



USAID FIRMS PROJECT

Provincial Agriculture Marketing Policy Framework Rapid Market Appraisal

September, 2011

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Data Page

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Abstract

The present study was undertaken to obtain basic information about the existing agricultural marketing system in Balochistan. The method adopted for the survey was a “Rapid Market Appraisal”, which is an emerging approach for collecting primary information or data. The main purpose of this Rapid Market Appraisal was to identify the existing and potential market linkages that connect the growers/farmers to the consumers, who are the end users.

Various intermediaries are involved in the marketing channels, including growers/farmers, pre-harvest contractors, commission agents, wholesalers and retailers. Therefore, it was considered necessary to personally contact main *stakeholders*, such as farmers, contractors, commission agents, and exporters to obtain first-hand information.

Different questionnaires were developed for growers, contractors, commission agents, and exporters to collect maximum information. The Rapid Market Appraisal team also made an attempt to investigate and explore other related facts about business, which were not included in the format but considered essential in understanding the marketing system in vogue.

The target crops selected for the survey among the fruits were apples and grapes, and onion and tomatoes among vegetables. The main reason for selecting fruit crops was because fruit crops were available in the market/orchards at the time of the study, being the leading crops grown and consumed in the province, not only locally but also sold in other domestic markets as well as exported to neighboring countries like Iran and Afghanistan. Tomatoes and onions were identified for the survey because of their high demand during this season from other parts of the country due to short supply in distant markets.

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Executive Summary

The present study was undertaken to obtain basic information about the existing agricultural marketing system in Balochistan. The method adopted for the survey was a “Rapid Market Appraisal”, which is an emerging approach for collecting primary information or data. The main purpose of this Rapid Market Appraisal was to identify the existing and potential market linkages that connect the growers/farmers to the consumers, who are the end users.

Various intermediaries are involved in the marketing channels, including growers/farmers, pre-harvest contractors, commission agents, wholesalers and retailers. Therefore, it was considered necessary to personally contact main *stakeholders*, such as farmers, contractors, commission agents, and exporters to obtain first-hand information.

Different questionnaires were developed for growers, contractors, commission agents, and exporters to collect maximum information. The Rapid Market Appraisal team also made an attempt to investigate and explore other related facts about business, which were not included in the format but considered essential in understanding the marketing system in vogue. Before conducting the study, various meetings between policy experts on agricultural marketing and the Firms team were held both at Lahore and Quetta. In light of these discussions, the formats were revised.

The target crops selected for the survey among the fruits were apples and grapes, and onion and tomatoes among vegetables. The main reason for selecting fruit crops was because fruit crops were available in the market/orchards at the time of the study, being the leading crops grown and consumed in the province, not only locally but also sold in other domestic markets as well as exported to neighboring countries like Iran and Afghanistan. Tomatoes and onions were identified for the survey because of their high demand during this season from other parts of the country due to short supply in distant markets.

The survey also included information about the operation and existing facilities of the main Hazar Ganji fruit and vegetable wholesale Quetta Market. During a short stay there, we had the opportunity to visit the fruit and vegetable terminal market of Lahore. Commission agents at Lahore who deal with apple, apricot, onion, grapes and tomato growers in Balochistan were also contacted during the visit.

We visited Kuchlak, Kan Mehtarzai, Pishin and Killa Saifullah, besides the Quetta Market during the present investigation. These areas are potential growing areas for apples, grapes and tomatoes. Business activities related to the marketing of fruits in these areas was in full swing during this season. Approximately 80 to 90% apples, 50% of apricots and grapes and about 50 to 60% of tomatoes and onions are sent directly to Lahore, Multan, Gujranwala, Rawalpindi, Faisalabad, Karachi, and Sukkur by the contractors and growers. The commission agents, contractors and growers interviewed

in these areas had on-the-spot information about all the marketing operations from the sale of the produce from the orchards to its final destination.

In addition to the above, the Rapid Market Appraisal team also assessed the efficiency of the present marketing system in the provinces and effectiveness of the Marketing Committee in Balochistan, as well as future plans to strengthen the existing system. Any future plans about establishing new markets run by growers, thus eliminating or minimizing the role of the Commission Agent were also discussed.

The results of the present survey/ investigations are detailed as under:

- The present main market is located at Hazarganji on 37 acres of land. To cope up with the increasing production and marketing, it has been extended to an additional area of 23 acres. Market became operational in 1996. It is actually a transfer market or junction market and serves as a transfer of produce from Quetta to other markets of the country and also to Iran, Afghanistan and Central Asian Countries. It is also named in some reports as a low price market due to supply of comparatively low quality produce sent to this market especially apple.
- The suppliers of fruits to the main Market Quetta are mostly pre-harvest contractors. Some growers also supply the fruit to the main market. In case of vegetables, all the supply is delivered by the growers to the market and contractor is not involved in vegetable marketing
- The buyers in the market are mostly retailers. Some buyers are commission agents from other provinces or traders that purchase produce from the local commission agent or contractor and resell to other markets of the country
- The estimated flow of fruits from Quetta wholesale market to primary distant markets for apple is 20%, and other perishable fruits like apricot, peach, plum, grapes is 50% to 60 %
- At present there are 258 Commission Agents' shops and each commission agent has been allotted a space in the auction platform. Also there are 315 shops for allied services, two banks, Post Office, Dispensary, Restaurant, Mosque, weight bridge, Octroi Post, Guest ouse, tube well (not operational at the time of visit).
- There are plans to have a Fruit/ Vegetable grading, washing ,waxing unit , cold stores, plat form and processing and packing units in addition to 866 plots for wholesalers in the newly extended area

- The Market Committee is composed of 12 members representing growers, commission agents, wholesaler, one each from retailer and consumer. The numbers of growers are more and Chairman is elected by the members and he is mostly from the grower.
- The only tube well at the time of the visit was not operational. Sanitation and drainage system was also not functional. Some portions of the roads were broken , and other infrastructure was not up to the desired standard
- Due to limited cultivated area, majority of apple fruit growers are small land holders in the high altitude areas like Ziarat, Kanmehtarzai Kach, and Kawas. About 90 % of the growers sell fruit to contractors in April/ May after fruit set and when the danger of late spring frost is over.
- At high altitudes of the province, high quality apples are produced and fetches good price in the distant markets. “A” grade apples are marketed to Lahore, Multan, Faisalabad, and Gujranwala. “B” grade apples are sent to Quetta Market
- The small growers take 1/3 advance from the contractor at the time of the deal and 1/3 at the time of first consignment and the last installment at the time of final harvest.
- Some growers from these areas have other business besides farming and send their produce directly to distant markets and do not take any advance from Commission Agents.
- Fruit growers from the upland located at an altitude between 4,500 feet to 5,500 feet grow varieties of fruits and vegetables. The land is not a limiting factor in this area but irrigation water is scarce. High quality stone fruits like, almond, apricot, peach and plum are grown here. Grape is also an important crop of Pishin, Gulistan, Killa Abdullah, and Mastung.
- Majority of growers sell their produce to Contractors after fruits set. Some financially sound fruit growers from the above mentioned area even entered into export business and deal directly with the Commission Agent of importing country or through exporter of Karachi.
- Those growers who have taken advance from the Commission Agent at Quetta Market are under obligation to send their produce to Quetta Market and are at the mercy of the Commission Agent

- A small minority of growers living at Pishin, Killa Abdullah, Gulistan who are educated and have other sources of income always prefer to send their produce directly to Karachi, Sukkur, Hyderabad market and they do not take advance from Commission agents and are present during auction at the distant market
- The margin of profits or benefits of direct marketing compared to selling through contractor is always higher and it ranges on an average from 10 to 50 % more compared to selling through Contractor, depending upon the price in distant markets and experience of the grower in selling direct to the market
- Unfortunately, no grower has ever received any feedback from the consumer or commission agents about the quality of their fruits. No system is in place to create awareness among the laborers or other persons engaged in orchard management operation about health hazards due to pesticide spray/ residue
- Every grower interviewed had expressed serious concerns about the load shedding almost for 16 to 18 hours daily this year. Their production will be almost ¼ of the actual production under normal circumstances. Also the quality of fruits will be far from satisfactory
- In this province, Pre Harvest contractors purchase almost 70 to 80% of the orchards. The orchards are contracted after the late spring frost which occurs from March 23rd to March 31st,
- Barring few exception, almost all the contractors take loans from the Commission Agents of the Markets where the produce is intended to be sent. The advance is taken usually in January/ February. The amount of advance depends on the volume of the produce to be contracted and the availability of skilled and unskilled labor and access to main markets is the main criteria considered by the Contractor
- The stone fruits like cherry, apricot, plum, and peaches are contracted in April/ May and apple and grapes in the last week of May to mid June
- Traditionally the contractor pays the amount to growers in three installments. First installments is paid at the time of deal which is 1/3 of total amount, the next is paid when the first consignment is ready for market and the last one at the time of final harvest.
- The contractor is responsible for the spraying operation, weeding, picking, grading, packing and transport to market.

- About 60 to 70% contractors, especially those who contract orchards at Pishin, Killa Abdullah, Gulistan, Bostan, Kuchlak, Muslim Bagh, and Killa Saifullah are Afghan nationals who are almost settled in Kuchlak/Pishin and Killa Abdullah. They have sufficient capital as compared to local contractors.
- About 50 to 60% of local contractors who inherited this business are out of business now as they were unable to continue due to non-recovery of their loans from growers as a result of continuous drought of 1997-2002. Many orchards were completely dried
- Commission Agents surveyed at Main market Lahore, Quetta, Kuchlak, Killa Saifullh were of the opinion that without Commission Agents it is impossible to have marketing operation. They further added that they provide capital to growers and contractors for running the business and their share is limited only to the commission.
- Some of the Commission agents at Lahore belonged to this province and have started business at Lahore since 2000-01. For the past three to four years, the local commission agents from Lahore have entered into partnership with Balochistan commission agents. Most probably the main purpose of partnership of Lahore commission agents with Balochistan commission agents appears to be assistance from their partners of Balochistan about smooth and speedy recovery of pending loans from Balochistan contractors/ growers
- Commission agents mentioned that their commission or profit is directly related to the quantity of produce in the market. If there is less production , they will be unable to recover the advance paid by them
- All the commission agents reported that during continuous drought spell in Balochistan from 1997 to 2002, the commission agents failed to recover the loan amounting to billions of rupees
- At Quetta wholesale Market commission rate varies 10% for fruit marketed within the province to 7% for fruit consigned from other parts of the country
- Some Commission Agents have also entered into export business for the last six to seven years. The main fruit exported is Kinno and to a lesser extent mango.

- The exporters of Kinno have established their business at Sarghoda and buy directly from the growers of Sarghodha and adjoining areas. The fruit after grading, waxing and packing of desirable standard -is exported to Iran via Quetta
- The quantity of Kinno exported to Iran according to two exporters was 21,750 tons from November to January and Potato 7,150 tons from October to April. One exporter since the last 3 years is exporting Kinno and potato directly to Central Asian countries via Iran. In this case Commission Agents from Central Asian countries visit Quetta and purchase the product from the Commission agent of Quetta
- Two growers are exporting apples, grapes to Bangladesh, Malaysia, Sri Lanka, United Arab Emirates and Dubai for the last seven or eight years by ship in containers. The quantity of apple exported was 639 tons and grapes 120 tons last year
- The importing country requires specific cartons of varying weightage and of desired quality
- Comparison between the contractors and growers about the net return after deducting all expenses has indicated that growers will earn more if they sell directly to market instead of contracting the orchards. The growers interviewed are aware of the benefits but due to lack of capital and skill in selling directly and other off Farm activities, prefer to sell to the contractor
- Some growers who sell directly to the contractor also stated that the risk is avoided i.e. the risk which may occur during transportation due to floods, road blockage, civil disorder and above all, if there is a glut in the terminal market
- Usually the vegetables are sent directly to the market and contractors are not involved. Small growers mentioned that the Commission Agent has a soft corner for well to do growers and the small growers are not treated equally. Their produce sells at the end of the auction which results in low price
- Those growers who have taken advance from the Commission Agent are bound to sell their produce to them. As such they do not have any say about the holding of produce for a better price
- The Commission Agent said that they only charge commission and the produce is auctioned openly. No favor or disfavor is done towards well to do growers or small growers. They also mentioned that they facilitate the growers by extending

the loan before the sowing of vegetables without any interest. They further added that the marketing operations or disposal of fruits will be difficult, if not impossible, without Commission Agent support

- The cold storage facilities are not up to the optimal capacity. Only one cold store in the private sector is in operation, having a capacity of 300 tons. During glut period, the farmers are compelled to sell the fruit at a low price
- The transport facilities are available to the growers throughout the province and good companies are active in arranging transport for the contractor/ growers for transporting their produce to distant markets. Goods companies charge commission and the commission varies from an average of 1500.00 to 2,000.00 per load.

1. BACKGROUND

The province of Balochistan is blessed with different agro ecological and climatic zones ranging from sea level in the south to high mountainous areas in the north (Annexure 1). Though the province has been classified among the arid areas of the world due to its rainfall pattern, the cultivation of fruits especially deciduous fruits and dates have been grown since long wherever the irrigation facilities from natural springs and karezes were available. The province due to its dry climate produces high quality fruits and vegetables. The main reason attributed to the quality is the absence or very low incidence of fungal diseases. The absence of fungal diseases increases the shelf life of fruits in cold storage.

The province leads in the production of deciduous fruit in the country and ranks second in the production of dates. According to the latest statistics of the Agriculture Department, the total area (bearing trees) under deciduous fruits is 115,119 hectares (284,459 acres) which is about 68.00 % of the total area under fruits. Total production of deciduous fruits according to same statistics is 602,567 tones, which accounts for 70 % of total production. Apple is the leading deciduous crop followed by apricots and grapes since 1990-91 to 2009-10 as appears from Annexes II and III. The estimated volume and value of fruits traded in and out of Balochistan are presented in Annexure IV

The marketing of fruits especially deciduous fruits from Balochistan province to other provinces was limited during the decades of 1950 and 1960 due to low production and limited transport facilities. The only means of transportation available was train. With the provision of electricity through National Grid System in the decades of 1970 and 1980, the area under deciduous fruits and vegetable was tremendously increased in the uplands of the province. Annex V provides data about increase in area and production of deciduous and ever green fruits since 1974-75 to 2009-10.

This development occurred as a result of exploitation of ground water through tube wells especially in the uplands. In addition, road transport facilitated the marketing of fruits from the farm to distant markets in relatively short time as compared to shipment by train.

2. PURPOSE

The prevailing system of marketing of fruits, vegetables and other commodities in the province was the same as practiced in other provinces, which in turn was inherited from undivided India. Various studies by different organizations were conducted in the past about marketing system in the province. The focus of these reports was mostly on the problems faced by the growers in increasing their production and how to improve the quality of their produce through better management and handling for marketing. These reports covered very little about the changes to be brought in the present Marketing Act of 1991 to safeguard the interest of grower and consumer by eliminating or minimizing the role of middleman/ Commission Agent and to promote competition thus encouraging investment by private sector/farmers organization.

In order to encourage the investment by private sector and to safeguard the interest of growers and consumers, the Government of Balochistan has expressed interest in promoting business friendly policy and regulations as practiced in other countries by amending the present Marketing Act 1991 or framing new regulations/act to encourage the investment by the interested parties

USAID Pakistan Firms Project has been entrusted to assist Government of Balochistan in formulating the policy/ regulations. FIRMS has already provided the technical service to the Government of the Punjab and Sind in amending their Marketing Act to bring change in the present marketing system which is monopolized by few individuals.

The present report outlines the primary information collected by interviewing/ discussion with various stakeholders involved in the marketing chains. The approach adopted in this report is based on Rapid Rural Marketing Appraisal (RRMA) which is an emerging approach in collecting the primary information data by the researchers/ consultants by visiting and holding meetings with various stakeholders starting from growers, contractors, commission agents, exporters, market committee members and various public sector officials engaged in marketing. The information/ data obtained through visits, meeting individuals and general findings are reported.

3. COVERAGE AND METHODOLOGY

The BEE/Firms' main objectives of the present assignment was to identify market linkages-existing or potential- that connect the grower with the market down to commission agents: or the wholesaler/retailer in the destination market. Maximum efforts were made during survey not to restrict to Questions /Answer only as mentioned in the survey format but also explore and investigate as far as possible additional information related to their business and activities during the entire marketing operations.

After discussion with Policy Expert on Agricultural Marketing FIRMS and other team members for Rapid Market Appraisal Balochistan, target crops identified for appraisal survey were apples, grapes among the fruits and onions and tomatoes were selected from vegetables. The main reasons for choosing these crops were that apples and grapes are the leading fruit crops of the province, and were being marketed during the survey to distant markets as well as to Quetta market. These crops are not only sold in the country but are also exported to other countries. Tomatoes and onions are identified for survey because of their demand in the other markets of the country as in this season there was no supply from other parts of the country (though for short period) to the distant markets like Lahore, Faisalabad, Karachi, and Sukkur.

The marketing operations like selling to commission agents by the growers/ contractors were almost identical of the crops identified and other fruit and vegetable crops grown in this province hence there was no difference in marketing operations of the crops selected for present studies and other crops

Farmers / growers, contractors and commission agents at Quetta main market were interviewed at Quetta. We visited Kan Mehtarzai (Upland) famous for quality apple production and, Killa Saifullah which is a tomatoes' growing area and early maturing apple varieties. Grape growers and contractors were interviewed at Pishin, the major grape growing area. Visits outside Quetta was undertaken with an aim to get on the spot information from various stakeholders involved in marketing of their produce.

Onions from Harnai, Kharan, Duki, and Dulai are marketed in July, August. Visits could not be made to onion growing areas but the growers of these areas were interviewed at Quetta. Market Committee Chairman Mr [REDACTED], who is also a leading onion grower of Panjpai was interviewed at Quetta Market.

We availed an opportunity to visit Main Market at Lahore during my stay at Lahore. Though it was a very short visit it proved very productive. The focus was to interview those commission agents who are dealing with the growers/ contractors of Balochistan with an aim to investigate any problem/concern by them about their business with Balochistan growers. The main commodities from Balochistan marketed and auctioned through Lahore Commission Agents are apple, apricot, grapes, onion and tomatoes.

During the entire period of study we remained in contact with Preston S. Pattie, Policy Expert on Agricultural Marketing Firms, from July 13th to July 28th, at Lahore and Quetta. The survey reports were discussed with him and additional information were collected as a result of discussion. Grower/ Farmer format was also revised. After his departure, contact was continued through e-mail till August 7th, 2011 and his suggestions were incorporated in the survey formats. Last contacted was made with him through e-mail on August 31st, 2011 and supplied him the information about Quetta main Market and Market Committee Quetta.

In addition to above investigation, an attempt was also made to assess the efficiency of the present marketing system in the province and effectiveness of Market Committee in Balochistan.

3.1. Rapid Market Appraisal: Growers/ Farmers

The first step was to survey the farmer growers. Rapid Market Appraisal format was the same for all the crops. The growers interviewed were categorized according to the crop grown by them, size of farm, marketing, direct to commission agent or through contractor, climatic zones where the crop is grown and whether the produce was marketed at Quetta or distant markets.

3.1.1. Crop Identified for Rapid Market Appraisal

Apples, Grapes, Onions, Tomatoes

Category of grower:

- a) Location: high altitude (more than 2000m) or mid-altitude (between 1550m to 2000m)
- b) Farm size up to 5 acres, 10 to 25 acres, more than 25 acres
- c) Point of sale, Quetta market, distant market within the country or export to other countries
- d) Sold directly to market or to contractor
- e) If sold to contractor, what was the mode of payment?
- f) If sold direct to commission agent, whether any advance was obtained
- g) Are inputs available in time and locally or obtained from distant cities?
- h) Any awareness about pesticide residue, health hazards?
- i) Any feedback from the final end user about the quality of his produce?

3.2. Rapid Market Appraisal: Contractor/ Trader

The second step was the Rapid Market Appraisal of contractors who contracts orchards from the growers. The following points were included in the survey:

- a) Duration of business
- b) Orchards contracted
- c) Point of purchase, within the vicinity of contractor's village or at a distance from the village
- d) How the relationship with the growers was established
- e) Mode of payment to growers
- f) When the advance was given to grower
- g) Relationship with buyer?
- h) Where the product is sold; local market or distant market or exported
- i) Has any feedback from buyer of local/ distant markets received regarding quality of produce?

In addition to the above survey, it was decided by the Policy Expert on Agricultural Marketing Firms on July 20, 2011 at Quetta meeting to estimate the comparison of benefits between farmers selling directly to distant markets and those who sell to the contractors. Comparison of tomato and onion between grower and contractor benefits is not worked out because these crops are not contracted in this province and are sold directly by the grower to commission agent in the market –local/ distant market. However, the cost of production and net return by the growers through direct marketing to commission agents has been worked out and is reported in this write up.

3.3. Rapid Market Appraisal: Commission Agents

The 3rd step of Rapid Market Appraisal of present investigations was to cover commission agents at Lahore main market, Quetta, Kuchlak and Killa Saifullah. The Commission Agents are the main actors in the whole marketing chain in this province/ country. Though the RMA was actually meant to collect information from the commission agents of Karachi and other terminal markets of the country, most of the growers and contractors of Balochistan- especially small growers and majority of contractors- do not have enough capital and their business is mostly with the Commission Agents of Quetta market; hence it was considered worthwhile to include also the commission agents of Quetta/ Kuchlak and Killa Saifullah in the survey.

The following information was collected from Commission Agents Lahore, Quetta, Kuchlak and Killa Saifullah.

- a) Investment made in the business - since the start and at present
- b) Relationship with the growers-does he obtain product directly from the growers?
- c) How the relationship was established

- d) Does he deal with the same grower/ same village?
- e) How does he deal with the contractor?
- f) Does always work with same contractors?
- g) Whether advance is paid to contractor/ grower in different installments or in one installment
- h) How is it recovered?
- i) Where is the product is sold-to wholesaler/ retailers or sent to some other markets nearby or other provinces?

3.4. Rapid Market Appraisal: Export Sale

The province of Balochistan is bounded in the North to Afghanistan and North East to Iran. It is connected by roads to Iran and Afghanistan. Citrus fruits especially the variety Kinno from Punjab is marketed through Quetta to Iran for the last 20 to 25 years. However, the export of fruits like Kinno and mango to Afghanistan started just since the last 10 years. Export of apple and vegetables to Afghanistan has been taking place since the last five to six years by the exporters of Gulistan, Killa Abdulla. Over the last few years Kinno, potato and rice is exported to central Asian countries like Tajikistan, Azarbijan, Kaziqastan, and Uzbekistan through Iran and Afghanistan.

Some commission agents and financially sound growers have also entered into export business. The following Rapid Market Appraisal Survey of Exporters was conducted and five exporters were interviewed. The survey was centered on the following points.

- a) Kind of product being exported
- b) Who provides the product: growers, contractors or commission agents?
- c) Where the product is received or purchased
- d) What is the mode of payment –in installments or lump sum or after the produce is reached at destination?
- e) Who are the buyers of importing countries-commission agents, contractor or any other?
- f) How was the relationship established with the buyer?
- g) Does the buyer place orders with specific conditions for delivery?
- h) Is the buyer concerned with quality?

3.5. Rapid Market Appraisal: Hazar Ganji Main market, Quetta;

The market is a place where the transaction of commodities from the farm to market and out of market to other main markets within the country or outside the country takes place. Fruit and Vegetable Market at Hazar Ganji is the main primary market in Balochistan. However, it is not as big as other primary terminal markets in the country like Lahore, Islamabad, Multan, Faisalabad, Karachi, Hyderabad and Sukkur. It may be called a Transfer Market or Junction Market. The produce received in this market from

the province are exported to other big consumer markets in the country and also this market serves as an export market for exporting the produce like Kinno, mango and potato received from Punjab and Sind

The Rapid Market Appraisal Survey of Quetta Hazar Ganji main Market was undertaken focusing on the following points

- a) Area of Market
- b) Daily arrival of Fruit and Vegetables and time of arrival- in a peak season, slack season
- c) Time of auction
- d) Major commodities received- within the province, outside the province
- e) Space available
- f) Number of shops –Commission Agents, Allied services, other services
- g) Facilities provided by Market Committee
- h) Infrastructure – excellent, good or satisfactory
- i) Charges by Market Committee
- j) Charges by commission agents
- k) Persons delivering the produce –farmers or their representative, pre harvest contractors, others?

3.6. Rapid Market Appraisal: Market Committee Operation Quetta Main Market

The present survey also includes the operation of Market Committee Quetta. The main focus was to look into services provided, overall maintenance of infrastructure, future plans, annual budget and source of budget. Future plans in development of market in other areas near Quetta or support to other districts *in* establishment of markets

3.7. Rapid Market Appraisal: Storage of Produce

Cold stores are an essential component of every market. The main idea of the Cold Store in terminal markets or primary wholesale markets is to store the fruit when there is surplus of a particular commodity in the market. Also the fruits which are stored for a longer period can be marketed during off season. Apples and potatoes are the examples of such commodities. Present survey included to ascertain the existence of cold stores in the market or in Quetta. If so, the capacity of these cold stores and its utilization during peak season were also studied.

4. FINDINGS

4.1. Step 1 in Rapid Market Appraisal: Growers/ Farmers

I. **Apple:** Nineteen apple growers were interviewed during the period of investigation. Growers from Ziarat, Kan Mehtarzai, Pishin, Quetta, M. Bagh, and Kuchlak were selected as these were the main apple growing areas. They were divided among different categories according to Farm Size. The summary of responses is summarized as follows:

i) **Category 1.** Farm Size ranging from 1.5 acres to 5 acres
Number of Growers interviewed: 12

- For most of the growers, farming is their main source of income inherited from their elders/ forefathers. However, two farmers have other sources of income too - one from Ziarat has out of farm business like Rent a Car shop whereas one farmer from Quetta is a Government servant
- Ten growers from Ziarat and Kan Mehtarzai sent their produce to distant markets like Lahore, Multan, Faisalabad, Gujranwala, Rawalpindi/ Islamabad, and two growers to Quetta Market
- Four growers sent their produce directly to Commission Agents at distant markets whereas eight growers sold to contractors
- Out of 12 growers, three growers preferred to take advance during slack season from the neighbors instead of commission agents; four growers who sent directly to distant markets did not take advance from commission agents of distant markets. In this way they are not bound to sell the produce to same commission agents
- Five out of 12 growers who sold to contractor took advance at three different installments; 1/3 at the time of deal which is usually in April/ May after fruit set, 1/3 at the time of first shipment to market by the contractor which is in July the harvesting period of the early variety of apple "GAJA" and apricots, peaches/ plums etc and the last at the time of harvest of late variety of apple "Shin Kullu" which is usually in October/ November.
- The training, pruning, and application of fertilizer/ farm yard manure is the responsibility of grower whether he sells directly to market or sell to contractors. In case orchard is contracted, farm operations like spraying, irrigating the orchards, weeding, harvesting, grading and packing is the responsibility of contractor. If the grower self market the product of his orchard, all the operations starting from training, pruning, application of fertilizer, irrigation, weeding, interculturing, spraying, harvesting, grading etc. rest with the grower

ii) **Category 2:** Farm Size ranging from 6 to 25 acres

Number of Growers interviewed: 3

The summary of response is as under:

- All the growers earn their income from farming except one who is a lawyer at Quetta
- The produce is sent to distant as well as Quetta market “A” grade is sent to distant markets like Lahore, Multan, Faisalabad and “B” grade to Quetta Market
- Two growers sold their orchard to contractor whereas one sold directly to Commission Agent at distant market
- The mode of advance from Contractor to grower is in three installments: 1/3 at the time of deal, the next 1/3 at the time of first shipment to market and the last one at the time of harvesting of late variety
- One grower who sent directly to distant market did not take any advance from commission agents
- Contractor is responsible for spraying, irrigation, weeding, picking, grading , packing etc. The grower is responsible for training/ pruning, fertilizer application. Those growers who sends direct to market are responsible for all the above mentioned operations

iii) Category 3: Farm Size ranging from 30 acres to 140 acres

Number of growers contacted: 4

The summary of response is as under:

- All the growers in this category are resource rich growers. Their main source of income is farming inherited from their forefathers. One grower besides farming has also income from off farm activities i.e. working as “an On Farm Water Management” Consultant in a private firm
- Two farmers sell directly to distant markets and also export to UAE, and Bangladesh whereas export to Afghanistan started since the last four to five years the other two sell to contractor
- The mode of advance from contractor is in three installments; 1/3 at the time of contract, 1/3 at the time of first consignment to market and the last at the time of harvesting of late varieties
- Contractor is responsible for all the farm operations after contract like spraying, irrigating the orchards, weeding, picking, grading and packing. Those growers who do not sell the produce to contractor are responsible for carrying out all the operations

I.I. Points Common to all the above categories

The following points are common to all the categories mentioned above

- a) The orchard is contracted at the time of fruit set and not at full bloom as reported in previous reports

- b) The main source of irrigation is ground water in 95% of the orchards. Only 5% orchards are irrigated by traditional kareze water at Pishin, Kanmehtarzai, Killa Saifullah
- c) Relationships with buyers (Contractors/ Commission Agents) are established the first time through brokers and some mutual friends
- d) Those growers who contract their orchards believe that they can earn more if they sell directly to the market but due to lack of skill, and experience they prefer to contract the orchard. Also they are busy in other farm activities and do not have the time to sell by themselves.
- e) Small and resource poor farmers reported that they do not have the resources for purchasing of inputs during the growing season and also during winter which is a slack season. In winter they need money to bear day to day expenses; hence they are compelled to take loans. Also they do not have the capital to engage skilled labor and to pay the transport charge from farm to market-domestic as well as distant.
- f) Resource rich farmers sell directly to distant markets and always plan to be present personally or through their representatives at the time of auction at distant market. If there is glut in the market, they store their product in cold stores where facilities are available in the distant markets
- g) None of the farmers visited had any feedback from the end users, retailers, or wholesaler about the quality of their produce and any measure suggested to improve his production or quality
- h) No system is in place to create awareness among the labor engaged, especially among those who spray the orchards about health hazards and precaution to be taken
- i) All the inputs like fertilizers, pesticides, packing material are available in the local market
- j) The production this year according to growers whose source of irrigation is tube well is anticipated below than average due to continuous load shedding in the growing season for almost 12 to 16 hours in 24 hours. The quality of fruit will not be of desired standards either.

II. Grapes: Eight growers having different Farm Sizes were interviewed. They were categorized according to their farm size. The growers belong to Districts Pishin and Killa Abdullah. These two districts are leading grape growing areas of the province.

- i. **Category1.** Farm Size ranging from 10 to 15 acres
Number of growers interviewed: 4
The summary of response is summarized as below:

- All the farmers inherited farming from their forefathers. Farming is the main source of income of all the farmers. One grower has also one shop at nearby town

- Three growers sell their produce to contractor while one sells directly to distant Market at Karachi. Also the contractor sells the produce to distant markets of Punjab or Karachi
- The mode of payment of the produce sold to contractor is in two installments: half at the time of deal with contractor and the other when the first consignment is ready for marketing
- The relationship with buyer (contractor) is established through brokers at the time of the first visit by the contractor and after that, through mutual trust. Main factor is who offers the *better* price.
- The irrigation facilities are provided by the growers but irrigating the orchards is the responsibility of contractors' labor. Training, pruning, fertilizer application and other management operations are the responsibilities of grower. After the sale of contract the responsibility of spraying, picking, packing, grading shifts to the contractor.

ii) **Category 2.** Farm Size ranging from 30 to 35 Acres

Number of growers; 3; [REDACTED]

The summary of response is as under:

- Farming is the main source of income.
- Besides farming, one grower has off farm business i.e. cloth shops; and one is a lawyer at Quetta
- Two growers sell directly to distant markets Sukkur, Karachi, Multan.
- One grower is also exporting grapes to Bangladesh and United Arab Emirates
- Relationship with buyers (Commission Agents) was established through friends and by visiting the distant markets personally. Relationship with foreign importers was established through personal visits. Seven or eight years back, Pakistan Export Promotion bureau used to arrange regularly Fruit Show at Quetta and invited the foreign countries buyers to Quetta
- Buyers are changed. The main factor is who offers the better price
- All the farm operations like irrigation, pruning and training, fertilizer application, spraying, picking, packing, grading and marketing are undertaken by the farmers through engaging unskilled and skilled labor, if the grower sell directly to market. If the orchard is contracted, spraying, picking, packing, grading is the responsibility of the contractor whereas all the other operations are the responsibilities of the grower even if the orchard is contracted.

iii) **Category 3:** Farm Size; 100 acres and above

Name of Grower: [REDACTED]

Number of Grower 1 [REDACTED]

Summary of response is as under:

- Farming is the main source of income. One of the resource rich and leading progressive farmers of the province
- Sends his produce directly to Sukkur, Karachi, Gujranwala
- Also entered in export business for the last eight to 10 years.

- Exports to Bangladesh, Malaysia, Dubai. Exports from Karachi in partnership with Commission Agent of Karachi
- No advance from Commission Agents is obtained
- After the produce is disposed of by commission agents through wholesale sellers/ retailers payment is made either in full or in two installments
- All the farm operations starting from planting to harvesting are done by the skilled and seasonal labor employed during the period.
- Picking, packing is done on the farm under his supervision
- All the inputs are available in the local market and are purchased on cash

II.1 Points Common to all the above categories

Small and average farmers sell the produce to contractors due to lack of skill and experience, other jobs besides farming, and shortage of capital

- Mode of Payment: mostly in grapes by the contractors is in two installments; one at the time of deal and other at the beginning of harvest
- Load shedding is a problem in the grape growing area as well. However, 50 % of the growers surveyed in Pishin area had kareze water and are not seriously affected. Some grape growers who are resource rich have purchased power generators which they use at the time of load shedding.
- Unfortunately there is no system in place for the grower to receive feedback from the end users
- Also awareness about pesticide residue and hazards associated with it is lacking

III Onion: Five growers having different farm size and representing different onion growing areas of the province were contacted for the RMA survey. The growers were from Kharan, Panjpai and Nohisar the main onion growing areas.

The response is summarized as below:

i. Category 1: Farm Size ranging from 10 acres to 20 acres

Number of Growers; 4

- Farming is the main source of income.
- Three growers are in Government service whereas one is retired three years ago
- Three growers send their produce to distant market whereas one sells at Quetta Market. Two growers send to Lahore, Gujranwala and one to Sukkur Sind
- The relationship with buyers (Commission Agents) are established through visits and mutual friends who were already dealing with Commission Agent
- The produce is sent to different commission agents depending upon who offers the better price and early payment
- The produce is packed on the farm in gunny bags by share croppers

ii. Category 2: Farm size more than 100 acres (125 acres)
Grower [REDACTED]

- Farming is the main source of income
- The produce is sent to Lahore Market since long
- The buyer is a Commission Agent of Lahore main Market
- The grower has established business friendly relations since long with a Commission Agent at Lahore and always sends to same commission Agent
- The produce is packed on the farm by share croppers in gunny bags
- The source of irrigation is tube well. Total number of Tube wells are 25

III.I Points Common to all the above categories:

- Onion in this province is sold to Commission Agent in the distant markets and local markets. Contractor is not involved in the purchase of crop
- All the onion growing areas are irrigated by tube wells.
- Share croppers (Labor) are employed by the farmers. The terms of payment are 1/3 of the final produce at the time of harvest. Share croppers are responsible for land preparation, sowing, weeding, fertilizer application, spraying, and packing of produce. Share croppers may be local of the area or Afghan refugees
- The grower provides all the inputs like fertilizers, seed, spray, packing material etc.
- The commission agents provides advance before the sowing time if the growers so desire. Almost 80 % growers take advance for the purchase of inputs.
- Amount of advance depends on the growers' area, and reputation in dealing. One grower who has 125 acres of onion was provided advance of 1.00 million to 2.00 million. A small grower having 15 acres of farm has taken advance of Rs. 50,000.00 from Commission Agent of distant Market
- Continuous load shedding this year is a matter of great concern for the growers, contractors and Commission Agents who have extended the loan. Production is estimated to be below average.
- Most of the growers consider onion as a risky crop. Sometimes the onion from India at Lahore market lowers down the price of Quetta onions. Also onion from Sind reaches market in Karachi and Sindh market when the onions from Balochistan are still in the process of marketing
- No feedback is received by the growers about the quality of their crops. There is no system in place.
- Most of the growers are aware of pesticide residues and health hazards associated with it but failed to train their labors who are engaged in spraying their produce

IV. Tomato: Seven tomato growers belonging to Killa Saifullah, Quetta, and Pishin were contacted for RMA survey. They were classified into three different categories according to their farm size. Summary of responses is as under:

i) Category 1. Farm size ranging from 5 acres to 15 acres

Number of growers 5

Three growers interviewed were from Killa Saifullah (the major tomato growing area) one each from Quetta and Pishin

- Farming is the main source of income. Two out of five growers are also working in Government Department
- Growers from Killa Saifullah send their produce to Lahore, Faisalabad, Rawal Pindi, and D.G. Khan. For the last three to four years, the commission agents from Bannu, Mardan (Khyber Pakhtoon Khawa) during the season come to Killa Saifullah and directly purchase from the local commission agent or growers at Killa Saifullah. The growers from Quetta and Pishin sell their produce at Quetta Market
- All the growers obtain advance from the commission agents before the sowing of crops. This advance is used for purchase of seed/ seedlings, fertilizer/ farm yard manure, pesticides, packing material, packing cartons etc.
- Relationship with the buyers was established at the beginning through broker in the main market, through mutual friends and by visiting the distant markets. As the growers take advance from the commission agent, he is bound to sell his produce to same commission agent. Very little chance of changing the buyer is present.
- Share croppers are employed by all the tomato growers interviewed at Killa Saifullah and Pishin. The share cropper at Killa Saifullah is paid 1/3 of the total produce. All the inputs are provided by the grower. At Pishin, share croppers are paid 40 % of the produce. In this particular case, besides labor, share cropper also pays for fertilizer/ pesticide besides labor starting from land preparation, planting, weeding, harvesting, packing and grading. The grower at Quetta who was interviewed had engaged labor at a rate of Rs. 6,000.00 per month instead of sharecroppers. The number of laborers vary according to the farm operations

ii) Category 2. Farm size ranging from 30 acres to 55 acres

Number of Growers 2; from Quetta and Khanozai Pishin

- Farming is the primary source of income. Besides farming, grower at Quetta also has agrochemical business.
- The grower from Quetta sells the produce at Quetta Market whereas the grower from Pishin sends the produce to Karachi, Multan, Lahore
- The produce is sent directly to commission agents at Quetta as well as at distant markets
- The relationship with buyers (commission agents) is established since long , almost 10 to 15 years by both the growers. It is a kind of family relationship
- Both growers have engaged share croppers on 1/3 share of the final produce. The inputs are provided by the farmers

IV.I. Points Common to all the above categories

- The crop is directly sent to commission agents in the main markets

- With few exceptions, the share croppers are engaged by the growers during the season. Mostly 1/3 of the total produce is the share of share cropper. All the inputs are provided by the grower.
- The commission agents provide advance about 40 % of the total produce expected from the grower at the main markets. The advance is used for the purchase of inputs like seed/ seedlings, fertilizers/ farm yard manure, pesticides, packing material, cartons etc.
- The packing is done at the farm by share cropper after harvest
- The growers do not receive any feedback from the end users (consumers) about the quality of their produce.
- No system is in place to create awareness among the labor engaged regarding health hazard associated with pesticide spray. No precautionary measures are being used
- All the growers have expressed concern about the continuous load shedding during this year. They were expecting less production.
One Commission Agent at Killa Saifullah mentioned that in 2004 the total production of tomato from Killa Saifullah alone was 120,000 crates (each crates weighing 12 to 14 Kg). Since 2007 the production has dropped and last year (2010), it was 40,000.00 crates. This year according to his estimate it would be hardly 20,000 to 25,000 from the same area.

4.2. Step 2 in Rapid Market Appraisal: Pre-Harvest Contractor/ Trader

Number of Contractors interviewed: 7

Types of Orchards Contracted: Apple, apricot, peach, plum, cherry and grapes

Five contractors interviewed were dealing with apple, apricot and other Stone fruits while two contractors were contracting vineyards

The contractors interviewed were from Quetta, Kuchlak, MuslimBagh, KanMehtar Zai, Killa Saifullah, Pishin, Gulistan.

The responses received are as under:

- i) Category 1.** Contractors dealing with apple, apricots, peaches, plums and cherries
 - Most of the contractors interviewed were in the business for the last 20 to 25 years. 40 % inherited from their forefathers/ relatives and are local of the province while others opted for this business since 2000-01 and migrated from Afghanistan
 - The fruit is purchased at the places where orchards are located as mentioned above
 - The purchase is made directly from the grower. At the time of first entrance in the area, the services of broker in the village or in the vicinity are hired. With the passage of time mutual trust is developed between the contractor and grower

- As a tradition, payment to the growers is made in three different installments: 1/3 of the total price agreed is paid when the deal is finalized at the beginning and the second installment is paid when the first consignment is ready for marketing and the last installment at the time last harvest or harvest of late varieties of apples
- Only one contractor interviewed used his own capital whereas the rest obtain advance from the Commission Agents of main markets where the fruit is sent
- The orchard for apricot, peach, plum and cherry are contracted in the month of March after the late spring frost is over, and the apple orchards are contracted in last week of May to mid June. The deal is made after the fruit set
- After the contract is finalized, the management of orchard like irrigation, spraying against insects and pests, picking, packing is the responsibility of the contractor whereas grower takes care of pruning and training, provision of irrigation water and application of farm yard manure/ fertilizer during autumn and early spring.
- The contractors do not have any feedback from the commission agents or end users about their quality of produce
- Also there is no program to create awareness among the labors who are engaged in spraying about health hazard associated with pesticides spray

ii. Category 2: Contractors dealing with grapes

- The contractors are in the business for the last 20 to 25 years
- Their first choice of contracting vineyard is in the grape growing area of Killa Abdullah and Pishin. If feasible logistically and availability of labors, they also contract apple orchards nearby
- The deal is finalized with the grower after survey of the condition of crop
- The relationship with grower is established through some mutual friends, neighbors, or at the beginning through broker.
- After finalizing the deal with the growers, the amount is paid in three installments. In some cases in two installments. First installment is paid at the time of the deal, the second 1/3 when the first consignment is sent to market and the last installment when the final shipment is marketed. In case of two installments, last payment is made when the first consignment is sent to market
- Most of the contractors interviewed reported that they take advance from commission agents of markets and pay in one or two installments depending upon the sale of fruit
- The buyers are Commission Agents at Quetta markets and distant markets at Lahore, Karachi, Multan, and Sukkur. Mostly deal with those commission agents who pay them advance at the time of contracting the vineyard
- The packing material, cartons are purchased locally or from Quetta markets
- The fruit is packed at the farm in carton varying in size from 10 to 12 KG
- No feedback has ever received by the contractor from the end user or Commission Agent about the quality of his produce
- Many contractors are aware of the health hazard as a result of spray of pesticides but no precautionary measure are adopted or labor engaged in spraying are trained

4.2.1. Related Common Information

Most of the contractors work independently or with close family members. The contractors have gained sufficient experience in their business. Before making any deal, they survey the entire fruit growing area to be contracted

They enter into a contract with the growers after assessing the nature and volume of crop, conditions of roads from orchard to the main road, availability of labor - both skill and unskilled.

Many of the local professional contractors from this province have been out of business since 2000. The main reason was that due to continuous drought of 1997-2002 they were unable to recover the amount paid by them to the growers as there was no production. Consequently they could not return to the Commission Agents from whom they obtained loan. They did not have their own capital or were unable to get loan from any institution to continue their business.

Nowadays most of the contractors are Afghan nationals who had migrated from Afghanistan during Afghan crisis, and permanently settled at Quetta, Kuchlak, Pishin, and Loralai. They have the capital and due to their links in Afghanistan, also contract orchards of pomegranate and grapes at Qandahar (Afghanistan) and market at Quetta and distant markets of Lahore or Karachi.

Apple fruit especially from Ziarat, Muslim Bagh, Kan Mehtarzai, Killa Abdullah (High altitude area) are sent by the contractor to markets of Lahore, Multan, Faisalabad, Karachi, Sukkur, and Hyderabad. About 80 to 85% of "A" grade apple is sent to distant markets and only "B" grade are sent to local market at Quetta. Also the grapes are sent to distant markets. Due to perishable nature of crop, the quantity sent to distant markets ranges from 50 to 60 %.

Perishable fruits like apricot, peaches, plums and cherries are sent to Quetta Market. However, apricot if picked at pre ripe stage is sent to nearest distant market like, Sukkur, Hyderabad, D.G. Khan/ Multan.

Most of the contractors or their representatives are present at the time of auction at the market. In case of apple, if there is a glut in the market, they store their apple in the cold store at distant market.

A contractor who deals with the grape crop stated that the profit from grapes is less as compared to dried grapes (raisins). Also packing charges of raisins are less as compared to fresh grapes. The raisins are marketed in the local dry fruit market at Quetta and there is a saving of transport as well. The raisins packs are small and packed in plastic covers of 3 kg to 5 kg and the payment is made in full by the dry fruit merchant on the same day

The information obtained from contractors about the purchase of orchards (apple, apricot) vineyards during the current season is detailed below. Some of the contractors were reluctant to respond. In some cases especially in grapes, growers were approached to provide information about the amount of sale of their produce.

Table 1: Showing the Orchards Contracted by the Contractors in the province

Crop	Name of the Grower	Name of Contractor	Location of Orchard	Amount contracted	Area/ Number of trees.
Apple			Sariab,Quetta	Rs.1.10 million	5 acres (300 trees)
Apple			Tora Shah ,Pishin	Rs.2.50 million	17 acres (1200 trees)
Apple			Dolangi, Gulistan kareze,	Rs.8.00 million	2000 trees from 5 orchards
Apple			Khanozai Pishin	Rs. 7.00 million	40 acres
Apple			Killa Saifullah	Rs. 6.00 million	10 acres
Apple			Tangi, Kach	Rs.200,000.00 thousands	1.5 acres 130 trees
Apple			Kan Mehtarzai	Rs. 0.40 millions	200 trees (3.5 acres)
Grapes			K. Abdullh, Gulistan,Dolangi	Rs.1.50 millions	5 acres (100 trench)
Grapes			Batezai (Pishin)	Rs.1.70 million	12 acres
Grapes			Skan Khan Pishin	Rs.4.00 million	12 acres

*Contractors from Afghanistan settled in the Province

4.3. Step 3 in Rapid Market Appraisal: Commission Agents

Number of Commission Agents interviewed:	12
Commission Agents Interviewed at Lahore:	5
Commission Agents Interviewed at Quetta:	5
Commission Agents Interviewed at K. Saifullah:	1
Commission Agent Interviewed at Kuchla:	1

Commission Agents were categorized in two different categories namely Lahore and Quetta/Killa Saifullah/Kuchlak. Responses received are mentioned below:

i. Category 1: Commission Agents Lahore

All the Commission Agents interviewed at Lahore had dealing with the contractors/ growers of Balochistan since long. Two of the Commission Agents at Lahore are permanent residents of Balochistan, village Gulistan district Killa Abdullah. Two Commission Agents had a partnership with the Commission Agents of Lahore. One Commission Agent who deals only with onion crop is a resident of Lahore, has independent business and is dealing with onion growers of Balochistan for the last 50 to 60 years

- Commission Agents of Lahore are buyers of produce from Balochistan
- Two Commission Agents deal in apple marketing, one only in tomato, one in onion and one both in onion and tomato
- Contractors and growers send their produce direct to Lahore
- Apple Commission Agent deals both with contractors and growers from Balochistan. His suppliers are 70 % contractor and 30% are growers whom he knows since long or belong to his village or near to his village
The number of growers/ contractors on an average is 15 to 20 *with* whom he is dealing
- Commission Agents of tomato and onion deal directly with growers. The number of tomato and onion growers varies from 20 to 30.
- The relationship of tomato commission agents developed through some common friend at Killa Saifullah, Duki *and* Harnai which is the main early tomato producing area of Balochistan. After the first dealing the relationship continues only on good will, fair dealing and honoring each other's commitments
- Onion Commission agents deals with same growers of Balochistan since long. The main reason explained was the trust and credibility established. Onion Commission Agent explained that the growers honor their commitments and no complaint about non-payment or selling the produce to other Commission Agents has ever been received

4.3.1. Related Common Information: Lahore Market

- All the Commission Agents pay advance to the contractors and growers, if demanded
- Advance for vegetables (onion and tomato) is paid well ahead of sowing of these crops. The advance to tomato growers of Killa Saifullah, Harnai and for onion growers from Kanak, Panjpai, Dulai, is paid in January/ February. For apple growers/ contractors, the advance is paid in March/ April after the fruit sets and when danger of late spring frost is over
- The advance is used by the vegetable growers for purchase of seed, fertilizer/ farm yard manure, pesticides, purchase of packing material, gunny bags (for

onion) and carton for tomato. In case of apple growers, the advance is used for purchase of pesticide, hiring of seasonal labors/ skilled labors, pesticides, packing material and crates.

- The amount and extent of advance paid depends on the size and kind of crops. The advance paid by the Commission Agents of Lahore to Contractors / growers of Balochistan this year is detailed below. One Commission Agent who deals with tomato and onion from Balochistan did not respond.

Apple: Contractors: Rs.100.00 million
Growers: Rs. 15.00 million

Onion: Grower Rs. 20.00 million in two installments one for the purchase of inputs at the time of sowing and second for the purchase of packing material, at the time of harvest.

Tomato: Grower:
Killa Saifullah; Rs.0.8 million for purchase of input for sowing
Quetta: Rs. 1.00 million for the purchase of inputs for planting like seeds, fertilizer, pesticides etc

- The advance is recovered after auctioning. If the price is reasonable on the day the produce is auctioned, the entire advance along with commission is deducted and the remaining is paid back. In case the advance paid is more than the volume received, it is deducted in two installments, subject to the marketing of produce to the same Commission Agent
- The contractor/ grower is bound to sell his produce to the commission agent who has extended loan to the growers.
- The onion commission agent stated that he received 20-25 truck loads last year (from Panjpai area) each containing 125 to 150 bags, with each bag weighing 80 to 90 Kg.
- According to a estimate by one commission agent, 40 to 50 trucks reach Lahore market during the season which is late September to late October. The season lasts only for 20 to 25 days. After that, the onion from Sind starts sometimes in late October/ November.
- The Apple Commission Agent interviewed mentioned that apples reach Lahore market from late July (early varieties Gaja) and continues till October/ November (late variety Shin Kulu). The estimated volume of early variety of Apple Gaja marketed to Lahore from mid July to mid August from Balochistan upland was approximately 25 trucks daily with each truck containing 200 to 250 crates and the weight of crates being 16 to 18 KG.
- Produce is sold to wholesalers during auction and then to retailer who in turn sells to shopkeeper, vendor cart owner.

On a question about the problems in recovery of loan from Contractors/ Commission Agent, except onion commission agent, all the persons interviewed mentioned that 10 % of contractors/ growers did not send their produce to Lahore Market and it was a loss to Commission Agents. One apple commission agent stated that for the last two years he could not recover loan worth Rs. 60.00 million both from Contractors and/ growers. The reasons explained by him was that produce did not reach Lahore due to blockage of roads as a result of heavy floods in Punjab and Sind

ii. Category 2: Commission Agents Quetta, Kuchlak, Killa Saifullh

Number Interviewed: 7

- All the Commission Agents interviewed deal with apple, grapes, apricots, plum, tomato, onion, pomegranate
- Commission agents buy from contractors/ growers and further send to commission agents of Karachi, Lahore, Sukkur, and Hyderabad. Commission agents from Punjab, Khyber Pakhtoon Khawa visit Quetta, Killa Saifullah market in the season and directly purchase from the commission agents of these two markets. These commission agents are called “Ladan”
- The quantity of apple sent to distant markets is around 80 % and other fruits like apricot, peach, plum grape are around 50 %.
- Relationships with contractors, growers and Laden were established through common business friends, brokers at the beginning and then continue if both parties honor commitments.. Business with contractor is around 70 % to 80 % and with growers is 20 %.
- The produce is sent by the contractors/ growers directly to the market
- Onions and tomatoes are sent directly by the growers. In this province Contractor is not involved in vegetable marketing
- The numbers of contractors/ growers dealing with commission agents vary from year to year depending upon the production and dealings. On an average, 10 to 15 person deal with the commission agents of Quetta market and 8 to 10 at Killa Saifullah and Kuchlak market

4.3.2. Related Common Information Main Market Quetta

- Commission Agents pay advance to growers/ contractors from their own capital
- All the Commission Agents interviewed were reluctant to share the information about the volume of their business in monetary terms. They did not mention the quantity or number of trucks received by them during the season
- Advance is paid to growers and contractors in the slack season if demanded by them. Only financially sound contractors and growers do not request for advance
- Advance to growers and contractors are given in February/ March. The extent of advance to contractors is relatively more than growers. Range varies from individual to individual- usually it is 70 % for the Contractors and 30 % for the growers

- The amount of advance extended by the commission agents to the growers and contractor during this year is given below

Advance by commission agent dealing with grapes: Rs. 4.70 million

Advance by commission agents of apples/apricots: Rs. 6.00 million

Advance paid by commission agent K.Saifullah for tomato:
Rs. 6.00 million

Advance paid by commission agents of Kuclak for apple, apricot, peach,
and plum: Rs. 10.00 million

The onion growers interviewed and who send their produce to Quetta Market do not take any advance from commission agent

Most of the growers/ contractors from the apple growing areas like Ziarat, Muslim Bagh, Kan Mehtar Zai, Khanozai, takes advance from commission agents of Lahore, Multan, Faisalabad, and Gujranwala as mentioned above

The advance is recovered by the commission agent after deducting their commission in one installment or two, depending upon the volume of produce received.

Nearly all the Commission Agents contacted reported that they have been the losers in the business for the last many years. The main reason mentioned by them was that during the dry spell from 1997-2002, the orchards were dried due to decline of water. The ground water table dropped to considerable extent which resulted in drying of trees.

Some growers whose source of irrigation was natural springs/ karezes are back into business as there were good rains and snow during 2004, 2005, 2007 and springs and karezes were revived. However, even these good years did not help the growers whose source of water was tube wells as the discharge of ground water was more than the recharge

According to them, most of the established commission agents whose source of income was only marketing of fruits have discontinued their business. Only those commission agents are surviving who had alternative side business like transport, agricultural land etc

Commission Agents of Quetta market have expressed concern about the establishment of new market named Farmers market at Balelli. According to them, the growers/ contractors especially from Northern areas will not send their produce to present market because of distance.

4.4. Step 4 in Rapid Market Appraisal: Exporter

The exporters dealing with export of fruits from this province were interviewed and their responses are as under:

Number of Exporters interviewed: 5

- The commodities exported from Quetta to neighboring countries like Iran and Afghanistan are Kinno, mango, potato, onion, apple variety Gaja, and rice.
- Kinno and, mango are purchased from Punjab and Sind respectively. Potato are imported from Punjab and sent to Iran and central Asian countries.
- Apple and grapes from Balochistan are exported to Bangladesh, United Arab Emirates, Malaysia, and Sri Lanka. Apple variety GAJA is exported to Afghanistan
- The exporters of Balochistan deal directly with growers of Kinno at Bhalwal, Sarghoda and have their business established at Bhalwal. The citrus fruit is graded, waxed and packed at Sarghoda where excellent facilities exist. Fruit is exported direct to Iran and other Central Asian countries via Quetta.
- The buyers of importing countries (Commission Agent) place orders mentioning specification, size of cartons and packing material.
- The quality is the main criteria by the importing countries and if the produce shipped is not of desirable quality, the amount is withheld or damage of the spoiled commodity is claimed
- Mango is purchased from Commission Agent of Hyderabad, Sind and sent to Iran and Afghanistan via Quetta.
- Apple and grapes from Quetta are shipped from Karachi to Bangladesh, Dubai, and UAE. The Commission Agents/ exporter at Karachi are partners with some exporters of Quetta
- Relationship with the importing countries was developed during Fruit Show at Quetta organized by Export Promotion Bureau of Pakistan in mid 1990. Importers or Commission Agent of importing countries were also invited to attend the show and the relationship was established.
- Some exporters from Balochistan also visited the importing countries like Bangladesh, UAE, Dubai, Malaysia, Sri Lanka, Central Asian countries and Afghanistan
- The Commission Agents of Central Asian countries like Tajikistan, Turkmenistan, Kaziqstan visit Quetta and purchase directly from the exporter of Quetta. After completing the custom formalities, they arrange for transport for the fruits purchased at Quetta Market
- A token advance is received from the buyers of importing countries and the remaining amount is paid by the importers after the fruit, vegetable reach destination and is auctioned. The time taken to pay the full amount is from one to three months.
- .In case of export of apple to Afghanistan, the Commission Agents visit Quetta and pay 1/3 in advance to the exporter after the deal is finalized and after fruit sets, the second 1/3 is paid when the first consignment leaves for Afghanistan

and the last is paid after the final harvest and when the consignment is ready for shipment to Afghanistan.

- According to one exporter of apple to UAE and Dubai, there is tough competition in these markets. The apples of Lebanon and of USA are competing with Quetta apple at Dubai and UAE.
- Also among grapes, there is a competition of Balochistan grapes with Californian grapes at Bangladesh.
- The exporter or his representative is present in the importing countries when the fruit reaches distant markets. In case of any dispute, the problem is decided on the spot
- The time of export of various fruits are as under;
 - a) Kinno November to March
 - b) Mango May/ June
 - c) Potato January to March
 - d) Apple Mid July to August
 - e) Grapes Second week of July to end of September

Table 2: Total Quantity of Fruit/Vegetable Exported by Balochistan Exporters

Name of Exporter	Crop Exported	Country Exported	Weight
[REDACTED]	Apple	Sri Lanka Bangla Desh ,UAE	10 tons 10 tons 10 tons
	Grapes	UAE	10 tons
[REDACTED]	Apple	Bangla Desh, Dubai, Malaysia Afghanistan	20 tons 80 tons 40 tons 42 tons
	Grapes	Bangla Desh	120 tons
[REDACTED]	Kinno	Iran, Afghanistan	18,000 tons From Nov;to Feb
[REDACTED]	Kinno	Central Asia	750 tons
	Potato	Central Asia	150 tons
[REDACTED]	Kinno	Iran	1000 tons/monthly from Nov to January
	Potato	Iran	3000 tons 1,000 tons/month from October to April Total 7000 Tons

Source: Exporters Quetta Hazar Ganji Market

4.5. Step 5 in Rapid Market Appraisal: Quetta Main Market at Hazar Ganji

Various intermittent visits were made during July, August to Quetta main Market. The purpose was to get inside information about the functioning of markets and meeting with various persons like Market Committee members, commission agents, contractors, goods transport company persons, government official responsible for handling, monitoring and facilitating the operation of the market.

The following information was obtained:

- Date of Establishment/Shifting to Present location: 1996
- Area original: 37 acres
- Recently extended: 23 acres
- Total 60 acres
- Allocation of 37 acres:
 - a) Shops Allotted to Commission Agents: 258
 - b) Shops for Allied Services 315
 - c) Shops for packing material (Bardana) 65
 - d) Plot for Banks 02
- Allocation of Plots for Extended 23 Acres
 - a) Shops Allotted to Commission Agents: 421
 - b) Plot for (auction) wholesalers 866
 - c) Plot for Petrol Pump 01
 - d) Plots for Hotels 04
 - e) Plots for Restaurant 01

Existing Facilities at Hazar Ganji Market Quetta

Mosque	01
Dispensary	01
Post Office	01
Guest House	01
Admin Bloc k	01
Weight Bridge/Octroi Post	02
Tube Well	01
Auction Platform	02
Restaurant	01
Market Committee Office	01
Over head and Underground Water Storage Tanks	02

Future Planning for extended 23 acres is as under:

Fruit/Vegetable grading, washing and waxing unit	01 unit
Fruit/Vegetable Processing and Packing Unit	01 unit
Cold Stores	02 No
Plat form (Tharas) for whole sellers	87 No

In addition to the above, infrastructure like roads, gas, water supply, electricity, telephone, parking facilities, sewerage system, toilets, dust bins, septic tanks, mosque, drainage, auction platforms are also included in the new market.

The execution of 23 acres of additional area was assigned to Balochistan Development Authority. About 46 % work has been completed and the remaining 54 % is yet to be accomplished

- Daily arrival of trucks in the market during the survey was 20-25 trucks and leaving Quetta Market for Karachi, Hyderabad, and Sukkur about 10 to 15. Also there is a seasonal variation.
- During survey from July and August, the fruits from the province like apple, peaches, plums, apricots were supplied by the contractors and growers in sufficient quantity. Onion from Kharan, Awaran,(Balochistan),Khuzdar; tomato from Killa Saifullh, and potato from Okara Punjab were sent to Quetta Market for further disposal. Also water melons and melons from Afghanistan were found in the Quetta Market. Banana and late variety of Mango imported from Sind was also available. About 60 to 70 % mango received at Quetta market was under the process of export to Iran and Afghanistan
- About 50 % grapes, apricots, peach, plums were being sent from Quetta Market to Karachi, Hyderabad, and Sukkur market whereas approximately 20 % apples are marketed within the Province to the plain areas of Province like Sibi, Dhadar, Jaffarabad and Dera Murad Jamali from Quetta main market
- Space in the market was sufficient at the moment. The extension of 23 acres will further provide enough area for the smooth running of the market.
- There is not much congestion of the traffic in the market. Sufficient parking is available. However, there is some congestion of traffic early in the morning when the truck loads of fruits reach market at the time of auction. After 11.30 there is no congestion.
- Marketing of fruit and vegetables in Quetta market involves several types of intermediaries like pre harvest contractors. Commission Agents, wholesalers and retailers in addition to allied services like, transport, agro chemical, pesticides dealers and shops for material used in packing

The detail market operation and role of each actor is detailed in annex VI

4.6. Step 6 in Rapid Market Appraisal: Quetta Market Committee at Hazar Ganji Market, Quetta.

Met Chairman Market Committee, members representing growers, and Commission Agent. The information collected is detailed as below:

- Market Committee was constituted in 1994 under Balochistan Agricultural Produce Act 1991, amended Act 2004 and Balochistan Agricultural Produce Market general Rules 1995.
- The purpose of Balochistan Agricultural Produce Marketing Act was to provide a legal base for organizing agricultural produce marketing as was done in the other three provinces
- Market Committee members are appointed by the Provincial Government from the private sector and the Chairman is elected by the members of the Committee
- The membership distribution of Quetta Market Committee is as under
 - a) Farmers/Growers 9
 - b) Commission Agents (License Holder) 5
 - c) Wholesaler(License Holder) 1
 - d) Consumer 1
 - e) Secretary Market Committee 1
(Representative of Economics and Marketing Wing of Department of Agriculture)
- The administrative staffs of the Market Committee are public servant from the Department of Agriculture
- Market committee is a self financing unit.
- The income is generated through Market fee collection, renewal of licenses. bank Markup, issuance of licenses for different categories
- The total budget released till December, is 40.40 millions
- Market Committee has repaid Rs.57.610 millions Asian Development
- Loan through Finance Department Government of Balochistan

4.6.1. Related Information

- Market Information Service Center has been established and linked through E-Mail and Internet Services to exchange wholesale and retail prices on daily basis.
- Daily wholesale prices of Agricultural Commodities are regularly broadcasted from Radio Pakistan, and FM 101, Quetta Center
- To strengthen the MIS component, the Market Committee has got the password from Agricultural Marketing Department Punjab and uploading the Quetta Market prices on website
- Auction sheds are not all weather proof. During rains and extreme of cool and hot temperature, there is always a danger of spoilage of fruits/ vegetables meant for or stored for auction.
- There is a serious shortage of water. The tube well supplying water was not operational at the time of visit. The budget for its repair is available but due to some dispute between Market Committee and Balochistan Development Authority, there has been a delay in putting the tube wells into operation.
- There is heavy load of traffic especially in the morning at the time of auction.

- Sewage and drainage system needs repair or renovation. The Commission Agents have expressed their concern about the *defective* sewage and drainage system

4.7. Step 7 in Rapid Market Appraisal; Storage of Produce

The following information was collected after interviewing Chief Executive of the Cold Store, the only functional cold store at Quetta.

- Established in 1997
- Capacity of Cold store is 300 tons
- Located at Western bypass at a distance of 8 km. from Main Hazar Ganji Market
- Apple Variety GAJA is stored from July to August and apple variety SHIN KULL is stored from October to December.
- Contractors utilize 80 % of the space while 20 % is used by the grower
- Exporters of Kinno store their produce from January to February and most of it is sent to Afghanistan
- The charges per crate/ carton per month range from Rs.20.00 to Rs.30.00
- All the necessary facilities like, temperature, humidity are provided
- Also there is a stand by generator which is used when there is load shedding
- No pre cooling, grading, and waxing facilities exist
- There are plans for extension of the present cold store to 900 tons by March, 2012

In addition to above cold store, there is one cold store of 25 tons capacity provided by the Pakistan Horticulture Development Company to the Government of Balochistan in 2008. Also there was a fruit grading unit of the Fruit Development Project Agricultural Research Institute, Sariab, Quetta.

This cold store was meant to facilitate Growers, Contractors and Commission Agents, to utilize when needed. However, due to its location, far away from the main Market, it is not utilized by the growers or Commission Agents.

4.7.1. Other Related information

In addition to above cold store, there is one cold store of 25 tons capacity provided by the Pakistan Horticulture Development Company to the Government of Balochistan in 2008. Also there was a fruit grading unit of the Fruit Development Project Agricultural Institute, Sariab Quetta

The cold store was meant to facilitate Growers, Contractors and Commission Agents , to utilize when needed. However due to its location far away from main market, it is not utilized by the growers or Commission Agents.

4.8. General Comments

All the Commission Agents visited are concerned about the establishment of Proposed new “Farmer Feeding Market” at the Airport Road. They are worried about their huge investment in the business at the present market and have also extended loans to the growers/ contractors. With the functioning of the Farmers Feeding Market, their business will be at stake and the Farmers/ Contractors who are their clients would prefer to market their produce at the new market site.

Also they mentioned that no space is allotted in the new “Farmer Feeding Market” to Commission Agents. The Market Committee members, when asked to comment, stated that that the concerns of Commission Agents are baseless. Only 10 acres area is allocated to Farmers Feeding Market which will in no way affect their business. The Government and Market Committee Members have agreed to allot 10 % of the area at the new market to the Commission Agents. The response from Commission Agents is awaited.

5. COMPARISON BETWEEN FARMERS/ GROWER SELLING DIRECT AND THROUGH CONTRACTOR TO DISTANT MARKET

It has been proven beyond doubt that growers who sell the orchard to contractor are making far less profits compared to those who sell directly to market thus bypassing Contractors. Yet it was considered worthwhile to compare the extent or difference of profit between them. It is also necessary to mention here that selling of marketing of produce directly to market not only requires capital but also skill, availability of labor during the season, relations with the Commission agents and also time available for business. The risks involved during marketing about natural hazards and glut in the market is equal for both the categories; however, for a better return some entrepreneurial farmers who are financially sound do take risks and are in the business though they are in minority.

During meeting at Lahore and at Quetta, the Senior Policy Consultant Pattie, stated that the present survey should also collect information regarding comparative advantage/profit between the growers who sell their orchards to contractor and those who sell their product directly to market. The survey should also take into account the various farm size/categories and locality where the fruits are grown.

It is necessary to mention here that the farmer is responsible for farm operations like training/ pruning of fruit tree, irrigating the orchards, applying fertilizer/farm yard manure, paying electricity charges in case of tube well irrigation, hoeing during winter season etc.

In case of contracting the orchards to contractor, spraying operations during contracting period against insects/ pests, harvesting, grading and packing are the responsibilities of contractor. Also the contractor is responsible for the proper maintenance of orchard during contracting period.

The grower is responsible for all the farm operations activities mentioned above if he himself markets the fruit.

The comparison is tabulated in table 3 below:

Example I.

Number of Trees per acre: 130

Area: 1.5 Acres

Locality: Kach District Ziarat

Name of Fruit: Apple

Yield per Acre; 23,400 Kg or 23.40 Metric ton (Average 10 crates/Tree each crate weighing 18 KG)

Table 3: Comparison between Apple sent directly to Market by Grower and that through Contractor; Category 1: 1.5 to 5.0 acres

Direct sale by the Grower	Amount	Sale by Contractor	Amount
Expenditure: a) Labor i) 1 Permanent Labor at 6000.00 per month for 12 months ii) 2 temporary Skilled labors for pruning at 10,000.00 per month for 1.5 months iii) 2 skilled labors for picking, grading at Rs 20,000.00 for 1.5 months iv) 2 labors for spray at 6000.00 p.m for 3 months	Rs.72,000.00 Rs.30,000.00 Rs.60,000.00 Rs.36,000.00	Expenditure: A) Amount of Contract B) Labor: B.1) 2 labors for spray at 6000.00 per month for 3 months B.2) 2 skilled labors for picking, grading at Rs 20,000.00 for 1.5 months	Rs.200,000.00 Rs.36,000.00 Rs.60,000.00
Sub Total:	Rs.198,000.00	Sub Total	Rs.296,000.00
b) Orchard Management i) 4 sprays at 6,000.00 per spray ii) Fertilizer/ Farm Yard Manure	Rs.24,000.00, Rs. 30,000.00	C. Orchard Management C.i) 4 sprays @ 6,000.00 per spray	Rs.24,000.00
Sub Total	Rs. 54,000.00	Sub Total	Rs. 24,000.00
c) Packing Material i) 1,300 crates at Rs.80.00 per crate ii) Straw, paper, nails etc	Rs.104,000.00 Rs. 40,300.00	D) Packing Material D.i) 1,300 crates at Rs.80.00 per crate D.ii) Straw, paper, nails etc	Rs.104,000.00 Rs. 40,300.00
Sub Total	Rs.144,300.00	Sub Total	Rs.144,300.00
d) Transport From Kach to Multan at Rs.75.00 per crate for 1300 crates Loading , unloading, market fee	Rs.97,500.00 Rs.30,000.00	E) Transport E.I.From Kach to Multan at Rs.75.00 per crate for 1300 crates E.II)Loading , unloading, market fee	Rs.97,500.00 Rs.30,000.00

Table 3: Comparison between Apple sent directly to Market by Grower and that through Contractor; Category 1: 1.5 to 5.0 acres

Direct sale by the Grower	Amount	Sale by Contractor	Amount
Sub Total:	Rs.127,500.00		Rs.127,500.00
Grand Total	Rs.523,800.00	Grand Total	Rs.591,800.00
Return ; Assuming sale at auction at Multan Market at 30 Rs/ Kg. Sale Proceeds of 23,400Kg at Rs.30/Kg	Rs.702,000.00	Return: Assuming sale at Multan Market at Rs. 30.00 Kg. Sale Proceed of 23,400 Kg at Rs 30.00 Kg	Rs.702,000.00
Expenditure Incurred	Rs.523,800.00		Rs.591,800.00
Net Return from 1.5 Acres	Rs. 178,200.00	Expenditure Incurred	Rs. 110,200
Per Acre	Rs.118,800.00	Net Return from 1.5 Acres	Rs.73,466.00
		Net Return per acre	

The above table indicates a difference between net return between the two categories, namely those who sell their orchard to contractor and those who sell directly to market/ Commission Agent. As mentioned above, all the operations are carried out by growers who sold directly to Market.

In case of contracting the orchards, the responsibility of spraying, picking/harvesting, grading rests with the contractor besides over all maintenance and management of the orchards. In the above example the profit of direct selling to market is around 60 %

Example II:

Number of Trees per acre: 70 trees per acre

Area: 10 Acres

Locality: Khanozai District Pishin

Name of Fruit; Apple

Yield Per Acre; 189,000 Kg or 189.000 Metric ton (Average 15 crates/Tree each crate weighing 18 KG)

Table 4: Comparison between Apple sent directly to Market by Grower and that through Contractor; Category 2: 6 to 25 acres

Direct sale by the Grower	Amount	Sale by Contractor	Amount
Expenditure: a) Labor .i) 3 Permanent Labor at 10,000.00 pm for 12 Months ii) 3 temporary Skilled labors for pruning at 10,000.00 p.m for 2 months iii) 3 skilled labors for picking, grading at Rs 20,000.00 for 3 months iv) 4 labors for spray at 6000.00 p.m for 2 months	Rs.360,000.00 Rs. 60,000.00 Rs.180,000.00 Rs. 48,000.00	Expenditure: A) Amount of Contract B) Labor: B.I) 4 labors for spray @ 6000.00 p.m for 2 months B.2) 3 skilled labors for picking, grading @ Rs 20,000.00 for 3 months	Rs.1,460,000.00 Rs. 48,000.00 Rs. 180,000.00
Sub Total:	Rs.648,000.00	Sub Total	Rs.1,688,000.00
b) Orchard Management .i) 4 sprays at 6,000.00 per spray ii) Fertilizer/ Farm Yard Manure	Rs.24,000.00 Rs.100,000.00	C. Orchard Management C.i) 4 sprays @ 6,000.00 per spray	Rs. 24,000.00
Sub Total	Rs. 124,000.00	Sub Total	Rs. 24,000.00
c) Packing Material i) 7000 crates at Rs.80.00 per crate ii) Straw, paper, nails etc	Rs.560,000.00 Rs.217,000.00	D) Packing Material D.i) 7000 crates @ Rs.80.00 per crate D.ii) Straw, paper, nails etc	Rs.560,000.00 Rs.217,000.00
Sub Total	Rs. 777,000.00	Sub Total	Rs. 777,000.00
d) Transport From Bostan (Pishin) to Karachi at Rs.70.00 per crate for 7,000 crates Loading , unloading, market fee	Rs.490,000.00 Rs.161,400.00	E) Transport E.I.From Kach to Karachi @ Rs.70.00 per crate for 7000 crates E.II) Loading, unloading, market fee	Rs.490,000.00 Rs. 161,400.00

Table 4: Comparison between Apple sent directly to Market by Grower and that through Contractor; Category 2: 6 to 25 acres

Direct sale by the Grower	Amount	Sale by Contractor	Amount
Sub-Total	Rs,651,400.00	Sub-Total	Rs. 651,400.00
e) 2 Tube well		Grand Total	Rs.3,140,400.00
Electricity charges Rs.4,000 per T.Well per month for 12 months	Rs.96,000.00		
Sub Total:	Rs.96,000.00		
Grand Total	Rs,2,296,400.00		
Return ; Assuming sale at auction at Karachi Market at 30 Rs/ Kg. Sale Proceeds of 189,000 KG at Rs.30/Kg	Rs,5,670,000.00	Return Assuming sale at Karachi Market at Rs. 30.00 Kg. Sale Proceed of 189,000Kg at Rs. 30.00 Kg	Rs.5,670,000.00
Expenditure Incurred	Rs.2,296,400.00	Expenditure Incurred	Rs.3,140,400.00
Net Return from 10 acres	Rs.3,373,600.00	Net Return from 10 Acres	Rs.2,529,600.00
Net Return Per Acre	Rs. 337,360.00	Net Return per acre	Rs.252,960.00

The above table relates to another area whose farm size is around 10 acres and relatively at low altitude than those shown in Table III. The source of irrigation in this case was tube well water and the grower had to pay electricity charges where as in the Example I the source of water was kareze and no electricity charges were involved in the cost of production.

The net return in this case for the farmers who sold his orchard directly to the market was around 33.33% more compared to that farmer who sold his orchard to contractor. The reason for less profit compared to previous example I (Table III) is that the keeping quality of apples at low altitude is low compared to that of apples at high altitude. This characteristic affects the price during auction at terminal markets.

Example III

Number of Trees per acre: 70

Area: 70 Acres

Locality: Pishin
 Name of Fruit; Apple
 Yield Per Acre; 22,680 Kg or 22.00 Metric ton (Average 18 crates/Tree , Each crate weighing 18 KG

Table 5: Comparison between apple sent directly to market by Grower and through Contractor; Category 3: 30 to 100 acres

Direct Sale by the grower	Amount	Sale by Contractor	Amount
Expenditure a) Labor a.i) 7 permanent labor at Rs.6,000.00 p.m for 12 months a ii) 10 temporary skilled labor for pruning at Rs.10,000.00 per month for 2.5 months a.iii) 4 skilled labors for picking, grading at Rs,20,000.00 for 2.5 months a.iv) 6 labors for spraying at 6,000.00 pm for 3 months	Rs.504,000.00 Rs.250,000.00 Rs.200,000.00 Rs.108,000.00	Expenditure A) Amount of Contract B) Labor B.1) 6 labors for spray at Rs.6,000.00 pm for 3 months B.2) 4 skilled labors for picking, grading at Rs.20,000.00 per month for 2.5 months	Rs.12,250,000.00 Rs.108,000.00 Rs.200,000.00
Sub Total	Rs.1,062,000.00	Sub Total	Rs,12,558,000.00
b) Orchard Management b.i) 4 sprays at 6,000.00 per spray b.ii) Fertilizer/ Farm Yard Manure	Rs.24,000.00 Rs.800,000.00	b) Orchard Management b.i) 4 sprays at 6,000.00 per spray	Rs.24,000
Sub Total	Rs.824,000.00	Sub Total	Rs.24,000
c) Packing Material c.i) 88,200 crates at Rs. 80.00 per crate c ii) Straw, paper, nails etc	Rs.7,056,000.00 Rs.2,528,399.00	c) Packing Material c.i) 88,200 crates at Rs. 80.00 per crate c ii) Straw, paper, nails etc	Rs.7,056,000.00 Rs.2,528,399.00
Sub Total	Rs,9,584,394.00	Sub Total	Rs,9,584,394.00

Table 5: Comparison between apple sent directly to market by Grower and through Contractor; Category 3: 30 to 100 acres

	00		
d) Transport From Pishin to Lahore at Rs.90.00 per crate for 88,200 crates Loading, unloading, market fee	Rs.7,938,000.00 Rs.2,033,010.00	d) Transport From Pishin to Lahore at Rs.90.00 per crate for 88,200 crates Loading, unloading, market fee	Rs.7,938,000.00 Rs.2,033,010.00
Sub Total	Rs.9,971.010.00	Sub Total	Rs.9,971.010.00
e) Tube well 7 at Rs.6,000.00/ tube well for 12 months	Rs.504,000.00		
Sub Total	Rs.504,000.00		
Grand Total	Rs.21,945,404.00	Grand Total	Rs.32,137,404.00
Return Assuming sale at auction at Lahore Market at Rs.30.00/Kg, sale proceed of 1,587,600 kg	Rs.47,628,000.00	Return Assuming sale at auction at Lahore Market at Rs.30.00/Kg, sale proceed of 1,587,600 kg	Rs.47,628,000.00
Expenditure incurred	Rs.21,945,404.00	Expenditure incurred	Rs. 32,137,404.00
Net Return from 70 Acres	Rs.25,682,596.00	Net Return from 70 Acres	Rs.15,490,596.00
Net Return per acre	Rs.366,894.22	Net Return per acre	Rs. 221,294.22

It is evident from table 5 that net return or income of the growers who market directly their produce to the market is about 66 % more compared to the growers who sell to contractor In this case the advance paid by the contractor to grower was in three different installments.

The contractor is responsible for the spraying, engaging skilled and unskilled labors for picking, packing, and grading in addition to amount paid for contracting the orchard.

During the period of contract, the maintenance of the orchards such as weed control, irrigation the orchards and looking after the other operations required.

The growers during the contract period will provide regular irrigation; will look after the general repair of electric pump if required during the contracting period. The grower undertake the operations of training, pruning of trees, fertilizer/ farm yard application, and spray , if needed, before the contract. After the contract, the orchard operations mentioned are shifted to the contractor.

If the grower sells to market directly, he undertakes all the operations mentioned in the table under column “Direct Sale by Grower”

Example IV

Number of trench per acre 50; 12 vines per trench bearing 6 to 8 Kg /vine

Area: 10 Acres;

Locality: Gulistan District Killa Abdullah

Name of Fruit: Grapes

Yield per Acre; 3,600 Kg or 3.60 Tons

Table 6: Comparison between grapes sent directly to market by Grower and through Contractor; Category 1: 10 to 15 acres

Direct Sale by the grower	Amount	Sale by Contractor	Amount
Expenditure:		Expenditure:	Rs.1,100,000.00
a) Labor		A)Amount of Contract	
a.i) 1 Permanent Labor at 6000.00 pm for 12 Months	Rs.72,000.00	B)Labor:	
	Rs. 120,000.00	B.1) 2 labors for spray at 6000.00 p.m for 3 months	Rs. 36,000.00
a.ii) 4 temporary Skilled labors for Pruning at 15,000.00 p.m for 2 months	Rs. 60,000.00		
a iii)3 skilled labors for picking, grading at Rs 10,000.00 for 2 months	Rs.36,000.00	B.2) 3 skilled labors for picking, grading at Rs 10,000.00 for 2.0 months	Rs. 60,000.00
a.iv)2 labors for spray at 6000.00 p.m for 3 months			

Table 6: Comparison between grapes sent directly to market by Grower and through Contractor; Category 1: 10 to 15 acres

Direct Sale by the grower	Amount	Sale by Contractor	Amount
Expenditure: a) Labor a.i) 1 Permanent Labor at 6000.00 pm for 12 Months a.ii) 4 temporary Skilled labors for Pruning at 15,000.00 p.m for 2 months a iii)3 skilled labors for picking, grading at Rs 10,000.00 for 2 months a.iv) 2 labors for spray at 6000.00 p.m for 3 months	Rs.72,000.00 Rs. 120,000.00 Rs. 60,000.00 Rs.36,000.00	Expenditure: A)Amount of Contract B)Labor: B.1) 2 labors for spray at 6000.00 p.m for 3 months B.2) 3 skilled labors for picking, grading at Rs 10,000.00 for 2.0 months	Rs.1,100,000.00 Rs. 36,000.00 Rs. 60,000.00
Sub Total:	Rs.288,000.00		Rs.1.196,000.00
b) Orchard Management b.i) 3 sprays at 5,000.00 per spray b.ii) Fertilizer/ Farm Yard Manure	Rs.15,000.00 Rs.125,000.00	C. Orchard Management C.i) 3 sprays at 5,000.00 per spray	Rs.15,000.00
Sub Total	Rs.140,000.00	Sub Total	Rs.15,000.00
c) Packing Material c.i) 4,500 carton at 30.00 per carton	Rs.135,000.00	D) Packing Material D.i) 4,500 cartons at Rs.30.00 per carton	Rs.135,000.00
Sub-Total	Rs.135,000.00		Rs.135,000.00
d) Transport From Pishin to Karachi crate for 4,500 cartons Loading , unloading, market fee	Rs.40,000.00 Rs. 40,000.00	E) Transport E.I.From Pishin to Karachi for 4500 cartons, loading, unloading market fee	Rs.40,000.00
Sub-Total	Rs,40,000.00	Sub-Total	Rs.40,000.00

Table 6: Comparison between grapes sent directly to market by Grower and through Contractor; Category 1: 10 to 15 acres

Direct Sale by the grower	Amount	Sale by Contractor	Amount
Grand Total	Rs.603,000.00	Grand Total	Rs.1,986,000.00
Return ; Assuming sale at auction at Karachi Market at 40 Rs/ Kg. Sale Proceeds of 3,6000 Kg at Rs.50/Kg	Rs.1,800,000.00	Return: Assuming sale at Karachi Market at Rs. 50.00 Kg. Sale Proceed of 36,000 Kg at Rs 50 Kg	Rs.1,800,000.00
Expenditure Incurred	Rs. 603,000.00	Expenditure Incurred	Rs.1,486,000.00
Net Return from 10 Acres	Rs.1,197,000.00	Net Return from 1.5 Acres	Rs.314,000.00
Per Acre*	Rs.119,700.00	Net Return per acre	Rs.31,400.00

*For explanation of margin of profit between selling direct to the market and through contractor is given under table 7

Example V.

Number of trench per acre; 5012 vines per trench, 8 kg/ vine

Area: 30 Acres

Locality: Maizai Adda, Gulistan District Killa Abdullah

Name of Fruit: Grapes

Yield Per Acre; (Average 4800 Kg /Acre each carton weighing 8 KG

Table 7: Comparison between grapes sent directly to market by Grower and through Contractor; Category 2: 30 to 40 acres

Direct sale by the Grower	Amount	*Sale by Contractor	Amount
Expenditure: a) Labor a.i) 3 Permanent Labor at 6000.00 pm for 12 Months a.ii) 10 temporary Skilled labors for Pruning at 10,000.00 p.m for 1. month a iii)8 skilled labors for picking, grading at Rs. 20,000.00 for 2 months a.iv)6 labors for spray at 6000.00 p.m for 3 months	Rs.216,000.00 Rs.100,000.00 Rs. 32,000.00 Rs.108,000.00	Expenditure: A)Amount of Contract B)Labor: B.I) 6 labors for spray at 6000.00 p.m for 3 months B.2) 8 skilled labors for picking, grading at Rs 20,000.00 for 2 months	Rs.4,000,000.00 Rs.108,000.00 Rs.320,000.00
Sub Total:	Rs. 358,800.00	Sub Total	Rs.4,428,000.00
b) Orchard Management b.i) 4 sprays at 8,000.00 per spray b.ii) Fertilizer/ Farm Yard Manure	Rs.32,000.00 Rs.350,000.00	C. Orchard Management C.i) 4 sprays at 8,000.00 per spray	Rs.32,000.00
Sub Total	Rs.382,000.00	Sub Total	Rs.32,000.00
c) Packing Material c.i) 18,000 cartons at Rs.40.00 per carton	Rs.720,000.00	D) Packing Material D.i) 18,000 cartons at Rs.40.00 per carton	Rs.72,000.00
Sub Total	Rs.720,000.00	Sub Total	Rs.72,000.00
d) Transport From Pishin to Quetta for 18,000 cartons. Loading , unloading, market fee	Rs. 160,000.00	E) Transport E.I.From Gulistan to Karachi for 18,000 cartons loading unloading, market fee etc	Rs.160,000.00
Sub Total:	Rs. 160,000.00	Sub-Total	Rs.160,000.00
Grand Total	Rs.1,620,800.00	Grand Total	Rs.4,692,000.00

Table 7: Comparison between grapes sent directly to market by Grower and through Contractor; Category 2: 30 to 40 acres

Direct sale by the Grower	Amount	*Sale by Contractor	Amount
Return ; Assuming sale at auction at Karachiket at 40 Rs/ Kg. Sale Proceeds of 144,000. KG@ Rs.30/Kg	Rs.5,760,000.00	Return: Assuming sale at Karachi Market at Rs. 40.00 Kg. Sale Proceed of 144,000Kg at Rs 40.00 Kg	Rs.5,760,000.00
Expenditure Incurred	Rs.1,620,800.00	Expenditure Incurred	Rs. 4,692,000.00
Net Return from 30 Acres	Rs.4,139,200.00	Net Return from 30 Acres	Rs.1,068,000.00
Net Return Per Acre	Rs.137,973.33	Net Return per acre	Rs. 35,600.00

* On a question about the very nominal profit by contractor as compared to the Grower, Contractor reported that the grapes are dried as a raisin by most of the contractors in Pishin and Killa Abdullah District for the last 10 years. Most of the Contractors purchase the vineyard in the season for the sole purpose of making raisins. In this particular case the contractor will allocate half of the quantity for making raisins

The quantity of raisin obtained from 100 KG fresh grapes is around 20 to 25 Kg. The raisins is packed in 2 to 5 kg plastic bags and sold directly at the dry fruit market at Quetta. Hence very little transportation charges are required. The rate varies from day to day but on an average the price of raisin in the market ranges from Rs.100.00 KG to Rs.130 KG. As such the Contractor return is quite reasonable and he earns profit.

6. RAPID MARKET APPRAISAL OF ONION AND TOMATO: COST OF PRODUCTION OF ONION AND TOMATO AND NET RETURN

As mentioned previously, onion and tomatoes are directly sent to Market /Commission Agent. Onions from low altitude areas like, Kharan, Awaran and mid altitude areas like Panjpai, Khuzdar, Dulai and Kanak are sent to Karachi and Lahore respectively. Only a portion of onion from these areas is marketed to Quetta market for local consumption.

Onions from Nohisar, Aghberg (high altitude areas) which are harvested by the end of September to October are marketed to Karachi, Lahore and Quetta Market, Tomato from Killa Saifullah, Harnai, Duki, Barkhan are mostly marketed to Lahore, Faisalabd and Gujranwala. The first crop is harvested in July and it fetches good price on distant markets. The tomatoes from Kalat, Khuzdar, Pishin, and Quetta are marketed to Karachi.

The cost of production and return of onion and tomatoes are tabulated in tables 8 and 9

S. No.	Quetta Area 25 Acres	Amount	Kharan 15 acres	Amount
1	Land Preparation/Per acre Ploughing, Fertilizer, Farm Yard Manure	Rs.20,000.00	Land Preparation/Per acre Ploughing, Fertilizer, Farm Yard Manure	Rs.20,000.00
2	Seeds/ Planting	Rs. 600.00	Seeds/ Planting	Rs.15,00.00
3	Seasonal Labor 10 after 15 days for 7 months for weeding at Rs.250.00 per month	Rs. 17,500.00	Seasonal Labors 6 after 15 days for first 4 months for weeding at Rs.250.00 per month	Rs.6,000.00
4	Spray against thrips	15,000.00	Granules application	Rs.2,000.00
5	Gunny bags 250 at Rs.40.00 per bag	Rs.10,000.00	Gunny bags 150 at Rs.40.00 per bag	Rs.6,000.00
6	S. Total	Rs.58,100.00	S. Total	Rs.49,000.00
7	10 % of the total,	Rs. 5,810 00	10 % of the total,	Rs. 4900.00

Table 8: Showing Cost of production and net return by the farmers of onion				
S. No.	Quetta Area 25 Acres	Amount	Kharan 15 acres	Amount
	loading, unloading. Market fee		loading, unloading. Market fee	
8	Transport Charges		Per bag charges at Rs 75.00/bag from Kharan to Sukkur 150 bags. 15 acres	Rs.11,250.00
9	Sub Total	Rs.5,810.00-	Sub-total	Rs.11,250.00
	Grand Total	Rs.63,910.00 or Rs.64,000.00	Grand Total	Rs.65,150.00
1	Production Yield / Acre:10 tones Sale proceed of 10 tons at 25,000 .00/ton Quetta Market(last year)	Rs,250,000.00	Production Yield / Acre:11 tones Sale proceed of 11 tons at 17,000.00/ton Sukkur Market(last year	Rs, 187,000.00
1	*Expenditure / acre	Rs.64,000.00	Expenditure	Rs. 65,150.00
2	Balance/ acre	Rs.186,000.00	Balance	Rs.121,850.0 0
3	Share cropper1/4	Rs. 46,500.00	Share cropper ½ shares inputs ½	Rs. 60,925.00
4	Growers share/ net return/ acre	Rs139,500.00	Growers share/ net return/ acre	Rs. 60,925.00
5	Growers net 25 acre	Rs.3,487,500. 00	Growers net return 15 acres	Rs.913,875.0 0
6	Electricity charges of three tube wells at Rs 48,000.00/ tube well /year	Rs.144,000.00	Electricity charges of two tube wells at Rs 48,000.00/ tube well /year	Rs. 96,000.00
7	Net Return	3,343,500.00	Net Return	817,875.00
8	Net Return per acre	133,740.00	Net return per acre	54,525.00

*Expenditure does not include transport charges as the grower has tractor with trolley and Market by his own tractor.

The above table shows the cost of production and net return of onion per acre for two growers of different localities. As previously mentioned in the text, the vegetables are marketed directly by the growers in this province and no contractor is involved in vegetable marketing.

S. No.	Pishin Area 6 Acres	Amount	*Killa Saifullah 10 acres	Amount
1	Land Preparation/Per acre Ploughing, Levelling Fertilizer, Farm Yard Manure	Rs.21,0000	Land Preparation/Per acre Ploughing, Fertilizer, Farm Yard Manure	Rs.21,000.00
2.	Seeds/ Planting/acre	Rs. 1,000.00	Seeds/ Planting	Rs.1,000.00
3	Share cropper performs all the field operation like weeding, irrigation, staking etc at 1/3 of total		Share cropper performs all the field operation like weeding, irrigation, staking etc at 1/3 of total	
4	2 Spray against insects/pests at 6,000.00/ spray	12,000.00	2 Spray against insects/pests at 6,000.00/ spray	Rs.12,000.00
5.	166 wooden crates at Rs.55.00/ crate	Rs. 9,130.00	250 cartons at Rs 20.00	Rs. 5,000.00
6.	S.Total	Rs.43,130.00	S.Total	Rs.39,000.00
7	10 % of the total, loading, unloading. Market fee	Rs. 4,313.00	10 % of the total, loading, unloading. Market fee at Quetta	Rs. 3,900.00
8	Transport Charges 166 crates at Rs.25 per crates from Pishin to Quetta	Rs.4,150.00	Per carton charges at Rs 25.00 carton from Killa Saifullah to Quetta	Rs.6,250.00
9	Sub Total	Rs. 8,463.00-	Sub-total	Rs.10,150.00

Table 9: Showing Cost of Production and Net Return by the farmers of Tomato

S. No.	Pishin Area 6 Acres	Amount	*Killa Saifullah 10 acres	Amount
	Grand Total	Rs.51,593.00 say 52,000.00	Grand Total	Rs.49,150.00
1	Production Yield / Acre:3,000 KG or 3.00 tones Sale proceed of 3.0tons at 25,000 .00/ton Quetta Market(August,2011)	Rs.75,000.00	Production Yield / Acre:3000 Kg or 3.00 tones Sale proceed of 25,000.00/ ton	Rs, 75,000.00
1	*Expenditure / acre	Rs.52,000.00	Expenditure	Rs. 49,150.00
2	Balance/ acre	Rs.23,000.00	Balance	Rs.25,850.00
3	Share cropper 1/3	Rs. 7,666.00	Share cropper 1/2 shares inputs 1/2	Rs. 8,616.00
4	Growers share/ net return/ acre	Rs. 15,334.00	Growers share/ net return/ acre	Rs. 17,200.00
5	Growers net return 6 acres	Rs.92,004.00	Growers net return 10 acres	Rs.172,000.0 0
6	Electricity charges of three tube wells at Rs. 48,000.00/ tube well /year	-	Electricity charges of one tube wells at Rs 48,000.00/ tube well /year	Rs. 48,000.00
7	Net Return	Rs.92,004.00	Net Return	Rs.124,000.0 0
8	Net Return per acre	Rs.15,334.00	Net return per acre	Rs.12,400

* Tomato bears fruit in three flushes. The first flush yield / acre at Killa Saifulah as given by the grower was 1000 kg/ acre which is about 50 % less than expected. Main reason was continuous load shedding this season. For the purpose of calculation the yield figure from the Statistical Data of the Agriculture Department is taken which is 3000.00 KG/acre.

7. TRANSPORT

In Balochistan, transport has facilitated, to a greater extent, the marketing of fruits and vegetables from the area of production to the domestic area as well as terminal markets of the country. The Goods Transport Companies are well-established in all the fruit growing areas of the province namely Quetta, Ziarat, Kan Mehtar Zai, Pishin, Gulistan, Loralai, Khuzdar, Kalat, Kharan, Killa Saifullah.

Barring a few exceptions, the main highway roads linking production areas with main markets are maintained. However, the farm to market road linking with main road is in poor condition in Balochistan.

Goods companies especially in the rural area also act as brokers between the Grower and Commission Agent of distant markets. They also facilitate the small growers in the rural area whose production is less than one full load in organizing them and collect their produce at one central point. Once the produce collected equals one load, it is transported to the terminal markets and through the help of Commission Agents it is auctioned through usual marketing channels

7.1. Transport Costs

The transport costs vary from different areas to its destination. Also cost is directly correlated with prevailing rates of fuel which increase every month. The transport costs are charged usually per crate and according to prevailing rates of fuel which increase every month. The transport costs are charged usually per crate, per carton, and per bag. The following information was collected from the transporters/ goods companies

a) Commission of Goods Company for arranging Trucks	
b) For growers/contractors Exporters.....	Rs. 2,000.00/load
c) Charges per crate of apple (18 KG)	Rs.65.00 to 80.00
d) Charges per carton of grapes (12 KG)/tomato	Rs.45 to 50.00
e) Charges onion / potato 90 KG to 100 KG/bag	Rs.30 to Rs.35.00

8. CONCLUSION

Based on the information, data collected during Rapid Market Appraisal Survey from growers/farmers, pre harvest contractors, commission agents, exporters. The principal findings are summarized as under;

- In Balochistan, the main central Market is located at Quetta named Hazar Ganji Fruit and Vegetable Wholesale Market. This market is essentially a wholesale

and not a terminal market like Lahore, Karachi, Hyderabad, Sukkur, Rawalpindi, Multan etc.

- This Market also serves as a receiving center for the fruits like citrus, mango and potato meant for export to Iran, Afghanistan and Central Asian Countries via Quetta
- According to information collected, only 20 % apple received in Quetta Market is used for local consumption and to the markets of plains area of Balochistan namely Sibi, Dera Murad Jaamali, Jaffarabad and adjoining area of Sind i.e. Jacobabad, Shikarpur. 50 % of perishable fruits like apricot, plum, peaches, and grapes are sent to other terminal markets of the country and other secondary wholesale markets located in the province especially the low altitude areas like Sibi, Dhadar, Dera Allah Yar, Dera Murad Jamali
- Buyers of Quetta market are mostly retailers. Other buyers are Commission Agents from other parts of the country who visit Quetta Market in the season and buy fruit in bulk for resale to other markets.
- Some local Commission Agents also buy fruits for export to other countries. However, they export Kinno and Mango for Iran, and Afghanistan. Besides, they import potato from Punjab or purchase at Quetta and export to Iran.
- The suppliers of fruits to Quetta Market are mostly pre harvest contractors. A small number of growers who live nearby Quetta Market also sell their produce to the market or those growers who have taken advance from Commission Agents. The contractors and growers either themselves or through their representative are present at the time of auction.
- No market fee is charged by Market Committee for the produce entering the market but when the truck leaves the market, the fee is charged.

Commission of 10% is collected by the commission agents for the produce meant for auction. Actually the official market fee is 7%.

- Actually Commission Agents advances a huge amount of money to Contractors and fruit growers who desire to market directly with growers. The amount of advance depends on the reliability and credibility of growers. The contractors/ growers are then bound to sell their produce to Commission Agents from whom they have obtained advance.
- The extent of loan depends upon the volume of produce to be sold. About 40 to 50% of the loan is extended to the contractors, growers of the total volume. The extent of loan to the contractors is about 70 to 75 % while to the growers is 25 %.

- The contractor further advances to the grower. 1/3 of the total amount is paid at the time of contract which is usually after fruit sets and especially when the danger of late spring frost is over. The next installment is paid when the first consignment is ready for marketing. The last installment is paid when the last consignment is sent to Market.
- Most of the Commission Agents reported that huge amount of amount is outstanding against the growers/ contractors. The loan was not recovered as there was a serious setback of production due to drought during 1997-2002. Most of the Commission Agents who did not have any other source of income went out of business.
- Some of the Commission Agents have reported that about 10 to 20 % Afghan refugees settled in Balochistan and who had capital had proven defaulters. Also some contractors do not send their produce to Commission Agents from whom they have taken advance.
- Based on bitter experience of non-recovery of loan, Commission Agents reported that they would be interested to deal with the locals of this province and specially those who have some property in the form of agriculture lands or in any other business. According to their statement they were certain that the local Contractor will definitely repay the loan though there may be delay due to some natural hazards.
- The Contractors even Afghan refugees who have established good relations and reputation with local Commission Agents and with the Commission Agents of distant markets are in business for the last many years. They have also made contacts with local growers.
- They are very professional and contract many orchards at a time within the vicinity or at different places if they have the logistic arrangements and availability of labor especially skilled labors for picking, grading and packing.
- Some contractors especially those who were basically from Afghanistan and settled in this province have also links in Qandhar and purchase grapes and pomegranates at Qandhar and sell at Quetta Market or at Karachi/ Lahore.
- Though the Contractors interviewed especially from Afghanistan are financially sound compared to local contractors of this province, they were saying that they suffered a huge loss this season due to untimely hailstorm after they purchased the orchards. They mentioned particularly the damage caused by hail storm to apricots and early variety of apple "GAJA". Also they reported tremendous losses during the drought from 1997 to 2000 and were unable to recover the loan from the growers.

- The contractor is responsible for the management of orchards after the contract. The operation includes weeding, irrigating the orchards in a timely manner, spraying against insects, pests and picking, packing, grading and transportation to market.
- Growers belonging to different categories according to land holding, crops grown by them, location where the main crops were grown and financial status were interviewed.
- All the growers whose source of irrigation is groundwater drawn by tube wells have expressed a serious concern about the continuous load shedding this year resulting in almost 50 to 60 % reduction in production.
- Some resource rich growers who are only in minority purchased generators and used as standby arrangement during load shedding.
- Also some growers who do not have tube wells but their source of irrigation is from natural spring and kareze water have the advantage of selling their produce on reasonable price.
- Eighty percent of apple growers/ Contractors who purchase apple from high altitude areas like Ziarat, Kan Mehtarzai, Muslim Bagh sell their produce to distant markets of the country like Lahore, Multan, Faisalabad, Rawalpindi/ Faisalabad. Only "B" grade are sent to Quetta Market
- Tomatoes from Killasaifullh, Harnai are marketed at Lahore, Gujranwala and onions from Kharan, Awaran, Khuzdar are sent to Karachi and Sukkur Market.
- About 30 % of the fruit growers of apple and grapes contacted send their produce directly to Commission agents while 70 % are sold to Contractors.
- Small fruit growers realized the benefits of selling directly to market yet due to financial constraints and lack of skill, are compelled to sell to the contractor. Financially sound fruit growers do not take any advance from Commission Agents and therefore, are not bound to send their produce to particular Commission agents
- Small growers have usually complained about the monopoly of Commission Agents and are not satisfied with the present market system. However, they are helpless as they do not have any representation in the Provincial Assemblies or in Chamber of Agriculture.
- Most of rich fruit growers or their representatives are present at the time of auction at the distant as well as local Market.

- The Commission Agent pays the amount to those growers who deals directly with Commission Agents after deducting commission and other service charges in full or within a month.
- Onions and tomatoes are sent directly to the Commission Agents by all the categories of growers.
- Exporters of fruits like Kinno and mango reported that they send their produce directly to Iran, Afghanistan and Central Asian countries. Potatoes are also exported from Quetta Market.
- In some cases, the Commission Agents of importing country visit Quetta market and after purchase, transport to their country after completing the usual custom clearance formalities.
- The final payment is made to the exporter when the produce reaches the final destination and in acceptable quality.
- For the last three to four years, apples from Killa Abdullah District variety GAJA is exported to Afghanistan. The buyers from Afghanistan Commission Agents or Contractor visit the province and purchase the fruit. The payment is made in two installments or three- first at the time of contract, and second or the final payment when the first consignment is sent to the destination.
- Some fruit growers are exporting apples and grapes of this province to Bangladesh, UAE, Dubai, Sri Lanka and Malaysia by ship from Karachi. They have partners at Karachi Market who have experience in sending the produce by sea and have contacts with foreign countries Commission Agents.
- The extension of present market system is in progress and hopefully it will improve the marketing issues especially traffic in the peak hours of auction in the early morning.
- At present there is no cold storage, grading equipment and modern packing plant. However there are plans to equip the market with the cold store facilities and grading and packing assembly plant.
- Commission Agents have expressed concern about the establishment of new Farmers Feeding Market at Quetta near *Baleli* at Air Port Road. Their main complaint was that the Commission Agents have not been allotted any space in the new planned Market.

9. ANNEXES

9.1. Agro Ecological Zones of Balochistan



9.2. Share of Major Fruits in Area & Production of Fruits 2009-10

Kind of Fruits	Bearing Area in Hectare	%	Ranking	Production in metric tons	%	Ranking
Apple	55,713	33.0	I	250,877	29.0	I
Apricot	18,576	11.0	II	178,488	21.0	II
Grapes	10,512	7.0	III	63,349	7.0	III
Pomegranate	9,648	5.0	IV	35,214	4.0	IV
Peach	8,047	5.0	V	21,295	2.0	VI
Plum	3,184	2.0	VI	28,955	3.0	V
Other Fruits	6,671	16.0		16.0		
Total Balochistan	168,329			788,069		

9.3. Area and Production of Deciduous Fruits, 1990-91 to 2009-10

Fruits	1990-91		2009-10	
	Area	Production	Area	Production
Apple	14.3	136.5	55.7	250.8
Apricot	4.9	64.7	18.5	178.4
Plum	1.4	19.1	3.1	28.9
Grapes	3.1	31.8	10.5	63.3
Cherry	0.3	0.7	0.7	1.9
Peach	1.4	15.4	8.0	21.2
Pear	0.1	0.9	0.1	0.5
Pomegranate	1.9	29.1	9.6	35.2
Almond	7.2	30.8	8.5	21.1
Pistachio	0.1	0.2	0.1	0.6
Total	27.2	329.2	114.8	601.9

9.4. Estimated Volume and value of Deciduous Fruit traded in and out of the province during 2008-09

Fruit	Volume (Tons)	Average Wholesale Rate/tons(Rs)	Value (Million Rs)
Almond	25,588	195,000	4,989.66
Apples	306,534	25,115	7,698.00
Apricot	218,601	34,688	7,582.83
Cherry	2,314	186,475	431.50
Figs	217	125,000	27.13
Grapes	74,758	46,450	3,472.51
Peach	25,362	23,925	606.79
Pear	673	58,350	39.27
Pistachio	773	80,000	139.14
Plum	35,128	24,850	72.93
Pomegranate	43,604	49,400	2,154.04
Total	753,602		28,013.80

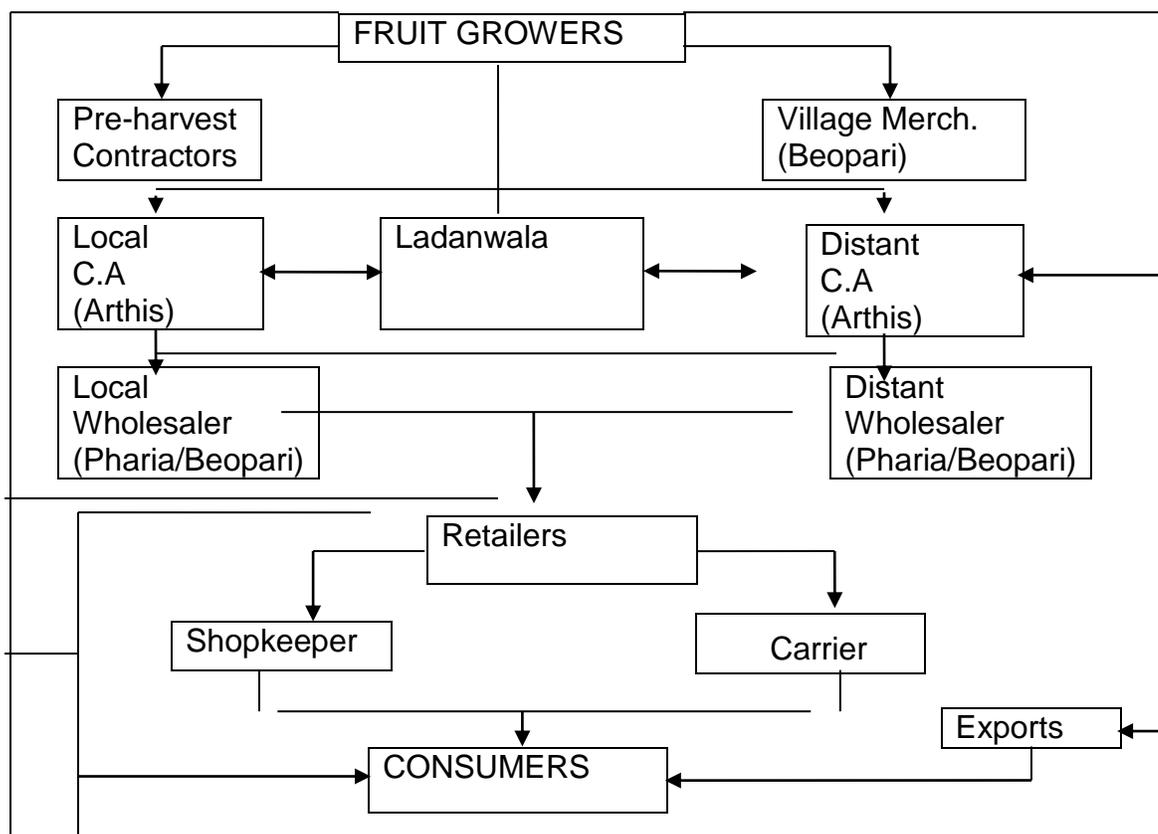
9.5. Increase / Decrease in Area and Production of Fruit Crops (Deciduous and Evergreen) since 1974-75 in Balochistan

Area: 000 hectares Production: 000 metric tons

Kind of Fruits	1974-75		1984-85			1994-95			2004-2005			2009-10		
	Area	Prod.	Area	Prod.	% increase over 74-75	Area	Prod.	% Increase over 84-85	Area	Prod.	% increase over 94-95	Area	Prod.	% increase Over 04-05
Deciduous	18,	159	25	216	A.44% P,36%	70	842	A.173 P,289	177	556	A.154 P -34	115	602	A. -34 P 8%
Evergreen	10	82	11	95	A.14 % P,16 %	49	480	A.343% P.393%	55	285	A. 16 P-41	53	253	A.4.1 7 P - 12.6

Source: Agricultural Statistics of Balochistan (A: Area P: Production)

9.6. Generalized Flow Chart of Fruit Marketing & the Role of Various Intermediaries



The role of different intermediaries as shown above is discussed below:

Pre-harvest Contractor

Pre-harvest contractor is the main actor who is responsible for the physical movement of the produce from orchards or main area of production to the domestic as well as distant markets. After contracting the orchard (which in this province is after fruit sets), he is responsible for spraying, orchard management, harvesting, grading, packing, transportation to the local/ distant markets are the services provided by him.

Village Merchant (Beoparis)

Village merchant collects produce from scattered orchards located in the vicinity of growing areas. They purchase fruits from village growers and transport in bulk to the wholesale market or distant markets. He is considered an important segment of unregulated market. To greater extent they trade in almond and dates fruit. Some of them work as middlemen between the main markets, village markets/ district markets.

Commission Agents (Arthi)

The Commission Agent is the main pillar of the marketing chain and his importance and activities cannot be ignored in the present system of marketing. Besides capital, he has a well established office in the main markets with a sufficient secretarial staff. He has a platform for auctioning of fruit. He has established a cordial relationship over a long period of time with the farmers on one hand and the wholesaler on the other.

He also facilitates the producer and contractor in lending money to them during slack season or for different on farm/ of farm activities/ purposes (informal credit) without any collateral and recover the loan at the time of marketing in one installments or two depending upon the quantity marketed and by mutual consent.

He also treats producers/ contractors as his guest during marketing or even when there is a slack season and provides him necessary facilities like accommodation, food, telephone etc. without any charge. This treatment is a kind of binding them to deal business only with him. Above all his business entirely depends on mutual trust among all the parties.

Ladanwala

Ladanwala is a kind of Commission Agent. He is a well informed person regarding the prevailing market price of commodities in the country. He is in constant touch with the Commission Agents of distant markets. He purchases the produce in bulk from Commission Agents/wholesalers and sells to distant markets on high profit. This practice of resale is known "Laden" and the person performing this practice is called "Ladanwala". In this way he not only gets his commission but sometimes also fetches a higher price in other markets. However, it is a very risky business. The higher price in distant market may be for very short time and by the time produce reaches in the distant market may create glut. This will result in a loss to Ladanwala.

Wholesalers (Mashakhor/Pharia)

His activities are also important in the marketing chain. He purchases produce in bulk from the Commission Agents during auction. He further sells to retailers in different lots according to the different grades and demand of retailer. He also packs and repacks the produce.

Retailers

Retailer is the last but not the least actor in the market chain. There are generally three types of retailers. They may be large market operators in a city, small shopkeepers, pushcart / street hawkers and small retailers operating within the market premises. They purchase the produce from the wholesalers during auction either on cash payment or on very short term loan may be for week or so. He is the final link in the system who reaches the ultimate consumer

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