler 4. Katcha Arhati 5. Katcha/Pacca Arhati
6. Food Department. 7 Passco



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7. COMMODITIES TRADED ON OWN ACCOUNT (1987-88)

7.1 PURCHASE FROM:

| Commodity | Type of Actor | No. of Purchases | Volume (Mds) | Price Rs/Mds | Cash Payment | Credit |
|---|---|---|---|---|---|---|
| Rice Basmati | | | | | | |
| Rice Irri | | | | | | |
| Rice Others | | | | | | |
| Mung | | | | | | |
| Mash | | | | | | |
| Wheat | | | | | | |
| Gram | | | | | | |
| Gram Kabali | | | | | | |
| Masoor | | | | | | |

Type of Market Actor. 1. Village Shopkeeper 2. Village Beopari 3. Pacca Arhati/ Wholesaler 4. Kaccha Arhati 5. Katcha/Pacca Arhati 6. Food Department 7. Passco

7. COMMODITIES TRADED ON OWN ACCOUNT (1987 - 88)

7.2 SOLD TO

| Commodity | Type of Actor | No. of Sales | Volume (Mds) | Price Rs./Mds | Payment | Credit |
|---|---|---|---|---|---|---|
| Rice Basmati | | | | | | |
| Rice Irri | | | | | | |
| Rice Other | | | | | | |
| Mung | | | | | | |
| Mash | | | | | | |
| Wheat | | | | | | |
| Gram | | | | | | |
| Gram Kabali | | | | | | |
| Masoor | | | | | | |

Type of Market Actor. 1. Village Shopkeeper 2. Village Beopari 3. Pacca Arhati/Wholesaler 4. Katcha Arhati 5. Katcha/Pacca Arhati 6. Food Department 7. Passco 8. Retailer

7(c) DETAILS OF SALES (1987 - 88)

| COMMODITY | UNIT | QUANTITY | AVERAGE PRICE | *NAME & ADDRESS OF THE MARKET ACTOR TO WHOM SOLD |
|---|---|---|---|---|
| | | | | |

1. * Six number of most important buyers (Market Actors) of each type for each commodity, who purchased 500 Bags or More.

2.** This will include sales on commission and also those on own Account.

7 (d). Selling Operations

Give market costs deducted by you from the sale proceeds of the sellers in the following table per Rs.100.00

| | Wheat | RICE | | | PULSES | | | |
|---|---|---|---|---|---|---|---|---|
| | | Basmati 370 | Irri | Common | Gram | Mascor | Mung | Mash |
| Commission | | | | | | | | |
| Palladari | | | | | | | | |
| Weighing | | | | | | | | |
| Changrai | | | | | | | | |
| Any other | | | | | | | | |
| TOTAL | | | | | | | | |

8. Business Cost for (1987-88)

a) Operation

i) Management

| | No. | Monthly Cost (Rs) | Annual (Rs) |
|---|---|---|---|
| Shop Manager | | | |
| - Clerk (Munshi) | | | |
| - Labourer (Permanent) | | | |
| - Labourer (Temporary) | | | |
| SUB-TOTAL: | | | |
| ii) Rent of Shop/Rental Value: | | | |
| iii) Other Charges: | | | |
| - Gunny bags | | | |
| - Electricity | | | |
| - Telephone | | | |
| - Taxes | | | |
| - Entertainment | | | |
| - Any other (specify) | | | |
| SUB-TOTAL: | | | |
| TOTAL (i) + (ii) + (iii) | | | |



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b) Transportation Costs (1987-88)

| Commodity | Units | Transportation & Costs | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Railway | | Truck | | Tractor Trolly | | Bullock Carts | | Pack Animals | | Any other | |
| | (Bags) | Rs, | Km | Rs, | Km | Rs, | Km | Rs, | Km | Rs, | Km | Rs, | Km |
| Rice | | | | | | | | | | | | | |
| Mung | | | | | | | | | | | | | |
| Mash | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Gram | | | | | | | | | | | | | |
| Masoor | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | |

ii) Octroi Charges:

| (Total) | Quantity | Octroi Paid |
|---|---|---|
| Rice | -------- | ---------- |
| Mung | ________ | ________ |
| Mash | ________ | ________ |
| Wheat | ________ | ________ |
| Gram | ________ | ________ |
| Masoor | ________ | ________ |

c) Storage

| Produce | Quantity (Units) (1) | Period of Storage (Months) (2) | Rent/Rental value of godown(Rs) (3) | Fumigation Cost (Rs) (4) | Labour Cost (Rs) (5) | TOTAL Cost |
|---|---|---|---|---|---|---|
| Rice | | | | | | |
| Mung | | | | | | |
| Mash | | | | | | |
| Wheat | | | | | | |
| Gram | | | | | | |
| Masoor | | | | | | |
| Total | | | | | | |

d) Losses in Operation (1987-88)

Losses during transportation KG/bag ____________

Losses in Storage:

i) Insects attach KG/bag ____________

ii) Drying KG/bag ____________

iii) Any other TOTAL KG./BAG ____________

TOTAL: ____________

e) Credit Costs (1986-87)

Mark-up (interest) on capital:

Mark-up (interest) on working capital:

f) Amount borrowed for fixed capaital: Rs. ____________

g) Average monthly amount borrowed as working capital Rs. ____________

Amount of credit given to growers: Rs. ____________

Rate of Interest charged: Rs. ____________

9. Total Business Costs:

a) Operation ____________

b) Transportation: ____________

c) Storage: ____________

d) Losses in Operations ____________

e) Credit Costs: ____________

TOTAL: ____________

10. i) Turn-over of specified commodities 1987-88

| Commosiry | Unit | Quantity | Value |
|---|---|---|---|
| Wheat | | | |
| Rice Paddy | | | |
| Gram | | | |
| Masoor | | | |
| Mung | | | |
| Mash | | | |
| Total | | | |

ii) Total Turn-over of all Commodities transacted during 1986-87 = ...................... Manund

Value = Rs. ____________

# RICE PROCESSING COSTS

Date: Day [ ] Month [ ]

**Interview Information:**

Investigator's Name: ----------------------------------------------

Supervisor's Name : ----------------------------------------------

Name of Mill Manager/Respondent : -----------------------------------

## A. Introduction

1. i) Name and Address of the Mill: ------------------------------------
   ----------------------------------------------------------------

   ii) Year of Establishment: ---------------------------------------

   iii) Year of Starting Commercial Production: -------------------------

2. Type of Mill: Chakki/Huller [ ] Sheller [ ]

   Semi-modern with rubber roll huller [ ] Modern Mill [ ]

3. Source of Supply of Main/Machinery: Local [ ] Imported [ ]

   If imported, give name and origin of suppliers: ----------------------
   ----------------------------------------------------------------

## B. Organization

4. Please indicate below the organization basis of the Mill:

   Public Limited [ ] Private Limited [ ]

   Partnership [ ] Individual Ownership [ ]

## C. 5. Give the value of fixed assets:

| | |
|---|---|
| Land | ------ (M. Rs.) |
| Building | ------ (M. Rs.) |
| Machinery | ------ (M. Rs.) |
| Other Fixed Investment | ------ (M. Rs.) |
| Total: | ------ (M. Rs.) |

## D. Capacity

6. Give installed capacity for milling in terms of Paddy for the last year on the basis of three shifts per day: --------- Tonnes.

## E. Milling Operation

7. Give duration of milling operations for 1987-88:

   - Number of working days ---------
   - Number of shifts utilized ---------

8. Give the quantity of Paddy milled on different accounts.

| | 1987 - 1988 | | | | |
|---|---|---|---|---|---|
| | Basmati 370 | Basmati 385 | Irri | Other Varieties | Total |
| Own Account | | | | | |
| Government Account | | | | | |
| Other Parties | | | | | |
| TOTAL: | | | | | |

6.1

9. a) (i) Paddy Procurement Operations

Give the quantities and values of different varieties of rice procured from different sources for 1987-88

| Source | Unit | Basmati 370 | | Basmati 350 | | Irri | | Other | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Qty. | Value | Qty. | Value | Qty. | Value | Qty. | Value | Qty. | Value |
| Local Market | | | | | | | | | | | |
| Other Markets | | | | | | | | | | | |
| Direct from Growers | | | | | | | | | | | |
| Food/Passco Centres | | | | | | | | | | | |
| Any Other | | | | | | | | | | | |
| Total: | | | | | | | | | | | |

9. (ii) Purchase

Give the quantities and value of rice milled

| | Unit | Quantity | Price/unit Rs. | Cost of Bags | Market fee | Brokrage (If Paid) | Total Cost | Average Cost per unit |
|---|---|---|---|---|---|---|---|---|
| Local Market | | | | | | | | |
| Other Markets | | | | | | | | |
| Direct from Growers | | | | | | | | |
| Food/Passco Centres | | | | | | | | |
| Any Other (Specify) | | | | | | | | |
| Total: | | | | | | | | |

10. (a) Give the annual output of rice and by products.

| | Unit | 1987 - 1988 | | | | |
|---|---|---|---|---|---|---|
| | | Basmati 370 | Basmati 385 | Irri | Other Varieties | Total |
| Head Rice | | | | | | |
| B1 (50-75%) | | | | | | |
| B2 (25-50%) | | | | | | |
| B3 (Below 25%) | | | | | | |
| Total Rice | | | | | | |
| Bran | | | | | | |
| Husk | | | | | | |

b) Give the annual output of sela (parboiled) rice.

| | Unit | 1987-88 |
|---|---|---|
| Sela Head Rice | | |
| Sela Broken | | |



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11. a) Transportation Units

| Filling & Loading (1) | Haulage (2) | Octroi (3) | Unloading (4) | Total Cost (1+2+3+4) |
|---|---|---|---|---|
| | | | | |

b) Storage Costs Units

| Period of Storage (1) | Rent/Rental Value (2) | Fumigation (3) | Labour (4) | Total Cost (2+3+4) |
|---|---|---|---|---|
| | | | | |

12(i) Operating Costs

| | 1987-88 |
|---|---|
| a) Direct (Variable) | |
| i) Salaries and Wages | ------- |
| ii) Contract Labour Charges | ------- |
| iii) Electricity/Energy Charges | ------- |
| iv) Telephone | ------- |
| v) Repair and maintenance | ------- |
| vi) Other miscellaneous Costs | ------- |
| Sub-Total: | ------- |
| b) Direct (Fixed) | |
| i) Salaries and Wages | ------- |
| ii) Administration | ------- |
| iii) Rent, Rates and Taxes | ------- |
| iv) Miscellaneous Costs | ------- |
| Total Operating Costs: | ------- |

ii) In case of parboiling operations give the processing cost to parboiling (sela) in the following table.

| Operating Costs | 1987-88 (Rs.) |
|---|---|
| a) Direct (Variable) | |
| i) Salaries, Wages and Benefits | -------------- |
| ii) Contract Labour Charges | -------------- |
| iii) Gunny Bags | -------------- |
| iv) Electricity/Energy Charges | -------------- |
| v) Husking Charges | -------------- |
| vi) Repair & Maintenance including spare and Stores | -------------- |
| vii) Transport Expenses | -------------- |
| viii) Other Miscellaneous Costs | -------------- |
| TOTAL: | -------------- |



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13. Financial Costs

i) Interest on capital --------

ii) Interest on working capital --------

Total: --------

14. Depreciation on Machinery

Depreciation of machinery --------

Equipment and Buildings --------

15. Losses During Operations

| | Weight Kg. | Value Rs. |
|---|---|---|
| i) Storage (Grains and Dals) | ----- | ----- |
| ii) Transportation (Grains and Dals) | ----- | ----- |
| iii) Losses during processing | ----- | ----- |

16. Sales Revenue

a) Give the Sales Revenue for the last year fordifferent varieties of Rice.

| | 1986 - 1987 | |
|---|---|---|
| | Quantity | Value |
| I. Basmati (a) White Rice | | |
| i) Sale to RECP | | |
| ii) Free Quota Sale | | |
| Head rice 370 | | |
| Head rice 385 | | |
| B1 370 | | |
| B2 370 | | |
| B3 370 | | |
| B1 385 | | |
| B2 385 | | |
| B3 385 | | |
| Pin heads | | |
| Bran | | |
| Husk | | |
| Total: | | |
| b) Sela Rice | | |
| i) Sale to RECP | | |
| ii) Free Quota Sale | | |
| Head Rice | | |
| Broken Rice | | |

| | 1987-1988 | |
|---|---|---|
| | Quantity | Value |
| II. Irri Rice | | |
| i) Sale to RECP | | |
| Superior (15% broken) | | |
| Fair average quality (40% broken) | | |
| ii) Free Quota Sale | | |
| Superior | | |
| B1 | | |
| B2 | | |
| B3 | | |
| Bran | | |
| Husk | | |
| Total: | | |
| GRAND TOTAL: | | |

16. (b) Details of Sales

Only those sales be record when weight is 500 bags or more

| Products & by-products | Period of Sale | Quantity in bags | Price per unit | Cash or Credit Sale | Name and Address to whom wold |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

17. Give the annual revenue from milling operations carried out for other clients.

| Client | unit | 1987- 1988 | |
|---|---|---|---|
| | | Qauntity | Value |
| Government | | | |
| Other clients | | | |
| Total: | | | |

# WHEAT PROCESSING COSTS

Date: Day [ ] Month [ ]

**Interview Information:**

Investigator's Name: ------------------------------------------------

Supervisor's Name : ------------------------------------------------

Name of Mill Manager/Respondent: ------------------------------------

A. **Introduction**

1. i) Name and Address of the Mill: ------------------------------------

------------

ii) Year of Establishment: ------------------------------------------

iii) Year of Starting Commercial Production: --------------------------

2. Type of Mill:

Traditional Chakki [ ] Modern Grinding Plant [ ] Roller Mill [ ]

3. Source of Supply of Main/Machinery: Local [ ] Imported [ ]

If imported, give name and origin of suppliers: ----------------------

------------------------------------------------------------------

B. **Organization**

4. Please indicate below the organization basis of the Mill:

Public Limited [ ] Private Limited [ ]

Partnership [ ] Individual Ownership [ ]

C. 5. Give the value of fixed assets:

| | |
|---|---|
| Land | ------ (M. Rs.) |
| Building | ------ (M. Rs.) |
| Machinery | ------ (M. Rs.) |
| Other Fixed Investment | ------ (M. Rs.) |
| Total: | ------ (M. Rs.) |

D. **Capacity**

6. Give installed capacity for milling in terms of wheat for the last year on the basis of three shifts per day: --------- Tonnes.

E. **Milling Operation**

7. Give duration of milling operations for 1987-88:

- Number of working days ---------
- Number of shifts utilized ---------

8. Give the quantity of wheat milled on different accounts.

| | Unit | 1987-88 |
|---|---|---|
| On Own Account | | |
| On Government Account | | |
| For other Parties | | |
| T O T A L: | | |

9. Wheat Procurement Costs

a) Purchases: Give the quantities and value of wheat milled

| | Unit | Quantity | Price per unit Rs. | Cost of Bags | Market Fee | Brokrage (if paid) | Total Costs | Average Costs per unit |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Local Market | | | | | | | | |
| Other Markets | | | | | | | | |
| Direct form Growers | | | | | | | | |
| Food/Passco Centres | | | | | | | | |
| Any Other (Specify) | | | | | | | | |
| Total | | | | | | | | |

9. b) Give the quantity of wheat processed in the last year: ---------------

10. Give the annual output of flour and other by-products of wheat milled on own account

| | Unit | 1987-88 |
|---|---|---|
| i) Flour | | |
| ii) Maida | | |
| iii) Fines | | |
| iv) Suji | | |
| By-Products (refraction (i) | | |
| (ii) | | |

11. Processing Costs

a) Transportation Costs

| Units | Filling & Loading (1) | Haulage (2) | Octroi (3) | Unloading (4) | Total Cost (1+2+3+4) |
|---|---|---|---|---|---|
| | | | | | |

b) Storage Costs

| Units | Period of Storage (1) | Rent/Rental Value (2) | Fumigation (3) | Labour (4) | Total Cost (2+3+4) |
|---|---|---|---|---|---|
| | | | | | |

12. Operating Costs:

a) Direct Variable

i) Salaries and Wages: Rs. ---------------------

ii) Contract Labour Charges: Rs. ---------------------

iii) Electricity/Energy Charges: Rs. ---------------------

iv) Telephone: Rs. ---------------------

v) Repair and Maintenance: Rs. ---------------------

vi) Other Miscellaneous Costs: (Specify) Rs. ---------------------

Total Rs. ---------------------

b) Direct (Fixed)

i) Salaries and Allowances ........

ii) Administration ........

iii) Rent, Rates and Taxes ........

iv) Miscellaneous Costs ........

Total Operating Costs: ________

13. Financial Costs

i) Interest on capital ........

ii) Interest on working capital ........

Total: ........

14. Depreciation on Machinery

Depreciation of Machinery ........

Equipment and Buildings: ........

15. Losses During Operations:

| | (Kg. Weight) | (Rs. Value) |
|---|---|---|
| i) Storage of wheat | .......... | ........ |
| ii) Transportation of wheat | .......... | ........ |
| iii) Storage of atta | .......... | ........ |
| iv) Transportation of atta | .......... | ........ |
| v) Losses during processing | .......... | ........ |

Total Cost ........

F. Revenues

16 a) Give the sales revenue from flour and other by-products for wheat milled on own account.

| Commodity | | Unit | 1987 - 88 Quantity | Value (Rs.) | Period of Sale No. of Month | Average Price per Unit |
|---|---|---|---|---|---|---|
| i) Flour | | | | | | |
| ii) Maida | | | | | | |
| iii) Fines | | | | | | |
| iv) Suji | | | | | | |
| By-Products (Refraction | i) | | | | | |
| | ii) | | | | | |
| | iii) | | | | | |
| Total: | | | | | | |

16. b) Details of Sales

| Products and By Products | Period of Sale | Quantity in bags (40 Kg.) | Price per Unit | Cash or Credit Sale | Name and Address to whom sold |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

* Sales of above 50 tons (50 bags) to be recorded only.

17. Give the annaul revenue from milling operations carried out for other clients.

| Client | Rate per unit | 1987 - 88 | |
|---|---|---|---|
| | | Quantity | Value |
| Government | | | |
| Other clients | | | |
| Total: | | | |

Signature of the Mill Manager/Respondent: --------------------------

Signature of the Interviewer: --------------------- Date: ---------

PROCESSING COSTS - PULSES (MUNG, MASH, MASOOR & GRAM)

Date: Day [ ] Month [ ]

Interview Information:

Investigator's Name: ----------------------------------------------------

Supervisor's Name : ----------------------------------------------------

Name of Mill Manager/Respondent: ---------------------------------------

A. Introduction

1. i) Name and Address of the Mill: -------------------------------------
------------------------------------------------------------------------

ii) Year of Establishment: ---------------------------------------------

iii) Year of Starting Commercial Production: ----------------------------

2. Type of Grinder use: ------------------------------------------------

3. Source of Supply of Main/Machinery: Local [ ] Imported [ ]

If imported, give name and origin of suppliers: -------------------------
------------------------------------------------------------------------

B. Organization

4. Please indicate below the organization basis of the Mill:

Public Limited [ ] Private Limited [ ]

Partnership [ ] Individual Ownership [ ]

C. 5. Give the value of fixed assets:

| | |
|---|---|
| Land | ------ (M. Rs.) |
| Building | ------ (M. Rs.) |
| Machinery | ------ (M. Rs.) |
| Other Fixed Investment | ------ (M. Rs.) |
| Total: | ------ (M. Rs.) |

D. Capacity

6. Give installed capacity for milling in terms of whole grain for the last year on the basis of three shifts per day ------------ tonns.

E. Processing Operations

7. Give duration of processing operations

- Number of working days --------
- Number of shifts utilized --------

8. Give the quantity of whole grain milled on different accounts

| | Unit | 1987-88 |
|---|---|---|
| On Own Account | | |
| On Government Account | | |
| For other Parties | | |
| T O T A L: | | |



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9. a) (i) Grain Procurement Operations

Give the quantities and values of different grains procured from different sources for 1987-88

| Source | Unit | MUNG | | MASH | | GRAM | | MASOOR | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Qty. | Value | Qty. | Value | Qty. | Value | Qty. | Value | Qty. | Value |
| Local Market | | | | | | | | | | | |
| Other Markets | | | | | | | | | | | |
| Direct from Growers | | | | | | | | | | | |
| Any other | | | | | | | | | | | |
| TOTAL: | | | | | | | | | | | |

(ii) Purchases

Give the quantities and value of pulses milled.

| | Unit | Quantity | Price/unit (Rs.) | Cost of Bags | Market Fee | Brokrage (if paid) | Total Costs | Average costs per unit |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Local Market | | | | | | | | |
| Other Markets | | | | | | | | |
| Direct from Growers | | | | | | | | |
| Food/Passco Centres | | | | | | | | |
| Any Other (Specify) | | | | | | | | |
| TOTAL: | | | | | | | | |

b) Give the quantity of whole grain processed.

Maunds

| Item | 1987-1988 |
|---|---|
| Mung | |
| Mash | |
| Gram | |
| Masoor | |
| Total: | |

10. Give the annual output of pulses and by-products.

Maunds

| Item | 1987-1988 |
|---|---|
| Mung dal washed | |
| Mung dal unwashed | |
| Mash dal washed | |
| Mash dal unwashed | |
| Gram dal | |
| Masoor dal | |
| Seed-cover | |
| Any other by-products (specify) | |
| TOTAL: | |

11. a) Transportation Units

| Filling & Loading (1) | Haulage (2) | Octroi (3) | Unloading (4) | Total Cost (1+2+3+4) |
|---|---|---|---|---|
| | | | | |

b) Storage Costs Units

| Period of Storage (1) | Rent/Rental Value (2) | Fumigation (3) | Labour (4) | Total Cost (2+3+4) |
|---|---|---|---|---|
| | | | | |

12. Operating Costs

| | 1987-88 |
|---|---|
| a) Direct (Variable) | |
| i) Salaries and Wages | -------- |
| ii) Contract Labour Charges | -------- |
| iii) Electricity/Energy Charges | -------- |
| iv) Telephone | -------- |
| v) Repair and maintenance | -------- |
| vi) Other miscellaneous Costs | -------- |
| Sub-Total: | -------- |
| b) Direct (Fixed) | |
| i) Salaries and Wages | -------- |
| ii) Administration | -------- |
| iii) Rent, Rates and Taxes | -------- |
| iv) Miscellaneous Costs | -------- |
| Total Operating Costs: | -------- |

13. Financial Costs

| | |
|---|---|
| i) Interest on capital | -------- |
| ii) Interest on working capital | -------- |
| Total: | -------- |

14. Depreciation on Machinery

| | |
|---|---|
| Depreciation of machinery Equipment and Buildings | -------- |

15. Losses During Operations

| | Weight Kg. | Value Rs. |
|---|---|---|
| i) Storage (Grains and Dals) | ----- | ----- |
| ii) Transportation (Grains and Dals) | ----- | ----- |
| iii) Losses during processing | | |

F. Sales Revenue

16. (a) Give the sales revenue from different type of pulses for own account

| Pulses | Unit | 1987 - 1988 | | Period of Sale No. of Month | Average Price per Unit |
|---|---|---|---|---|---|
| | | Quantity | Value (Rs.) | | |
| Mung dal washed | | | | | |
| Mung dal unwashed | | | | | |
| Mash washed | | | | | |
| Mash unwashed | | | | | |
| Gram dal | | | | | |
| Masoor dal | | | | | |
| Seed cover | | | | | |
| Any other by-product (specify) | | | | | |
| Total | | | | | |

16. (b) Details of Sales

Only those sales be record when weight is 500 bags or more

| Prodcts & by-products | Period of Sale | Quantity in bags | Price per unit | Cash or Credit Sale | Name and Address to whom wold |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

17. Give the annual revenue from milling operations carried out for other clients.

| Client | Rate per unit | 1987- 1988 | |
|---|---|---|---|
| | | Quantity | Value |
| Government | | | |
| Other clients | | | |
| Total: | | | |

| Day | Month |
|---|---|
| | |

# WHOLESALER

1. Interview Information:

Investigator's Name: ----------------------------------------------------------------

Supervisor's Name: ----------------------------------------------------------------

2. Interviewee's Name and Address: ----------------------------------------------------------------

----------------------------------------------------------------

3. Functional Group

| | | | |
|---|---|---|---|
| Village Shopkeeper | ☐ | Village Beopari | ☐ |
| Pacca Arhati/Wholesaler | ☐ | Katcha Arhati | ☐ |
| Katcha/Pacca Arhati | ☐ | Broker | ☐ |
| Retailer | ☐ | Pharia | ☐ |

Any Other (Specify):----------------------------------------------------------------

4. Area of Business activities:

No. of village served: ------------------------------

5. Year in Business: ------------------------------

6. Selling Operations

Give market costs deducted by you from the sale proceeds of the sellers in the following table per Rs. 100.00

| Commodities | Qty. | Purchase price/ unit | Commi- ssion | Palla- dari | Weigh- ing | Chang- ari | Octroi | Any Other | Total |
|---|---|---|---|---|---|---|---|---|---|
| Rice Basmat (whole) | | | | | | | | | |
| Rice Basmati (broken) | | | | | | | | | |
| Rice Ordinary (whole) | | | | | | | | | |
| Rice Ordinary (broken) | | | | | | | | | |
| Atta | | | | | | | | | |
| Maida | | | | | | | | | |
| Suji | | | | | | | | | |
| Gram (whole) | | | | | | | | | |
| Gram (dal) | | | | | | | | | |
| Kabali Gram (whole) | | | | | | | | | |
| Mung (whole) | | | | | | | | | |
| Mung dal unwashed | | | | | | | | | |
| Mung dal washed | | | | | | | | | |
| Mash (whole) | | | | | | | | | |
| Mash dal washed | | | | | | | | | |
| Mung dal unwashed | | | | | | | | | |
| Masoor (whole) | | | | | | | | | |
| Masoor dal washed | | | | | | | | | |
| Total: | | | | | | | | | |

7. Business Cost for (1987-88)

a) Operation

i) Management

| | No. | Monthly Cost (Rs.) | Annual (Rs.) |
|---|---|---|---|
| Shop Manager | | | |
| - Clerk (Munshi) | --- | -------------- | ------------ |
| - Labourer (Permanent) | --- | -------------- | ------------ |
| - Labourer (Temporary) | --- | -------------- | ------------ |
| TOTAL: | --- | -------------- | ------------ |

ii) Rent of Shop/Rental Value: ------------------------------------------

iii) Other Charges:

| | | | |
|---|---|---|---|
| - Gunny bags | --- | -------------- | ------------ |
| - Electricity | --- | -------------- | ------------ |
| - Telephones | --- | -------------- | ------------ |
| - Taxes | --- | -------------- | ------------ |
| - Entertainment | --- | -------------- | ------------ |
| - Any other (specify) | --- | -------------- | ------------ |
| Sub-Total | --- | -------------- | ------------ |
| TOTAL (i)+(ii)+(iii) | --- | -------------- | ------------ |

b) Transportation Costs (1987-88)

| Commodities | Qty. | TRANSPORTATION & COSTS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Railway | | Truck | | Tractor trolly | | Bullock carts | | Pack animal | | Any other | |
| | | Rs. | Km. | Rs. | Km. | Rs. | Km. | Rs. | Km. | Rs. | Km. | Rs. | Km. |
| Rice Basmat (whole) | | | | | | | | | | | | | |
| Rice Basmati (broken) | | | | | | | | | | | | | |
| Rice Ordinary (whole) | | | | | | | | | | | | | |
| Rice Ordinary (broken) | | | | | | | | | | | | | |
| Atta | | | | | | | | | | | | | |
| Maida | | | | | | | | | | | | | |
| Suji | | | | | | | | | | | | | |
| Gram (whole) | | | | | | | | | | | | | |
| Gram (dal) | | | | | | | | | | | | | |
| Kabali Gram (whole) | | | | | | | | | | | | | |
| Mung (whole) | | | | | | | | | | | | | |
| Mung dal unwashed | | | | | | | | | | | | | |
| Mung dal washed | | | | | | | | | | | | | |
| Mash (whole) | | | | | | | | | | | | | |
| Mash dal washed | | | | | | | | | | | | | |
| Mung dal unwashed | | | | | | | | | | | | | |
| Masoor (whole) | | | | | | | | | | | | | |
| Masoor dal washed | | | | | | | | | | | | | |
| Total: | | | | | | | | | | | | | |



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c) Storage

| PRODUCE | Quantity (Units) | Period of Storage (months) | Rent/Rented value of Godown (Rs.) | Fumigation Cost (Rs.) | Labour Cost (Rs.) | Total Cost |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Rice Basmat (whole) | | | | | | |
| Rice Basmati (broken) | | | | | | |
| Rice Ordinary (whole) | | | | | | |
| Rice Ordinary (broken) | | | | | | |
| Atta | | | | | | |
| Maida | | | | | | |
| Suji | | | | | | |
| Gram (whole) | | | | | | |
| Gram (dal) | | | | | | |
| Kabali Gram (whole) | | | | | | |
| Mung (whole) | | | | | | |
| Mung dal unwashed | | | | | | |
| Mung dal washed | | | | | | |
| Mash (whole) | | | | | | |
| Mash dal washed | | | | | | |
| Mung dal unwashed | | | | | | |
| Masoor (whole) | | | | | | |
| Masoor dal washed | | | | | | |
| Total: | | | | | | |

d) Losses in Operation (1987-88) — Weight (Kg.) — Value (Rs.)

| | Weight (Kg.) | Value (Rs.) |
|---|---|---|
| Losses during transportation | ------------ | ----------- |
| Losses in storage: | ------------ | ----------- |
| i) Insects attack | ------------ | ----------- |
| ii) Drying | ------------ | ----------- |
| iii) Any other | ------------ | ----------- |
| Sub-Total | ------------ | ----------- |
| T O T A L: | ----------- | ----------- |

e) Credit Costs (1987-88)

Mark-up (interest) on capital:

Mark-up (interest) on working capital:

f) Amount borrowed or fixed capital: Rs. --------------------------

g) Average monthly amount borrowed as working capital Rs. --------------------------

Amount of credit given to others: Rs. --------------------------

Rate of interest charged: Rs. --------------------------



6/6

8. (i) Turnover of specified commodities 1987-88

| Products | Unit | Quantity | Value |
|---|---|---|---|
| Rice Basmat (whole) | | | |
| Rice Basmati (broken) | | | |
| Rice Ordinary (whole) | | | |
| Rice Ordinary (broken) | | | |
| Atta | | | |
| Maida | | | |
| Suji | | | |
| Gram (whole) | | | |
| Gram (dal) | | | |
| Kabali Gram (whole) | | | |
| Mung (whole) | | | |
| Mung dal unwashed | | | |
| Mung dal washed | | | |
| Mash (whole) | | | |
| Mash dal washed | | | |
| Mung dal unwashed | | | |
| Masoor (whole) | | | |
| Masoor dal washed | | | |
| Total: | | | |

(ii) Total turn-over of all commodities transacted during 1987-88 (Rs.) ........

9. Details of Sales (1987-88)

| Commodity | Unit | Quantity | Average Price | Name and Address of the Market Actor to Whom Sold |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
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| | | | |
|---|---|---|---|
| | | | |

Date: | Day | Month |
|---|---|
| | |

# R E T A I L E R

1. Interview information: ------------------------------------------------

   Investigator's Name: ------------------------------------------------

   Supervisor's Name: ------------------------------------------------

2. Distributor's Name and Address: ------------------------------------

   ------------------------------------------------------------------------

3. Average monthly quantity purchased and their purchased prices.

| COMMODITIES | Unit. | Qty. | Source of Supply | Dis-tance | Purchase price/ unit | Trans-porta-tion Charges | Hand-ling Charges | Octroi | Any Other | Total Cost | Cost Per Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Rice Basmat (whole) | | | | | | | | | | | |
| Rice Basmati (broken) | | | | | | | | | | | |
| Rice Ordinary (whole) | | | | | | | | | | | |
| Rice Ordinary (broken) | | | | | | | | | | | |
| Atta | | | | | | | | | | | |
| Maida | | | | | | | | | | | |
| Suji | | | | | | | | | | | |
| Gram (whole) | | | | | | | | | | | |
| Gram (dal) | | | | | | | | | | | |
| Kabali Gram (whole) | | | | | | | | | | | |
| Mung (whole) | | | | | | | | | | | |
| Mung dal unwashed | | | | | | | | | | | |
| Mung dal washed | | | | | | | | | | | |
| Mash (whole) | | | | | | | | | | | |
| Mash dal washed | | | | | | | | | | | |
| Mung dal unwashed | | | | | | | | | | | |
| Masoor (whole) | | | | | | | | | | | |
| Masoor dal washed | | | | | | | | | | | |
| Total: | | | | | | | | | | | |

4. Average Monthly Sale

| COMMODITIES | Unit | Quantity Sold | Sale Price Per unit | Difference |
|---|---|---|---|---|
| Rice Basmat (whole) | | | | |
| Rice Basmati (broken) | | | | |
| Rice Ordinary (whole) | | | | |
| Rice Ordinary (broken) | | | | |
| Atta | | | | |
| Maida | | | | |
| Suji | | | | |
| Gram (whole) | | | | |
| Gram (dal) | | | | |
| Kabali Gram (whole) | | | | |
| Mung (whole) | | | | |
| Mung dal unwashed | | | | |
| Mung dal washed | | | | |
| Mash (whole) | | | | |
| Mash dal washed | | | | |
| Mung dal unwashed | | | | |
| Masoor (whole) | | | | |
| Masoor dal washed | | | | |
| Total: | | | | |

5. Operational Costs:

| | Total Monthly Cost |
|---|---|
| Hired Labour | Rs. ------------ |
| Shop Rent | Rs. ------------ |
| Electricity | Rs. ------------ |
| Telephone | Rs. ------------ |
| Tax | Rs. ------------ |
| Other (if any specify) | Rs. ------------ |
| TOTAL: | Rs. ------------ |

6. Credit Costs:

| | Per Year | Per Month |
|---|---|---|
| Interest on capital (Rs.) | -------- | --------- |
| Interest on working capital (Rs.) | -------- | --------- |
| TOTAL: | -------- | --------- |

7. Losses

| | Per Month | |
|---|---|---|
| | Weight Kg. | Value Rs. |
| Storage | -------- | --------- |
| Handling | -------- | --------- |
| Others | -------- | --------- |

8. Value of Losses:

| Commodities | Loss per unit (kg.) | Value of Loss (Rs.) |
| --- | --- | --- |
| Rice Basmat (whole) | | |
| Rice Basmati (broken) | | |
| Rice Ordinary (whole) | | |
| Rice Ordinary (broken) | | |
| Atta | | |
| Maida | | |
| Suji | | |
| Gram (whole) | | |
| Gram (dal) | | |
| Kabali Gram (whole) | | |
| Mung (whole) | | |
| Mung dal unwashed | | |
| Mung dal washed | | |
| Mash (whole) | | |
| Mash dal washed | | |
| Mung dal unwashed | | |
| Masoor (whole) | | |
| Masoor dal washed | | |
| Total: | | |

9. Revenue (Sales per Month

| | Turnover in Unit | Value (Rs.) |
| --- | --- | --- |
| Value of sale of all commodities | ---------------- | ----- |
| Value of sale of specified commodities | ---------------- | ----- |



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Place ID: [ ][ ][ ][ ]

Questionnaire ID: [ ][ ]

Date: Day [ ] Month [ ]

## CONSUMER's SURVEY

### Interview Information

Interviewer's Name: ----------------------------------------------

Supervisor's Name: ----------------------------------------------

1. Who makes decision about the quantity and quality of food items bought by the household?

   Head of the Household [ ]  House-wife [ ]

   Any other (specifiy): --------------------------

2. i) Name of head of the household: ----------------S/o --------------

   ii) Name of Respondent: ------------------------------------------

   ii) Address: ------------------------------------------------------

   iii) Age of head of the household: --------- Year

   iv) Educational Status:

| | Illiterate | Upto Matric | Above Matric |
|---|---|---|---|
| - Head of Household | [ ] | [ ] | [ ] |
| - Housewife | [ ] | [ ] | [ ] |

   V) Respondent: Head of Household [ ]  House Wife [ ]  Other Specify -----------

3. Size of Household:

| | | | |
|---|---|---|---|
| Adult (above 10 Years) | No. [ ] | Male Adult | No. [ ] |
| Children | No. [ ] | Male Children | No. [ ] |
| Total: | No. [ ] | Total Male | No. [ ] |

4. i) Occupation of head of the household: --------------------------

   ii) Total Monthly Income Rs.: In cash: -------In kind: Rs. --------

   iii) Monthly Expenditure on Food Rs.---------------------------------

   iv) Total Monthly Expenditure: Rs. --------------------------------

5. Is there any family member go abroad?

   Yes [ ]  No [ ]

   If yes,

   Duration of stay abroad: ---------- Years

6. i) Consumption of Selected items and prices paid.

| | Items | Quantity Consumed in kg. | Purchase price Rs./Kg. | FREQUENCY OF PURCHASES | | | |
|---|---|---|---|---|---|---|---|
| | | | | Daily | Weekly | Fortnightly | Monthly |
| A) | Atta (Wheat Flour) | | | | | | |
| | Maida(Baked Products) | | | | | | |
| | Suji | | | | | | |
| | Rice Basmati Whole | | | | | | |
| | Rice Basmati Broken | | | | | | |
| | Rice Ordinary Whole | | | | | | |
| | Rice Ordinary Broken | | | | | | |
| | Gram Whole | | | | | | |
| | Gram Dal | | | | | | |
| | Kabali Gram Whole | | | | | | |
| | Mung Whole | | | | | | |
| | Mung Dal Unwashed | | | | | | |
| | Mung Dal Washed | | | | | | |
| | Mash Whole | | | | | | |
| | Mash Dal Washed | | | | | | |
| | Mash Dal Unwasheddd | | | | | | |
| | Masoor Whole | | | | | | |
| | Masoor Dal Washed | | | | | | |
| | Bason | | | | | | |
| | Dalya | | | | | | |
| | Chapati (Nos.) | | | | | | |
| | Tanduri Roti (Nos.) | | | | | | |
| | Nan (Nos.) | | | | | | |
| | Double Roti (Nos.) | | | | | | |
| B) | Wheat | | | | | | |
| | Paddy | | | | | | |

ii) In case wheat and paddy is purchased/obtained in grain form. Please provide the following informaton.

| Commodities | SOURCE OF SUPPLY | | | In case of Market Purchase (price/mnd) |
|---|---|---|---|---|
| | Own Farm | Market | Other (Spy) | |
| Wheat | | | | |
| Paddy | | | | |

7. What features/factors are kept in mind at time of purchase for the following Commodities:

| | Commodities | FEATURES/FACTORS * | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Price (قیمت) | Taste (ذائقہ) | Colour (رنگ) | Texture (بناوٹ) | Cooking Ease (پکانے میں آسانی) | Odour (خوشبو) | N. Value (غذائیت) | Any Other (Specif) |
| A) | Atta (Wheat Flour) | | | | | | | | |
| | Maida(Baked Products) | | | | | | | | |
| | Suji | | | | | | | | |
| | Rice Basmati Whole | | | | | | | | |
| | Rice Basmati Broken | | | | | | | | |
| | Rice Ordinary Whole | | | | | | | | |
| | Rice Ordinary Broken | | | | | | | | |
| | Gram Whole | | | | | | | | |
| | Gram Dal | | | | | | | | |
| | Kabali Gram Whole | | | | | | | | |
| | Mung Whole | | | | | | | | |
| | Mung Dal Unwashed | | | | | | | | |
| | Mung Dal Washed | | | | | | | | |
| | Mash Whole | | | | | | | | |
| | Mash Dal Washed | | | | | | | | |
| | Mash Dal Unwasheddd | | | | | | | | |
| | Masoor Whole | | | | | | | | |
| | Masoor Dal Washed | | | | | | | | |
| | Bason | | | | | | | | |
| | Dalya | | | | | | | | |
| | Chapati (Nos.) | | | | | | | | |
| | Tanduri Roti (Nos.) | | | | | | | | |
| | Nan (Nos.) | | | | | | | | |
| | Double Roti (Nos.) | | | | | | | | |
| B) | Wheat | | | | | | | | |
| | Paddy | | | | | | | | |

* If more than one features/factors please rank in order of importance

8. Place Of Buying:

| COMMODITIES | PLACE OF BUYING | | | | REASONS FOR SELECTION FOR PLACE OF BUYING | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Wholesale Market | Mohalla Shop | Utility Store | Any Other (Specify) | Better Quality | Location | Cheaper | Correct Weight | Any Other (Specify) |
| A) Atta (Wheat Flour) | | | | | | | | | |
| Maida (Baked Products) | | | | | | | | | |
| Suji | | | | | | | | | |
| Rice Basmati Whole | | | | | | | | | |
| Rice Basmati Broken | | | | | | | | | |
| Rice Ordinary Whole | | | | | | | | | |
| Rice Ordinary Broken | | | | | | | | | |
| Gram Whole | | | | | | | | | |
| Gram Dal | | | | | | | | | |
| Kabali Gram Whole | | | | | | | | | |
| Mung Whole | | | | | | | | | |
| Mung Dal Unwashed | | | | | | | | | |
| Mung Dal Washed | | | | | | | | | |
| Mash Whole | | | | | | | | | |
| Mash Dal Washed | | | | | | | | | |
| Mash Dal Unwasheddd | | | | | | | | | |
| Masoor Whole | | | | | | | | | |
| Masoor Dal Washed | | | | | | | | | |
| Bason | | | | | | | | | |
| Dalya | | | | | | | | | |
| Chapati (Nos.) | | | | | | | | | |
| Tanduri Roti (Nos.) | | | | | | | | | |
| Nan (Nos.) | | | | | | | | | |
| Double Roti (Nos.) | | | | | | | | | |

9.(a) Do you purchase the following porducts in a package form?

Yes ☐ No ☐

If yes, indicate the type and size of package the product usually purchased.

| | TYPE | | | | | SIZE IN KG. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gunny Bags | Cloth Bags | Card Board Box | Polythe-line Bags | Any Other (specify) | 0.5 | 1 | 2 | 5 | 10 | 20 |
| A) Atta (Wheat Flour) | | | | | | | | | | | |
| Maida (Baked Products) | | | | | | | | | | | |
| Suji | | | | | | | | | | | |
| Rice Basmati Whole | | | | | | | | | | | |
| Rice Basmati Broken | | | | | | | | | | | |
| Rice Ordinary Whole | | | | | | | | | | | |
| Rice Ordinary Broken | | | | | | | | | | | |
| Gram Whole | | | | | | | | | | | |
| Gram Dal | | | | | | | | | | | |
| Kabali Gram Whole | | | | | | | | | | | |
| Mung Whole | | | | | | | | | | | |
| Mung Dal Unwashed | | | | | | | | | | | |
| Mung Dal Washed | | | | | | | | | | | |
| Mash Whole | | | | | | | | | | | |
| Mash Dal Washed | | | | | | | | | | | |
| Mash Dal Unwasheddd | | | | | | | | | | | |
| Masoor Whole | | | | | | | | | | | |
| Masoor Dal Washed | | | | | | | | | | | |
| Bason | | | | | | | | | | | |
| Dalya | | | | | | | | | | | |
| Chapati (Nos.) | | | | | | | | | | | |
| Tanduri Roti (Nos.) | | | | | | | | | | | |
| Nan (Nos.) | | | | | | | | | | | |
| Double Roti (Nos.) | | | | | | | | | | | |
| B) Wheat | | | | | | | | | | | |
| Paddy | | | | | | | | | | | |

9. (b) Would you like to purchase the following products in a package form?

Yes [ ] No [ ]

If yes, give your preference about type of package and size.

| COMMODITIES | TYPE | | | | | SIZE IN KG. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gunny Bag | Cloth Bag | Card Board Box | Polythe-line Bag | Any other (Specify) | 0.5 | 1 | 2 | 5 | 10 | 20 |
| A) Atta (Wheat Flour) | | | | | | | | | | | |
| Maida (Baked Products) | | | | | | | | | | | |
| Suji | | | | | | | | | | | |
| Rice Basmati Whole | | | | | | | | | | | |
| Rice Basmati Broken | | | | | | | | | | | |
| Rice Ordinary Whole | | | | | | | | | | | |
| Rice Ordinary Broken | | | | | | | | | | | |
| Gram Whole | | | | | | | | | | | |
| Gram Dal | | | | | | | | | | | |
| Kabali Gram Whole | | | | | | | | | | | |
| Mung Whole | | | | | | | | | | | |
| Mung Dal Unwashed | | | | | | | | | | | |
| Mung Dal Washed | | | | | | | | | | | |
| Mash Whole | | | | | | | | | | | |
| Mash Dal Washed | | | | | | | | | | | |
| Mash Dal Unwasheddd | | | | | | | | | | | |
| Masoor Whole | | | | | | | | | | | |
| Masoor Dal Washed | | | | | | | | | | | |
| Bason | | | | | | | | | | | |
| Dalya | | | | | | | | | | | |
| Chapati (Nos.) | | | | | | | | | | | |
| Tanduri Roti (Nos.) | | | | | | | | | | | |
| Nan (Nos.) | | | | | | | | | | | |
| Double Roti (Nos.) | | | | | | | | | | | |
| B) Wheat | | | | | | | | | | | |
| Paddy | | | | | | | | | | | |

10. How much higher prices are you prepared to pay in case the commodity is available in a graded form, in the type and size of package preferred by you.

| COMMODITIES | AS PERCENTAGE OF PRESENT PRICE | | | | | |
|---|---|---|---|---|---|---|
| | 0 | 1-5 | 6-10 | 11-15 | 16-20 | Above |
| A) Atta (Wheat Flour) | | | | | | |
| Maida (Baked Products) | | | | | | |
| Suji | | | | | | |
| Rice Basmati Whole | | | | | | |
| Rice Basmati Broken | | | | | | |
| Rice Ordinary Whole | | | | | | |
| Rice Ordinary Broken | | | | | | |
| Gram Whole | | | | | | |
| Gram Dal | | | | | | |
| Kabali Gram Whole | | | | | | |
| Mung Whole | | | | | | |
| Mung Dal Unwashed | | | | | | |
| Mung Dal Washed | | | | | | |
| Mash Whole | | | | | | |
| Mash Dal Washed | | | | | | |
| Mash Dal Unwasheddd | | | | | | |
| Masoor Whole | | | | | | |
| Masoor Dal Washed | | | | | | |
| Bason | | | | | | |
| Dalya | | | | | | |
| Chapati (Nos.) | | | | | | |
| Tanduri Roti (Nos.) | | | | | | |
| Nan (Nos.) | | | | | | |
| Double Roti (Nos.) | | | | | | |
| B) Wheat | | | | | | |
| Paddy | | | | | | |

11. Consumer's Preference for Different Forms of Products

i) Are you aware about the following products?

1. Enriched Flour — Yes [ ] No [ ]
2. Brown Flour — Yes [ ] No [ ]
3. Baking Mix:
   - Pakora Mix — Yes [ ] No [ ]
   - Khair Mix — Yes [ ] No [ ]
   - Gonda Howa Atta — Yes [ ] No [ ]
4. Semi-Cooked:
   - Samosa — Yes [ ] No [ ]
   - Paparr — Yes [ ] No [ ]
5. Pre-Cooked:
   - Canned rice — Yes [ ] No [ ]

Re.1 Enriched Flour: In contains supplementary vitamins

Re.2 Brown Flour: It is a whole grain flour, it includes bran, suji, madia.

ii) Would you like to purchase the following products?

Enriched Flour — Yes [ ] No [ ]

If yes, how much higher prices are you prepared to pay:

0% [ ] 1-5% [ ] 6-10% [ ] 11-15% [ ] 16-20% [ ] Above [ ]

Brown Flour: — Yes [ ] No [ ]

If yes, how much higher prices are you prepared to pay:

0% [ ] 1-5% [ ] 6-10% [ ] 11-15% [ ] 16-20% [ ] Above [ ]

Baking Mix:

- Pakora Mix — Yes [ ] No [ ]

If yes, how much higher prices are you prepared to pay:

0% [ ] 1-5% [ ] 6-10% [ ] 11-15% [ ] 16-20% [ ] Above [ ]

- Khair Mix — Yes [ ] No [ ]

If yes, how much higher prices are you prepared to pay:

0% [ ] 1-5% [ ] 6-10% [ ] 11-15% [ ] 16-20% [ ] Above [ ]

- Gonda Howa Atta — Yes [ ] No [ ]

If yes, how much higher prices are you prepared to pay:

0% [ ] 1-5% [ ] 6-10% [ ] 11-15% [ ] 16-20% [ ] Above [ ]



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Semi-Cooked:

- Samosa Yes ☐ No ☐

If yes, how much higher prices are you prepared to pay:

0% ☐ 1-5% ☐ 6-10% ☐ 11-15% ☐ 16-20% ☐ Above ☐

- Paparr Yes ☐ No ☐

If yes, how much higher prices are you prepared to pay:

0% ☐ 1-5% ☐ 6-10% ☐ 11-15% ☐ 16-20% ☐ Above ☐

Pre-Cooked:

- Canned Rice Yes ☐ No ☐

If yes, how much higher prices are you prepared to pay:

0% ☐ 1-5% ☐ 6-10% ☐ 11-15% ☐ 16-20% ☐ Above ☐

APPENDIX C

# B I B L I O G R A P H Y

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APPENDIX D

# GLOSSARY OF TERMS

## GLOSSARY OF TERMS

| | |
|---|---|
| ACRE | Measure of area equivalent to 4840 Sq.Yds. |
| BARANI | Dependent on rainfall |
| BEOPARI | Itinerant dealer |
| DISTRICT | Administrative unit of area. |
| KATCHA ARHATI | Commission Agent, person who arranges transaction between buyers and sellers and receives a commission for his services. |
| KHARIF | Autumn harvest or monsoon or summar crops. |
| MASH | Pulse, much valued as human food.(Phaseolus Dentisulata). |
| MASOOR | Lentil, a pulse crop. Lens Esculenta |
| MUNG | Pulse; much valued a food for invalids (Phaseopous Mumgo) |
| PACCA ARHATI | Dealer. A person who purchases produce on his own account. |
| RABI | Spring harvest or winter crops. |
| RUPEE | Pakistan standard coin |



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