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# PAKISTAN FARM INCOME

Gross and Net Farm Income by Province

1983/84 through 1990/91



Economic Wing Monograph No. 1

April 1993

Economic Wing

Ministry of Food, Agriculture and Co-operatives

Islamabad

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### 1983/84 through 1990/91

by

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## FOREWORD

Pakistan has an agricultural based economy and farm products are nearly one fourth of gross domestic products. It is, therefore, imperative to have reliable estimates of farm income on both provincial and national bases. Accordingly the Economic Wing has compiled farm income information and presents their work in a monograph series. The farm income estimates reflect agricultural production conditions, domestic and international prices, and government policies. In short, it is a measure of the nations agricultural economic health.

The farm income information and its analysis presented in this series provides a base to help planners, policy makers and researchers to evaluate and modify their policies. It will also assist in designing a rationale in making proper allocation of resources, identification of appropriate crop mixes in different regions and estimating impacts of alternative price mechanisms, subsidies, taxes and income transfer.

The Economic Wing has strived hard and put in its best efforts to collect, collate and analyze farm income data in a scientific manner. The results of this work are the following monographs.

- (1) PAKISTAN FARM INCOME, Gross and Net Farm Income by Province, 1983-84 through 1990-91. Monograph No. 1.
- (2) PAKISTAN FARM INCOME, Gross Farm Income Generated by Commodity, 1983-84 through 1990-91. Monograph No. 2.
- (3) PAKISTAN FARM INCOME, Data Tables, 1983-84 through 1990-91. Monograph No. 3.

The efforts made by M/S Aurangzeb Abbasi, Shabbir Ahmad Awan, Habib Ahmad and Salim Akhtar in compiling these series are commendable and are greatly acknowledged because without their untiring efforts it was not possible to accomplish this task. Thanks are also due to Dr. Donald W. Lybecker who by imparting technical knowledge and skills broaden the vision of the research staff. We must offer our thanks and gratitude to Dr. Richard J. McConnen for his cooperation and valuable advice rendered by him at every step without which it was not possible to accomplish this task. The computer graphics knowledge of Economic Wing intern Faiz M. Khan is noted and greatly appreciated. This study will remain

incomplete unless we acknowledge the keen interest taken by Dr. Zakir Hussain in enhancing the usefulness of the study.

Economic Wing being the technical arm of the Ministry of Food and Agriculture would continue its efforts to update these series and improve them further, in future.



( Dr. A. H. MAAN )  
Director General

## TABLE OF CONTENTS

List of Figures.....	ii
List of Tables.....	iii
Executive Summary.....	iv
Introduction.....	1
The Economic Health of Agriculture .....	1
Gross Farm Income.....	1
Net Farm Income.....	1
The Impact of Inflation.....	2
Gross Farm Income in Current Rupees.....	3
Gross Farm Income by Enterprise Origin.....	3
Gross Farm Income by Provincial Origin.....	3
Net Farm Income in Current Rupees.....	4
Net Farm Income by Enterprise Origin.....	4
Net Farm Income by Provincial Origin.....	4
Gross Farm Income in 1980/81 Rupees.....	4
Gross Farm Income by Enterprise Origin.....	5
Gross Farm Income by Provincial Origin.....	5
Net Farm Income in 1980/81 Rupees.....	5
Net Farm Income by Enterprise Origin.....	5
Net Farm Income by Provincial Origin.....	5
Provincial Farm Income Analysis.....	6
Punjab .....	6
Sindh.....	6
NWFP.....	7
Baluchistan.....	7
Figures.....	8-15
Tables.....	16-19
Glossary.....	20

## LIST OF FIGURES

1. Pakistan's Gross Farm Income by Enterprise Origin in Current Rupees.....	8
2. Pakistan's Gross Farm Income by Provincial Origin in Current Rupees.....	8
3. Pakistan's Net Farm Income by Enterprise Origin in Current Rupees.....	9
4. Pakistan's Net Farm Income by Provincial Origin in Current Rupees.....	9
5. Pakistan's Gross Farm Income by Enterprise Origin in 1980/81 Rupees.....	10
6. Pakistan's Gross Farm Income by Provincial Origin in 1980/81 Rupees.....	10
7. Pakistan's Net Farm Income by Enterprise Origin in 1980/81 Rupees.....	11
8. Pakistan's Net Farm Income by Provincial Origin in 1980/81 Rupees.....	11
9. Punjab's Gross Farm Income in Current Rupees.....	12
10. Punjab's Net Farm Income in 1980/81 Rupees.....	12
11. Sindh's Gross Farm Income in Current Rupees.....	13
12. Sindh's Net Farm Income in 1980/81 Rupees.....	13
13. NWFP's Gross Farm Income in Current Rupees.....	14
14. NWFP's Net Farm Income in 1980/81 Rupees.....	14
15. Baluchistan's Gross Farm Income in Current Rupees.....	15
16. Baluchistan's Net Farm Income in 1980/81 Rupees.....	15

## List of Tables

1. Pakistan and Provincial Gross Farm Income in Current Rupees by Enterprise Origin..... 16
2. Pakistan and Provincial Net Farm Income in Current Rupees by Enterprise Origin..... 17
3. Pakistan and Provincial Gross Farm Income in 1980/81 Rupees by Enterprise Origin..... 18
4. Pakistan and Provincial Net Farm Income in 1980/81 Rupees by Enterprise Origin..... 19

# PAKISTAN FARM INCOME

## Gross and Net Farm Income by Province 1983/84 through 1990/91

### Executive Summary

Farm income is regarded as one of the best estimates of agriculture's economic performance. The total value of crops and livestock produced in Pakistan (Gross Farm Income--GFI) in 1990/91 was Rs 250 billion in current (nominal) rupees and had grown at an average annual rate of 12.1% during the period studied, 1983/84 through 1990/91. The return to farm family supplied resources (Net Farm Income--NFI) in 1980/81 (inflation removed) rupees was Rs 50 billion and grew at 4.0%. The food and fiber system generates about 50% of the gross domestic product of Pakistan and is an important contributor to the economic growth. This study presents the annual GFI and NFI in nominal and real terms by province and crop and livestock sources, however, changes in average farm family income or the distribution of farm income among farm families is beyond the scope of this report.

During the eight years analyzed the livestock sector grew at nearly twice the rate of the crop sector--6.2% vs 3.6% growth in real NFI for the livestock and crop sectors, respectively. There is a substantial level of variability in GFI and NFI by year in both nominal and real terms which reflects the production uncertainty of agriculture.

Punjab provides half of Pakistan's farm income. In 1990/91, Sindh provided about one-quarter and NWFP and Baluchistan each provide about one-eighth. Baluchistan had the highest average annual real NFI growth rate (11.1%) and Sindh the lowest (2.0%). During the last three years the livestock sector in NWFP produced more income than the crop sector.

# PAKISTAN FARM INCOME

## Gross and Net Farm Income by Province 1983/84 through 1990/91

### Introduction

Agriculture is one of the major sectors of Pakistan's economy and it is important to know the state of agriculture's economic health and how that state changes over time. Agricultural production contributes about one-fourth of the nation's Gross Domestic Product (GDP) and provides the principal employment for nearly half of Pakistan's labor force. Agribusiness, the firms that supply inputs to production agriculture or which process and market its outputs, also accounts for one-fourth of the country's GDP. Pakistan's food and fiber system, production agriculture and the agribusiness sectors, contribute nearly one-half of the nation's GDP.

The companion report, "Pakistan Farm Income: Gross Farm Income Generated by Commodity 1983/84 through 1990/91", examines gross farm income by the crop and livestock sectors and by the principal crop and livestock enterprises for Pakistan and each of its four provinces. Additional statistical tables are available in the Economic Wing/MINFA publication entitled, "Pakistan Farm Income: Data Tables 1983/84 through 1990/91".

### The Economic Health of Agriculture

While the economic health of Pakistan's production agriculture sector has many dimensions, a time series of Farm Income estimates is generally regarded as one of the best indicators of economic performance. This report analyzes the first published estimates of a time series of Pakistan's Farm Income for the crop years 1983/84 through 1990/91. Two measures of Farm Income are presented: Gross Farm Income and Net Farm Income.

**Gross Farm Income (GFI)** is the total production of all crops and livestock produced during a crop year (Kharif season April-September and Rabi season October-March) valued at prices farmers could receive at the "farm gate". GFI is among the better indicators of the contribution of agricultural production to Pakistan's economic well-being. Annual variations will reflect changes in product prices, yields, and enterprise mix.

**Net Farm Income (NFI)** is GFI minus all expenses for inputs used in the production of crops and livestock which are not supplied by the farm family. NFI is the financial return to the

resources provided by the farm family in the production of crops and livestock. NFI does not mean the same thing as "profit" and is not "extra" income available to a farmer. NFI includes compensation for the use of owned land, family labor, management, and other resources provided by the farm family. In many cases, the opportunity cost of these resources is not realized by the farm family and if the opportunity cost of land and some other farm family owned resources were deducted from NFI, the residual would probably be negative. In many instances, the NFI available to a farm family is augmented by off-farm earnings of family members. Therefore, the economic well-being of a farm family will depend on the off-farm earnings as well as the family's net farm income.

**The Impact of Inflation:** When comparing economic performances measured in money terms at different points in time, changes in the purchasing value of the measurement unit, rupees in the case of Pakistan, should be taken into account. In this study GFI and NFI have been estimated for eight crop years using the prices received by farmers for commodities produced and the prices paid for production inputs purchased during the crop year. These prices are referred to as either "current" or "nominal" prices.

If there have been changes in the purchasing value of the rupee, comparison of farm income estimates expressed in "nominal" prices for different years can be misleading. For example, if there has been inflation, farm income estimates expressed in current prices can be deflated or adjusted to estimates expressed in "real" or "constant" prices using a price index. Real prices reflect the purchasing power of a currency in terms of a specified "basket of goods and services" for a given year that is represented by a specific price index. There are various price indices that can be used to estimate the average change in the purchasing value of a country's currency. Three price indices readily available in Pakistan are the Consumer Price Index (CPI), the Wholesale Price Index (WPI), and the Gross Domestic Product (GDP) deflator.

This report uses the GDP deflator to convert both GFI and NFI from current rupees to real rupees in terms of the 1980-81 level of prices. No price index is a perfect measure of the impact of inflation on a specific individual or group. For example, the basket of goods used to calculate the GDP deflator for all of Pakistan is probably different from the basket of goods consumed by the typical farm family. The GDP deflator was selected because of the breadth of the goods and services it includes and its availability.

## Gross Farm Income in Current Rupees

Table 1 reports the GFI in current rupees. The data are reported for the period 1983/84 through 1990/91. Pakistan's GFI more than doubled in the eight years reported in this study, increasing from Rs 112 billion to Rs 246 billion. The average annual rate of increase was 10.2% between 1983/84 and 1986/87 and accelerated to 14.2% between 1987/88 and 1990/91. The data are presented first by enterprise origin (crops vs livestock) and then by provincial origin.

**Gross Farm Income by Enterprise Origin:** Pakistan's nominal GFI is derived from crop and livestock sources. Figure 1 shows the relative contribution of these two enterprise origins for the years 1983/84 through 1990/91. The production of crops has increased from Rs 74 billion to Rs 153 billion and livestock has grown from Rs 38 billion to more than Rs 96 billion during the eight years studied. In 1983/84 crop enterprises accounted for two-thirds of the GFI. The importance of livestock has accelerated in recent years and in 1990/91 livestock accounted for nearly 40% of the GFI. Relative increases in the importance of livestock in terms of contribution to GFI reflect changes in the general character of Pakistan's agriculture.

During the period analyzed, farm level prices of livestock commodities have tended to be above world market prices while the farm level prices for most crops have tended to be below world prices. Unless there are changes to underlying conditions and policies, income growth from livestock commodities is likely to continue to become relatively more important. However, precise predications about future changes would require both a more detailed examination of the sources of past changes and predictions about future agricultural programs and policies.

Over the eight-year period analyzed the GFI of Pakistan has had an average annual increase of 11%. The rate of growth has been irregular ranging from a small decrease in 1986/87 to an increase of nearly 24% in 1984/85. Given the production uncertainty that exists in agriculture, this is not unexpected.

**Gross Farm Income by Provincial Origin:** In terms of current rupee GFI, Pakistan's agricultural production is dominated by Punjab (Figure 2). In 1990/91 nearly one-half of Pakistan's GFI came from Punjab, a quarter from Sindh, and the rest about equally divided between NWFP and Baluchistan. The production shares, however, vary annually. In 1987/88 Punjab accounted for 57% while in 1983/84 Punjab's contribution was 47%. Sindh has been nearly a constant quarter during the past eight years, NWFP was 20% in 1988/89 but was only 14% in 1990/91. Baluchistan stayed between 7% and 9% until 1990/91 when it jumped to 13%. These differences in provincial shares reflect diversity within

Pakistan agriculture which is desirable. GFI declines in one province may be balanced by increases in another.

### **Net Farm Income in Current Rupees**

Table 2 presents NFI in current rupees for the years 1983/84 through 1990/91. Net Farm Income (NFI) is computed by subtracting the financial costs of farm inputs not supplied by the farm family from GFI. Thus, NFI is the return the farm family earns for the inputs they supply--land, labor, management, and capital (other owned resources such as farm implements). The costs deducted from GFI are the direct financial costs of agriculture production borne by the farm family. These farm level financial costs will differ from economic costs of the inputs to the country if any inputs are either subsidized or taxed. When computed in terms of current rupees, NFI is presented in nominal or undeflated terms.

**Net Farm Income by Enterprise Origin:** NFI by crop and livestock sources increased from RS 50 billion in 1983/84 to over Rs 100 billion in 1990/91 (Figure 3). In 1990/91 Pakistan's NFI was 70% derived from crop sources and 30% from livestock sources. The livestock proportion has increased during the period reflecting the increased importance of meat and milk. On an annual basis, crops have increased 11.0%, livestock 13.6%, and the combined increase was 11.4%. In two years of the study period, the crop sector showed negative annual growth and a growth rate of more than 20% was recorded in two other years. The increase from the livestock sector has been positive each year and was over 30% in 1988/89. Over the eight years the NFI from crops doubled and livestock increased 130%.

**Net Farm Income by Provincial Origin:** Figure 4 shows the NFI by province. In 1990/91 Punjab had a NFI of Rs 51 billion, nearly 50% of that generated by the nation. Sindh contributed Rs 25 billion (24%) and NWFP and Baluchistan each added about 13%. There is substantial year to year variation in the contributions of the provinces. For example, Punjab provided 57% in 1987/88 but only 47% in 1983/84. Baluchistan has the highest average annual growth rate (19.5%) and Sindh the lowest (9.3%). The average annual growth rate of Punjab is 13% and NWFP 9.7%.

### **Gross Farm Income in 1980/81 Rupees**

The Gross Domestic Product (GDP) deflator was used to adjust both the GFI and the NFI to remove the effects of inflation. In theory, this means that the purchasing power of the rupee is the same each year and contrasts between crop years are comparable.

Table 3 presents the crop, livestock, and total real GFI in 1980/81 rupees by province for the crop years 1983/84 through 1990/91.

**Gross Farm Income by Enterprise Origin:** GFI in real terms grew from Rs 89 billion in 1983/84 to Rs 122 billion in 1989/90 (Figure 5). The crop contribution to NFI over the eight years was Rs 16 billion while livestock increased Rs 17 billion. These rupee increases are a 28% and a 56% increase for the crop and livestock sectors, respectively. On an average annual basis, the crop sector has grown at 3.7%, livestock at 6.9%, and Pakistan agriculture at 4.7%. These rates are lower than those reported under the current rupee section, but that is to be expected because the impact of inflation has been removed. The growth rates for both the crop and livestock sectors are not constant. The crop sector showed a 10.6% increase in 1984/85 and a negative 1.9% change in 1986/87. In the livestock sector the variation is greater being as high as 27.0% increase in 1988/89 to a 2.7% decline in 1990/91.

**Gross Farm Income by Provincial Origin:** Figure 6 shows the real GFI by province for the eight study years. The percentage by province for a given year is the same as under current rupees because each coefficient is divided by the same GDP deflator. The greatest rupee increase was in Punjab (Rs 22 billion) and the smallest in NWFP (Rs 2.2 billion). Average annual percentage growth rates over the eight years were 9.9%, 5.4%, 3.4% and 2.9% for Baluchistan, Punjab, NWFP, and Sindh, respectively.

### Net Farm Income in 1980/81 Rupees

The impact of inflation is removed from current rupee NFI by the GDP deflator for the data presented in Table 4. The real NFI levels are expressed in terms of 1980/81 rupees. The resulting NFI levels are all smaller than those in current rupees but contrasts of the rupee return to farm family supplied resources over the eight years are comparable. Because the quantity of farm family supplied resources changes (number of farmers, rupees of capital, etc) only changes to the agricultural sector can be noted, not farm family welfare.

**Net Farm Income by Enterprise Origin:** NFI in 1980/81 rupees is shown by crop and livestock enterprises in Figure 7. In 1990/91 crops were Rs 36 billion and livestock Rs 15 billion. The livestock contribution has increased in recent years and was one-third of total NFI in 1989/90. The crop proportion was 74% in 1983/84 and declined to a low of 66% in 1989/90. The average annual increase in real NFI was 3.6% for crops, 6.2% for

livestock, and 4.0% combined. In three years the annual change was negative for the crop sector; in two other years the livestock sector showed declines.

**Net Farm Income by Provincial Origin:** Punjab real NFI was Rs 25 billion in 1990/91, Sindh Rs 12 billion, and NWFP and Baluchistan were about Rs 7 billion each (Figure 8). Substantial yearly variation in provincial contribution exists, for example, Punjab's proportion of the total real NFI ranged from 47% to 56%. Greatest average annual growth in NFI was exhibited by Baluchistan (11.1%) and the smallest by Sindh (2.0%). Punjab's average annual growth rate was 5.5% and NWFP had an average annual growth rate of 2.4% over the eight years.

### Provincial Farm Income Analysis

A parallel analysis of provincial farm income is presented next. The figures presented are current rupee GFI and 1980/81 rupee NFI. Focus of the analysis is on growth of the crop and livestock sectors and farm income growth of the province.

**Punjab:** Punjab's current rupee GFI and 1980/81 rupee NFI are presented in Figures 9 and 10. Current rupee GFI of the crop and livestock sectors in Punjab grew at nearly equal rates over the eight years, 13.4% and 12.6% respectively. Only Baluchistan, which produces about one-tenth the GFI of Punjab had a higher average annual growth rate. The crop sector's annual growth rate ranged from a high of more than 20% (1983/84 and 1990/91) to near zero in 1986/87. Livestock annual growth rates were even more variable ranging from 34% in 1988/89 to a negative 1% in 1990/91.

Average annual NFI growth in 1980/81 rupees was 7.3% for the crop sector and 0.9% for the livestock sector. The crop sector is the dominant sector and, depending upon the year, accounts for up to 85% of the real NFI. About half of the nation's real NFI is generated by Punjab but it has varied from 46% to 57% over the eight years.

**Sindh:** The second most important agricultural province is Sindh (Figures 11 and 12). Over the past eight years Sindh has provided between 20 and 25% of Pakistan's agricultural production based upon nominal GFI. A little more than half of Sindh's nominal GFI is generated by crops, however, the importance of the livestock sector has increased rather steadily during the eight years analyzed. The average annual current rupee GFI growth rate for crops is 7.4% compared to 15% for livestock.

Real NFI in Sindh increased from Rs 10.9 billion in 1983/84 to Rs 12.3 billion in 1990/91. Sindh contributes about one-quarter of the nation's real NFI. The average annual growth rate of real NFI from the crop sector for the eight years was 0.6% but the livestock rate of growth was 4.6%. The 2.0% crop and livestock average annual growth rate for Sindh was the lowest provincial rate in Pakistan.

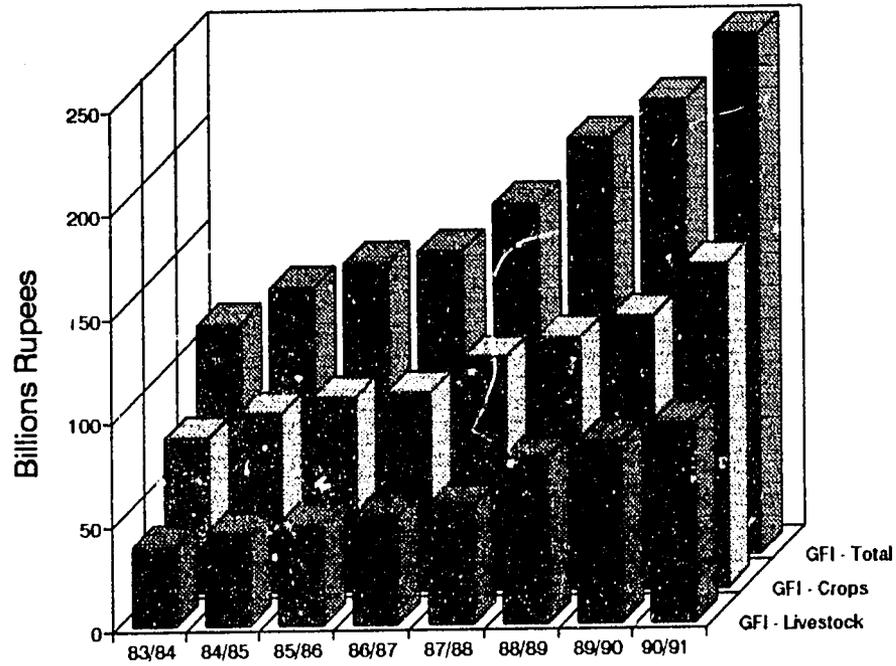
**NWFP:** The livestock sector exceeded the crop sector both in terms of current rupee GFI and real NFI during the last three years analyzed (Figures 13 and 14). In 1990/91 NWFP contributed Rs 28 billion to Pakistan's current rupee GFI and 60% of that was provided by the livestock sector. In 1983/84, the livestock sector contributed about 40% of NWFP's current rupee GFI.

Real NFI in NWFP was Rs 7 billion in 1990/91 and contributed for 14% of Pakistan's total. Real NFI in NWFP was nearly Rs 10 billion in 1988/89 but has declined during the last three years in both the crop and livestock sectors. The average annual growth rate of real NFI for crops plus livestock was 2.4%. The livestock average annual growth rate was 14.1% over the eight years, however, the crop growth rate was negative.

**Baluchistan:** In 1990/91 Baluchistan's nominal GFI was Rs 20 billion and real NFI was nearly Rs 7 billion (Figures 15 and 16). The nominal GFI average annual growth rate is the highest provincial rate. The livestock nominal GFI annual growth rate is 25.1% and the crop rate is 15.1%. Livestock growth during the last four years studied has been especially strong.

The real NFI average annual growth rates during the study period for the crop and livestock sectors were 23.4% and 8.4%, respectively. The combined rate of 11.1% was the highest provincial real NFI growth rate. Similar to the other provinces, the crop growth rate was inconsistent and includes three years of negative change. The livestock sector only shows one year of negative growth (1986/87).

**Figure 1. Pakistan's Gross Farm Income in Current Rupees**



**Figure 2. Pakistan's Gross Farm Income Source by Province in Current Rupees**

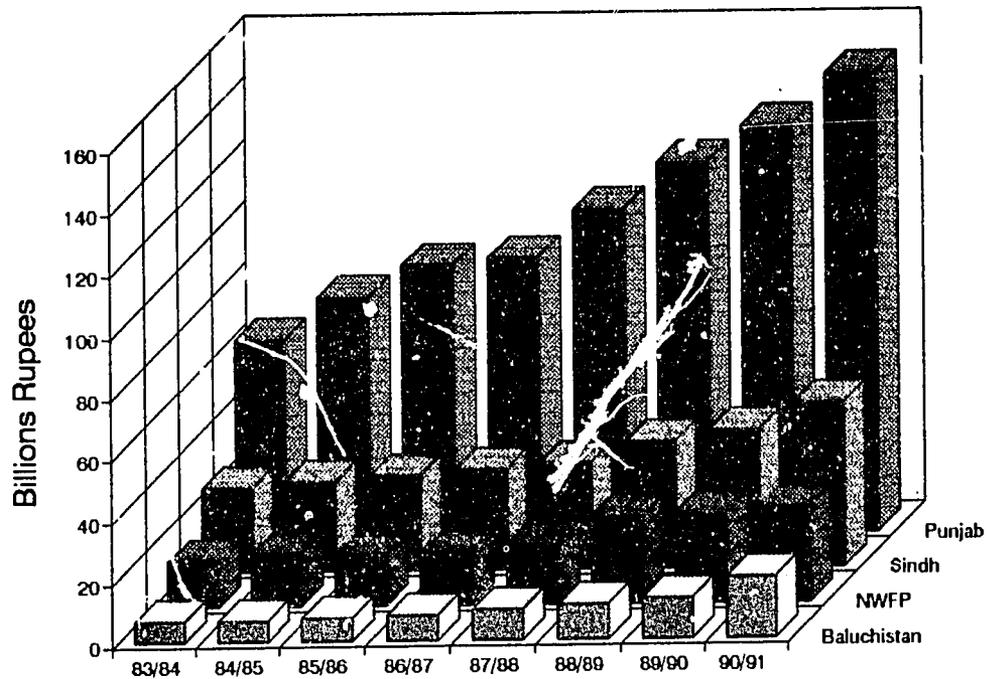


Figure 3. Pakistan's Net Farm Income in Current Rupees

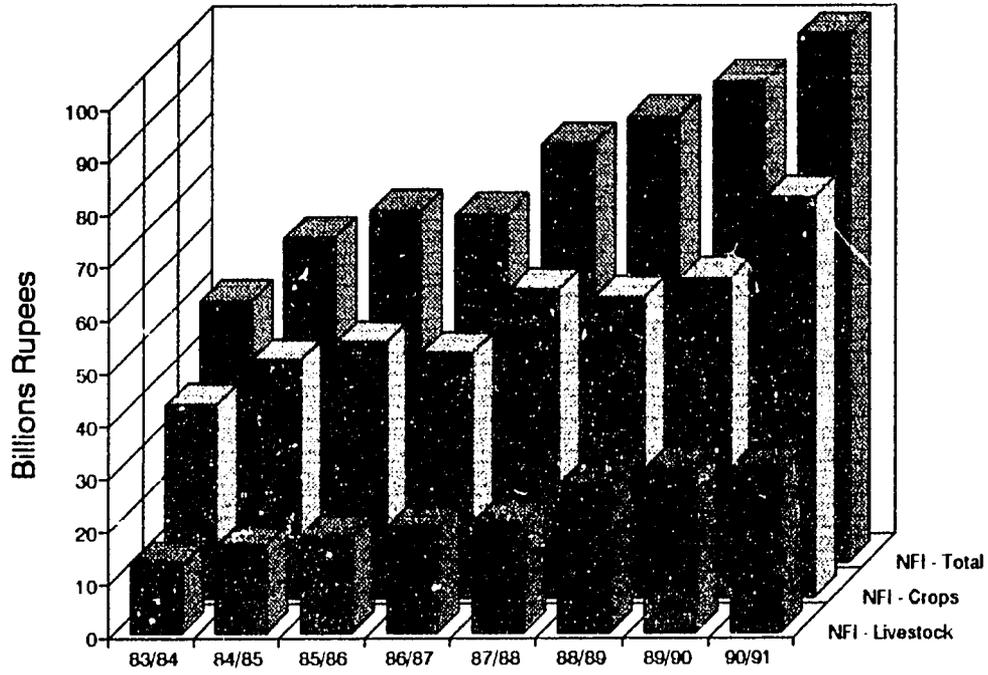


Figure 4. Pakistan's Net Farm Income Source by Province in Current Rupees

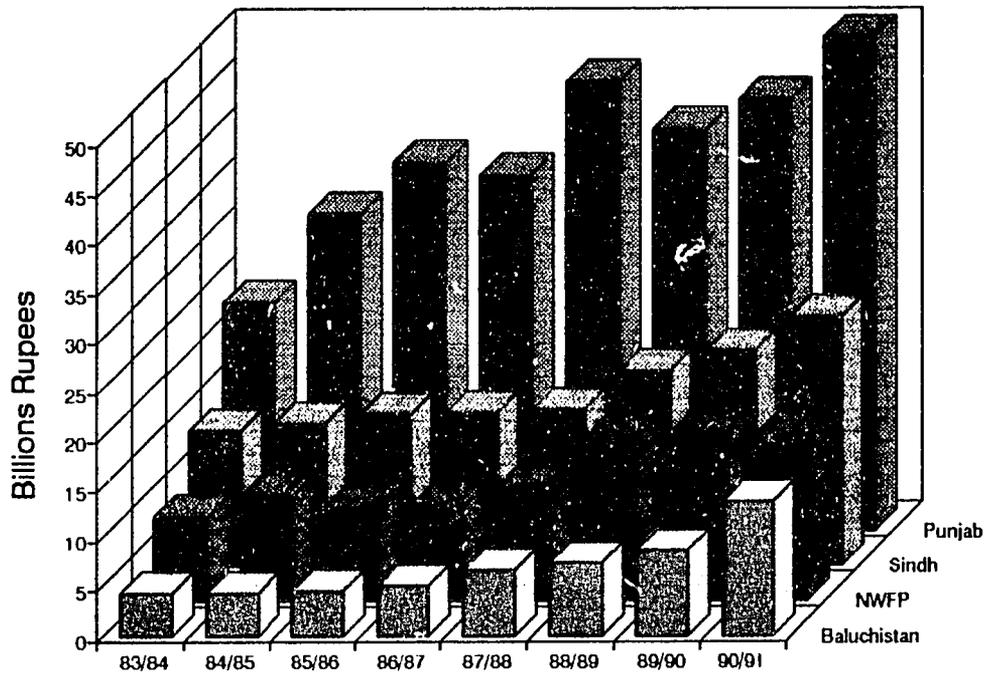


Figure 5. Pakistan's Gross Farm Income in 1980/81 Rupees

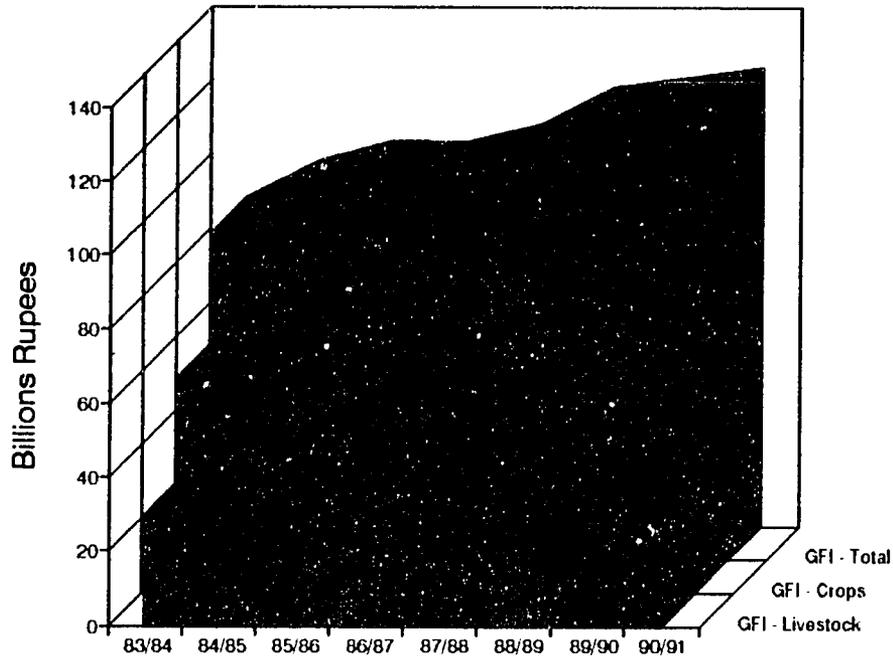


Figure 6. Pakistan's Gross Farm Income Source by Province in 1980/81 Rupees

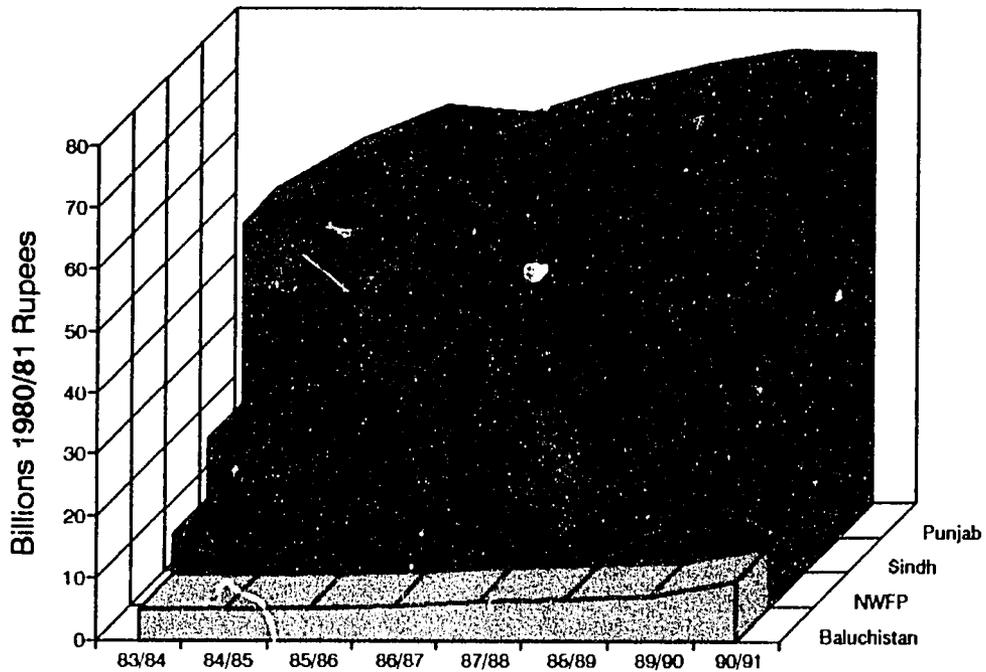


Figure 7: Pakistan's Net Farm Income in 1980/81 Rupees

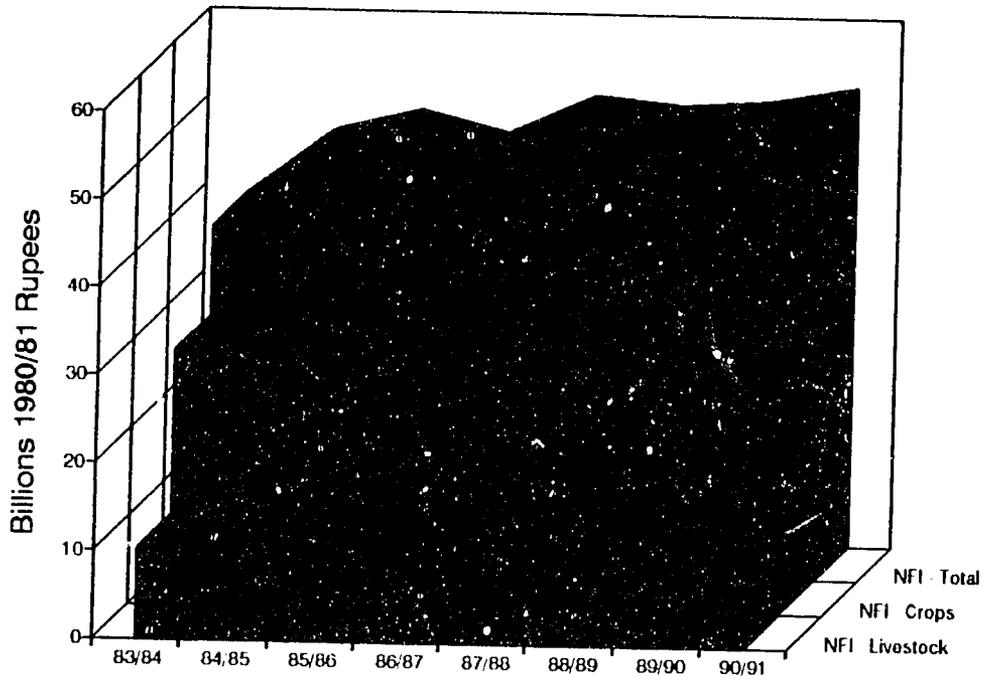


Figure 8. Pakistan's Net Farm Income Source by Province in 1980/81 Rupees

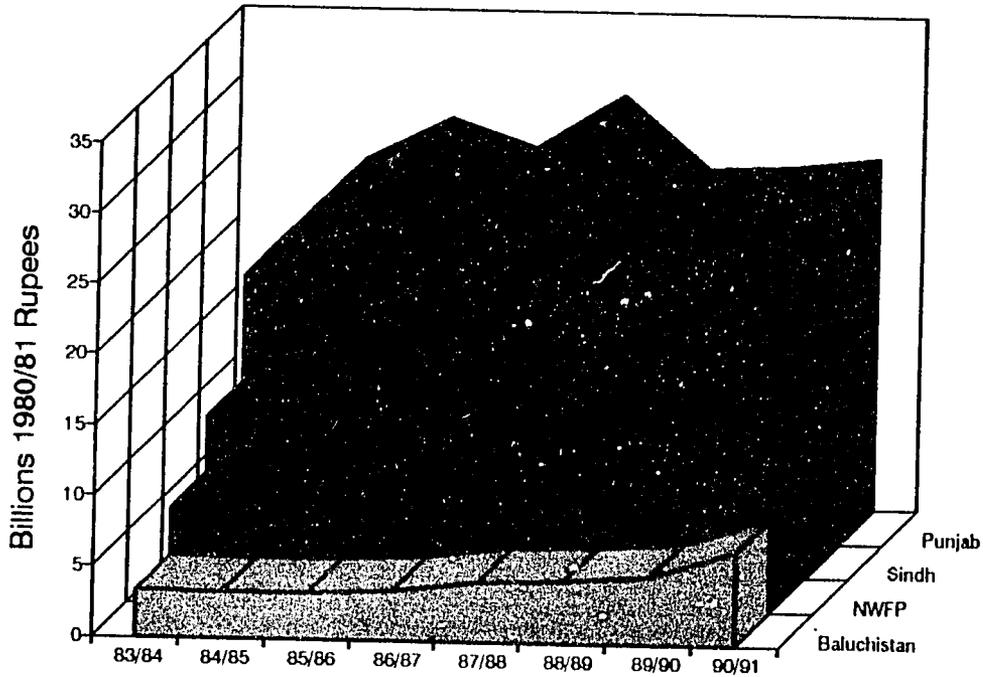


Figure 9. Punjab's Gross Farm Income in Current Rupees

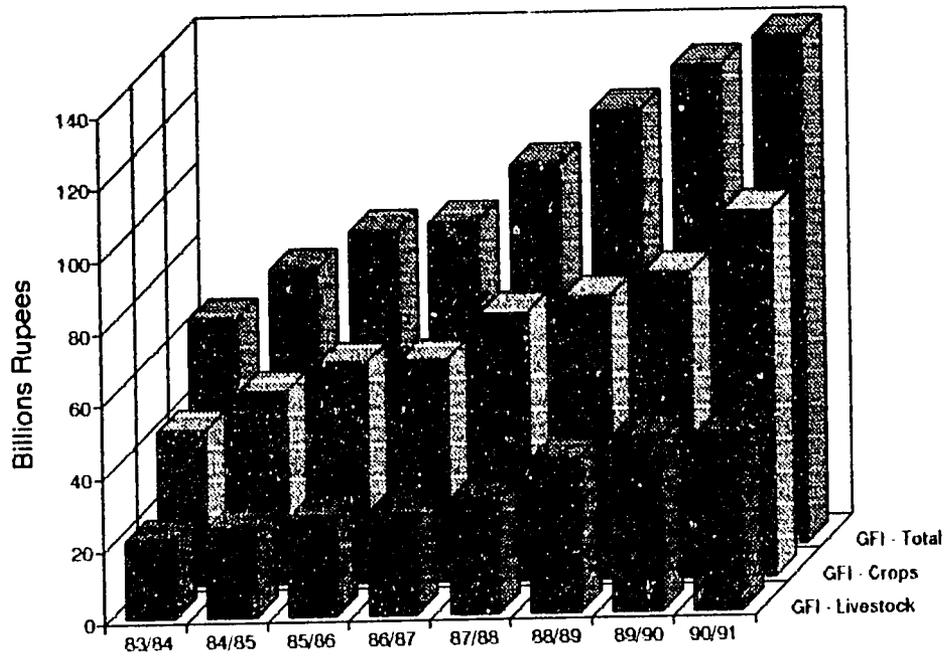


Figure 10. Punjab's Net Farm Income in 1980/81 Rupees

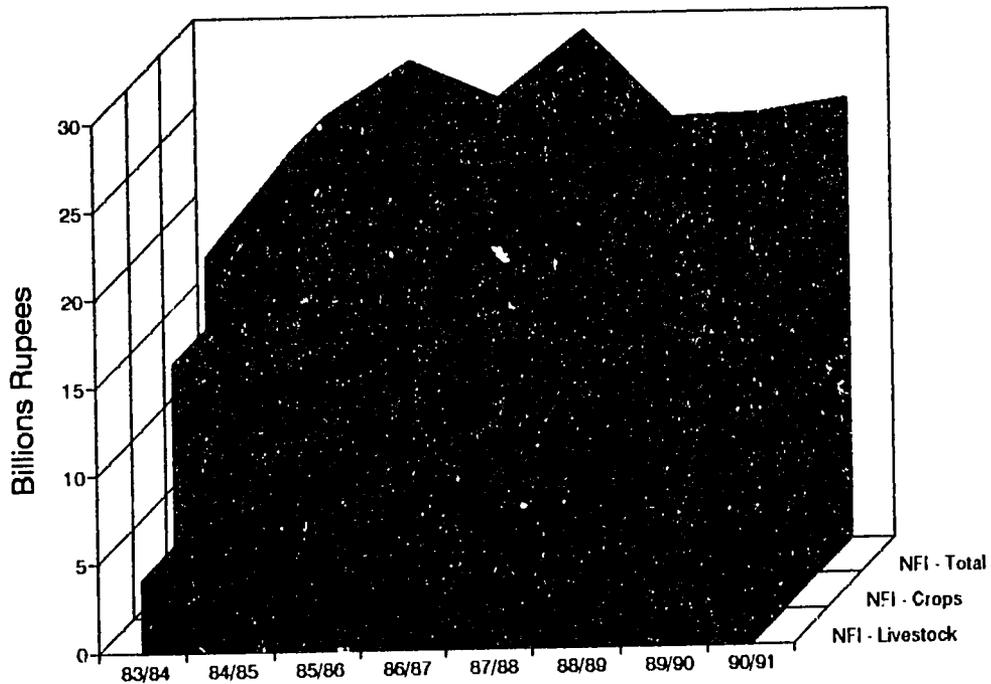


Figure 11. Sindh's Gross Farm Income in Current Rupees

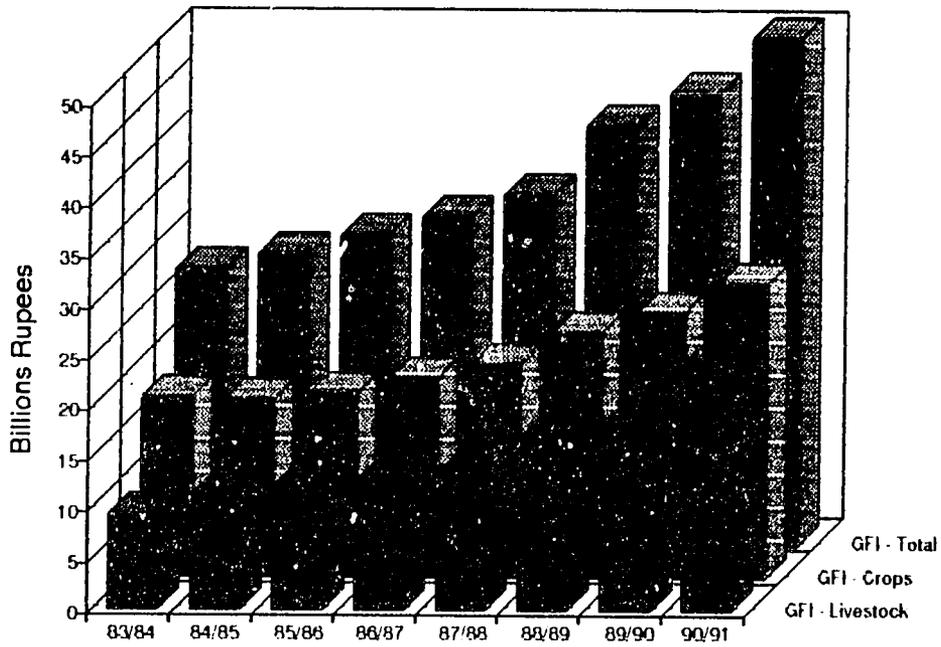


Figure 12. Sindh's Net Farm Income in 1980/81 Rupees

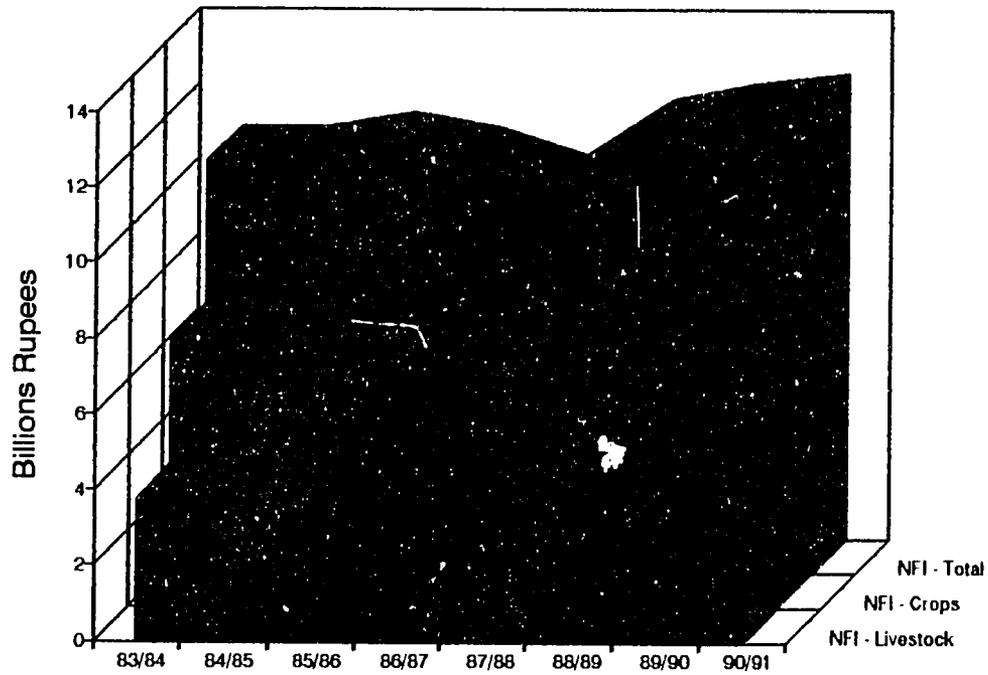


Figure 13. NWFP's Gross Farm Income in Current Rupees

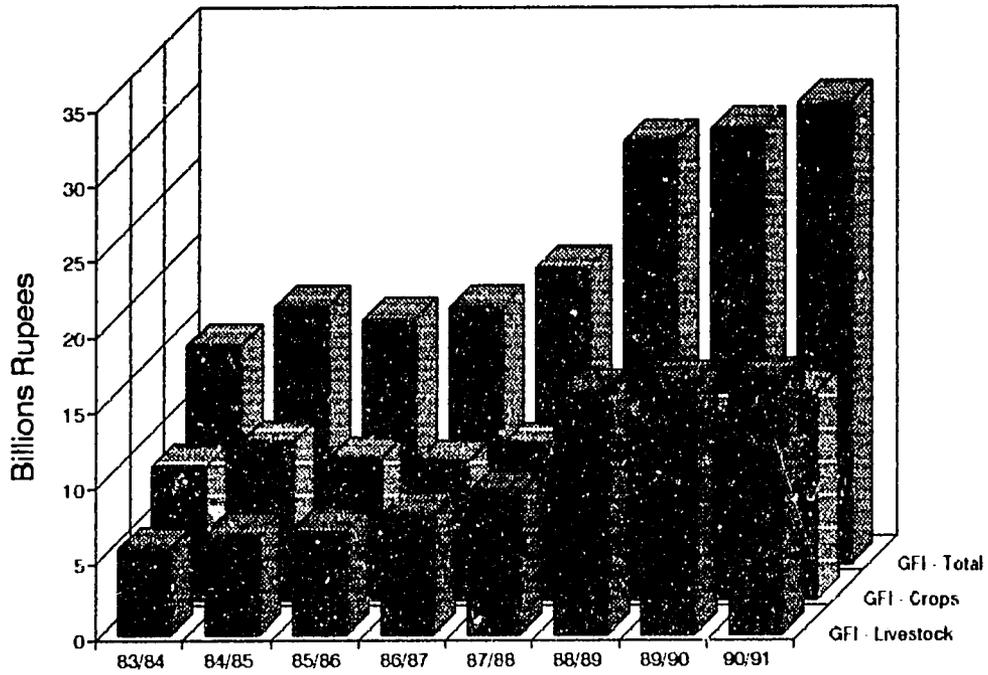


Figure 14. NWFP's Net Farm Income in 1980/81 Rupees

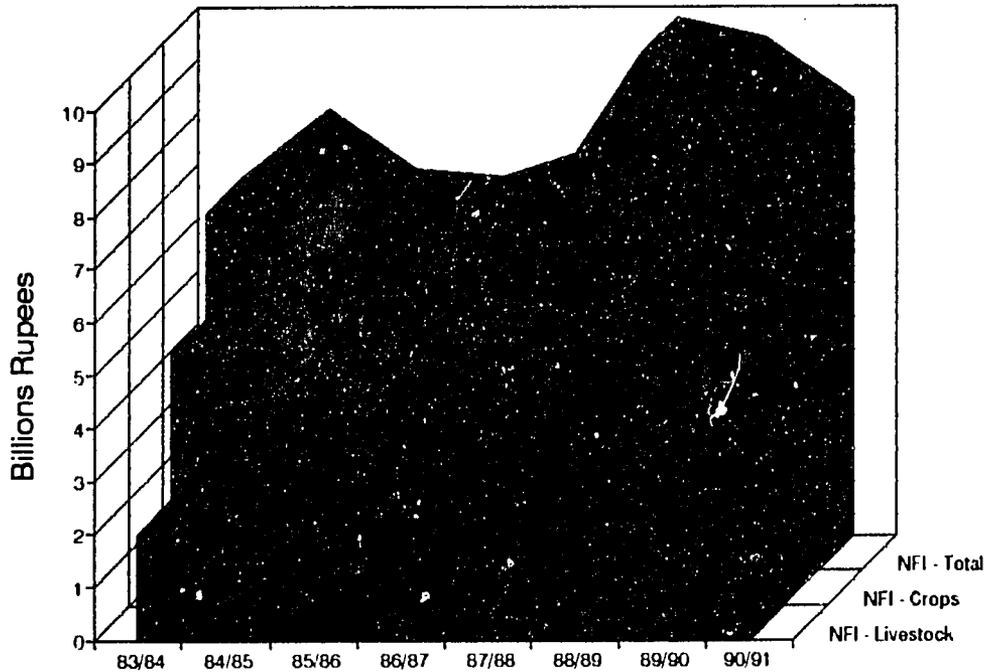


Figure 15. Baluchistan's GFI  
in Current Rupees

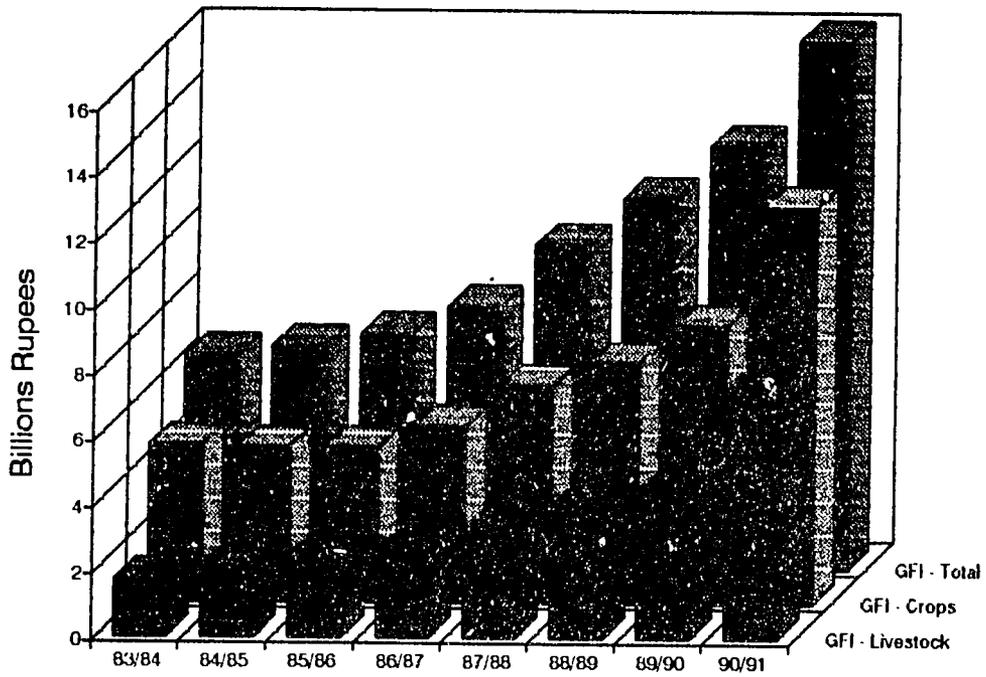


Figure 16. Baluchistan's NFI  
in 1980/81 Rupees

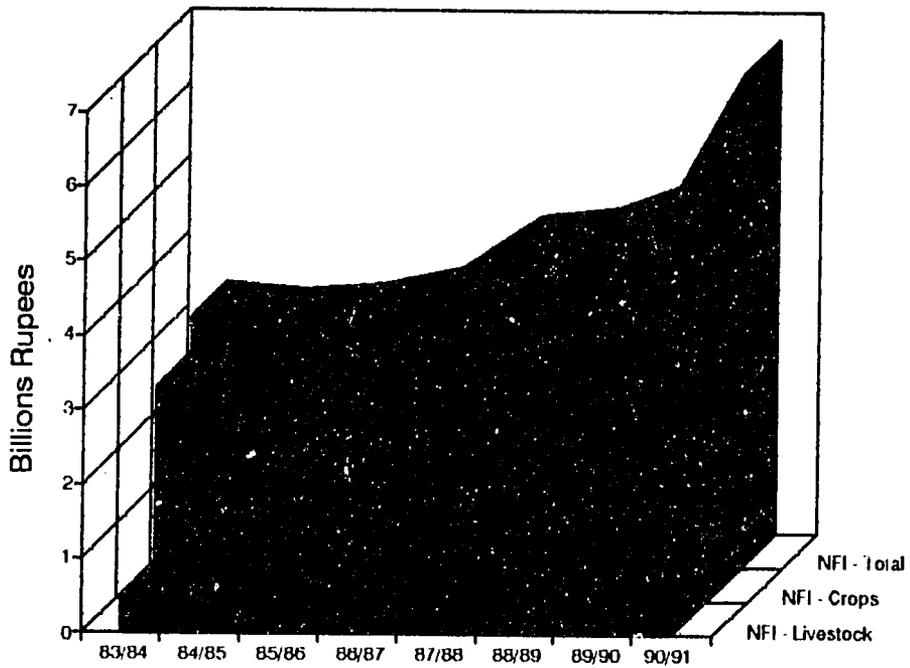


Table 1. Pakistan and Provincial Gross Farm Income in Current Rupees by Enterprise Origin

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91
-----Rs Billion-----								
PUNJAB								
Crops	42.7	52.8	60.6	61.2	73.9	77.9	84.1	101.0
Livestock	21.3	24.5	26.9	28.7	31.5	42.1	48.0	47.7
Total	64.0	77.3	87.5	89.8	105.3	120.0	132.1	148.7
SINDH								
Crops	17.7	17.5	18.1	19.5	21.0	24.1	26.0	29.0
Livestock	9.3	11.1	12.2	12.7	13.4	17.0	18.4	24.2
Total	27.0	28.6	30.4	32.2	34.4	41.2	44.5	53.2
96 NWFP								
Crops	8.9	10.4	9.3	9.1	10.3	11.9	12.3	13.8
Livestock	5.7	6.6	6.9	7.9	9.3	16.0	16.6	16.8
Total	14.5	17.0	16.2	17.0	19.6	28.0	28.8	30.6
BALUCHISTAN								
Crops	4.7	4.6	4.7	5.3	6.5	7.2	8.4	12.0
Livestock	1.7	2.0	2.4	2.6	3.2	4.0	4.4	7.5
Total	6.4	6.7	7.1	7.9	9.8	11.2	12.8	19.5
PAKISTAN								
Crops	73.9	85.4	92.7	95.1	111.7	121.2	130.8	155.8
Livestock	38.0	44.2	48.4	51.9	57.4	79.2	87.4	96.2
Total	111.9	129.6	141.2	147.0	169.1	200.3	218.2	252.0

Table 2. Pakistan and Provincial Net Farm Income in Current Rupees by Enterprise Origin

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91
	-----Rs Billion-----							
PUNJAB								
Crops	18.03	25.60	29.83	27.59	37.09	31.50	33.36	42.81
Livestock	5.13	6.46	7.46	8.37	8.31	9.15	10.33	8.05
Total	23.15	32.07	37.29	35.96	45.40	40.65	43.69	50.86
SINDH								
Crops	8.96	8.55	8.76	9.06	9.51	12.32	13.13	14.82
Livestock	4.76	5.81	6.57	6.39	6.25	7.33	8.59	10.30
Total	13.72	14.37	15.34	15.45	15.76	19.65	21.72	25.12
NWFP								
Crops	5.99	7.46	6.14	5.68	6.51	7.49	7.39	8.32
Livestock	2.51	3.18	3.27	3.94	4.84	9.11	9.57	8.54
Total	8.50	10.64	9.41	9.62	11.35	16.61	16.97	15.84
BALUCHISTAN								
Crops	3.59	3.44	3.42	3.92	5.12	5.32	6.30	9.61
Livestock	0.60	0.84	1.08	1.11	1.48	2.05	2.23	3.93
Total	4.19	4.28	4.51	5.02	6.61	7.38	8.53	13.54
PAKISTAN								
Crops	36.57	45.05	48.15	46.24	58.23	56.63	60.18	75.56
Livestock	13.00	16.30	18.39	19.81	20.89	27.65	30.73	30.82
Total	49.57	61.35	66.55	66.05	79.11	84.28	90.91	106.35

Table 3. Pakistan and Provincial Gross Farm Income in 1980/81 Rupees by Enterprise Origin

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91
-----Rs Billion-----								
PUNJAB								
Crops	33.8	40.0	44.5	42.9	47.3	45.9	46.6	49.5
Livestock	16.9	18.5	19.7	20.1	20.1	24.8	26.6	23.3
Total	50.7	58.6	64.2	63.0	67.4	70.7	73.2	72.8
SINDH								
Crops	14.0	13.2	13.3	13.7	13.4	14.2	14.4	14.2
Livestock	7.4	8.4	9.0	8.9	8.6	10.1	10.2	11.9
Total	21.4	21.6	22.3	22.6	22.0	24.3	24.6	26.0
18 NWFP								
Crops	7.0	7.9	6.8	6.4	6.6	7.0	6.8	6.7
Livestock	4.5	5.0	5.1	5.5	6.0	9.5	9.2	8.2
Total	11.5	12.9	11.9	12.0	12.6	16.5	16.0	15.0
BALUCHISTAN								
Crops	3.7	3.5	3.4	3.7	4.2	4.3	4.7	5.9
Livestock	1.3	1.5	1.8	1.8	2.1	2.3	2.4	3.7
Total	5.1	5.1	5.2	5.5	6.3	6.6	7.1	9.5
PAKISTAN								
Crops	58.5	64.7	68.0	66.7	71.5	71.4	72.4	76.2
Livestock	30.1	33.5	35.5	36.4	36.8	46.7	48.4	47.1
Total	88.7	98.2	103.5	103.1	108.3	118.1	120.9	123.3

Table 4. Pakistan and Provincial Net Farm Income in 1980/81 Rupees by Enterprise Origin

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91
	-----Rs Billion-----							
PUNJAB								
Crops	14.3	19.4	21.9	19.4	23.7	18.6	18.5	21.0
Livestock	4.1	4.9	5.5	5.9	5.3	5.4	5.7	3.9
Total	18.3	24.3	27.4	25.2	29.1	24.0	24.2	24.9
SINDH								
Crops	7.1	6.5	6.4	6.4	6.1	7.3	7.3	7.3
Livestock	3.8	4.4	4.8	4.5	4.0	4.3	4.8	5.0
Total	10.9	10.9	11.3	10.8	10.1	11.6	12.0	12.3
61 NWFP								
Crops	4.7	5.7	4.5	4.0	4.2	4.4	4.1	4.1
Livestock	2.0	2.4	2.4	2.8	3.1	5.4	5.3	4.2
Total	6.7	8.1	6.9	6.8	7.3	9.8	9.4	8.2
BALUCHISTAN								
Crops	2.8	2.6	2.5	2.7	3.3	3.1	3.5	4.7
Livestock	0.5	0.6	0.8	0.8	0.9	1.2	1.2	1.9
Total	3.3	3.2	3.3	3.5	4.2	4.4	4.7	6.6
PAKISTAN								
Crops	29.0	34.1	35.3	32.5	37.3	33.4	33.3	37.0
Livestock	10.3	12.3	13.5	13.9	13.4	16.3	17.0	15.1
Total	39.3	46.5	48.8	46.4	50.7	49.7	50.3	52.1

## GLOSSARY

**Adjusted Prices:** Prices which have had inflation removed by being deflated with a price index.

**Agribusiness:** Firms that supply farms with seed, chemicals, fertilizer, tractor services, and other inputs and firms which transport, process, market, finance and provide other marketing services

**Constant Purchasing Power Prices:** Adjusted prices. Prices which have been deflated with a price index.

**Consumer Price Index (CPI):** A price index representing the bundle of goods purchased by a typical family. A price index may be used to remove inflation from a time series.

**Crop Year:** The agricultural production year including the Kharif season (October-March) and the Rabi Season (April-September).

**Current Purchasing Power Prices:** Prices that have not had inflation removed with the use of a price deflation index.

**Economic Prices:** Prices which exclude government taxes or subsidies.

**Financial Prices** Cash prices paid to the merchant for goods or services. They include government taxes and subsidies.

**Food and Fiber System** The production agriculture (farming) plus the agribusiness sector.

**Gross Domestic Product (GDP) Deflator:** A broad based price index of the value of goods and services which is used to remove inflation.

**Gross Farm Income** Total value of all crops and livestock produced by the production agricultural sector in one crop year regardless of who consumes them.

**Inflation:** The increase in the cash or nominal price of a good or service over a given period of time due to decreases in the value of the monetary unit.

- Net Farm Income:** The return to the resources provided to the farm by the farm family; ie the return to owned land, labor, management and other farm employed resources such as machinery and equipment.
- Nominal Prices:** Prices which are not adjusted for inflation. See current purchasing power prices.
- Opportunity Cost:** The value of a resource (for example labor) if it is employed in its next best alternative.
- Price Index:** A set of prices which reflect changes in the current price of a good, service, or bundle of goods and services due to decreases in the value of the monetary unit.
- Production Agriculture:** The sector of the economy which produces crops and livestock; farming.
- Profit:** Return to risk in the production or marketing of a good or service.
- Real Prices:** Prices which have been adjusted or deflated to remove inflation. See adjusted prices.
- Unadjusted Prices:** Prices which include inflation. See nominal prices.
- Wholesale Price Index (WPI):** A series of prices used to deflate the value of goods at the wholesale level.

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# PAKISTAN FARM INCOME

**Gross Farm Income Generated by Commodity**

**1983/84 through 1990/91**



**Economic Wing Monograph No. 2**

**April 1993**

**Economic Wing**

**Ministry of Food, Agriculture and Co-operatives**

**Islamabad**

# PAKISTAN FARM INCOME

## Gross Farm Income Generated by Commodity

### 1983/84 through 1990/91

by

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## FOREWORD

Pakistan has an agricultural based economy and farm products are nearly one fourth of gross domestic products. It is, therefore, imperative to have reliable estimates of farm income on both provincial and national bases. Accordingly the Economic Wing has compiled farm income information and presents their work in a monograph series. The farm income estimates reflect agricultural production conditions, domestic and international prices, and government policies. In short, it is a measure of the nations agricultural economic health.

The farm income information and its analysis presented in this series provides a base to help planners, policy makers and researchers to evaluate and modify their policies. It will also assist in designing a rationale in making proper allocation of resources, identification of appropriate crop mixes in different regions and estimating impacts of alternative price mechanisms, subsidies, taxes and income transfer.

The Economic Wing has strived hard and put in its best efforts to collect, collate and analyze farm income data in a scientific manner. The results of this work are the following monographs.

- (1) PAKISTAN FARM INCOME, Gross and Net Farm Income by Province, 1983-84 through 1990-91. Monograph No. 1.
- (2) PAKISTAN FARM INCOME, Gross Farm Income Generated by Commodity, 1983-84 through 1990-91. Monograph No. 2.
- (3) PAKISTAN FARM INCOME, Data Tables, 1983-84 through 1990-91. Monograph No. 3.

The efforts made by M/S Aurangzeb Abbasi, Shabbir Ahmad Awan, Habib Ahmad and Salim Akhtar in compiling these series are commendable and are greatly acknowledged because without their untiring efforts it was not possible to accomplish this task. Thanks are also due to Dr. Donald W. Lybecker who by imparting technical knowledge and skills broaden the vision of the research staff. We must offer our thanks and gratitude to Dr. Richard J. McConnen for his cooperation and valuable advice rendered by him at every step without which it was not possible to accomplish this task. The computer graphics knowledge of Economic Wing intern Faiz M. Khan is noted and greatly appreciated. This study will remain

incomplete unless we acknowledge the keen interest taken by Dr. Zakir Hussain in enhancing the usefulness of the study.

Economic Wing being the technical arm of the Ministry of Food and Agriculture would continue its efforts to update these series and improve them further, in future.



( Dr. A. H. MAAN )  
Director General

## TABLE OF CONTENTS

List of Figures.....	ii
List of Tables.....	iii
Executive Summary.....	iv
Introduction.....	1
Pakistan Gross Farm Income by Commodity.....	1
Provincial Gross Farm Income by Commodity.....	2
Punjab .....	2
Sindh.....	2
NWFP.....	3
Baluchistan.....	3
Commodity Gross Income.....	3
Cotton.....	3
Wheat.....	4
Fruit.....	4
Rice.....	4
Vegetables.....	4
Sugarcane.....	4
Maize.....	4
Milk.....	4
Meat.....	5
Analysis of Sources Commodity Gross Income Changes.....	5
Basmati Rice.....	6
Irri Rice.....	6
Maize.....	6
Cotton.....	6
Sugarcane.....	6
Vegetables.....	6
Fruit.....	6
Wheat.....	6
Milk.....	6
Figures.....	7-13
Tables.....	14-19

## LIST OF FIGURES

1. Pakistan's Gross Farm Income by Crop and Livestock Commodities.....	7
2. Punjab's Gross Farm Income by Crop and Livestock Commodities.....	7
3. Sindh's Gross Farm Income by Crop and Livestock Commodities.....	8
4. NWFP's Gross Farm Income by Crop and Livestock Commodities.....	8
5. Baluchistan's Gross Farm Income by Crop and Livestock Commodities.....	9
6. Cotton Gross Income by Province.....	9
7. Wheat Gross Income by Province.....	10
8. Rice Gross Income by Province.....	10
9. Maize Gross Income by Province.....	11
10. Sugarcane Gross Income by Province.....	11
11. Fruit Gross Income by Province.....	12
12. Vegetables Gross Income by Province.....	12
13. Milk Gross Income by Province.....	13
14. Meat Gross Income by Province.....	13

## List of Tables

1. Gross income by principal crop and livestock commodities for 1983/84 through 1990/91 for Pakistan... 14
2. Gross income by principal crop and livestock commodities for 1983/84 through 1990/91 for Punjab..... 15
3. Gross income by principal crop and livestock commodities for 1983/84 through 1990/91 for Sindh..... 16
4. Gross income by principal crop and livestock commodities for 1983/84 through 1990/91 for NWFP..... 17
5. Gross income by principal crop and livestock commodities for 1983/84 through 1990/91 for Baluchistan 18
6. Indices of production, area, yield, nominal price, and real price for the principal crop commodities and milk for Pakistan in 1990/91..... 19

# PAKISTAN FARM INCOME

## Gross and Net Farm Income by Commodity 1983/84 through 1990/91

### Executive Summary

Milk, wheat, and cotton generated nearly 60% of the Rs 252 billion Pakistan gross farm income in 1990/91. Milk is the most important commodity and is becoming more dominate. In 1991/92 the gross income of milk was 26% of the gross farm income of Pakistan; in 1983/84 milk contributed 22% of the gross farm income. Cotton had the highest average annual growth in gross income for the 1983/84 through 1990/91 study period (18.6%). Other high average annual growth commodities were meat (17.6) and milk (15.6%). Milk was the most important commodity in all provinces for each of the eight years analyzed. Wheat and cotton were the dominate crop commodities in the generation of gross income.

Nine commodities were analyzed by provincial source of gross income. Punjab generates more gross income in all commodities except maize which is dominated by NWFP. Typically Sindh was the province that generated the second most gross income with the exceptions being maize and vegetables.

Sources of commodity gross income growth are area, yield, and price. Cotton production (area times yield) increased 222% between 1983/84 and 1990/91. Irri rice production declined 15% due to decreases in the area planted and basmati rice showed a decline in yield of 7% (but the area increase more than offset the yield decrease). Cotton yields have increased 168% over the eight years and the production of milk is up 75% during the period analyzed. The nominal (current rupee) price of all the principal commodities increased except cotton which is near the 1983/84 level. In terms of real prices, three commodities show prices below the 1983/84 level: cotton (61%), vegetables (76%), and milk (96%).

# **PAKISTAN FARM INCOME**

## **Gross and Net Farm Income by Commodity**

### **1983/84 through 1990/91**

#### **Introduction**

Commodity sources of gross farm income is the focus of this report. The commodities which contribute to the national and provincial gross farm income are identified, the importance and change in provincial shares of the principal commodities are reported, and the sources of change in a commodity's gross income are analyzed. The majority of the report is analyzed in current rupees although the impact of inflation on commodity price changes is described in the final section.

The companion report, "Pakistan Farm Income: Gross and Net Farm Income by Province 1983/84 through 1990/91", examines farm income in both nominal and real terms and by enterprise (crop vs livestock) for Pakistan and each of its four provinces. Additional statistical tables are available in the Economic Wing/MINFA publication entitled, "Pakistan Farm Income: Data Tables 1983/84 through 1990/91".

#### **Pakistan Gross Farm Income by Commodity**

Figure 1 and Table 1 show that the commodity which generates the most gross income is milk. Milk produces more rupees of gross farm income than any other crop or livestock commodity. Pakistan's growing population has increased the demand (and price) for milk making the commodity more profitable. Milk production is a means of increasing the income of small farmers with a fixed land base and milk generates income throughout the year. In 1983/84 the gross income of milk produced in Pakistan was nearly Rs 25 billion or more than 20% of the nation's gross farm income (GFI). Eight years later the gross income of milk production had increased to Rs 67 billion or more than 25% of the nation's GFI.

Cotton and wheat are the two most important crop commodities. In 1990/91 cotton, a kharif crop, contributed Rs 38 billion or 15% of the nation's gross farm income and wheat, cotton's companion rabi crop, produced Rs 39 billion, again about 15% of the nation's GFI. The proportional share of national GFI produced by milk, cotton, and wheat has stayed relatively constant over the eight years reported in this study.

Other commodities which contributed more than Rs 10 billion of GFI in 1990/91 include: meat (Rs 20 billion), fruit (Rs 19 billion), vegetables (Rs 17 billion), the combined production of irri and basmati rice (Rs 16 billion), and sugarcane (Rs 14 billion). The relative importance of the "big three" commodities relative to the others is shown in Figure 1.

Average annual commodity gross income growth over the eight years is led by cotton (18.6%), meat (17.6%) and milk (15.6%). As expected, substantial yearly variation is shown in the growth percentages. In 1988/89 meat grew nearly 50% and in the same year gross income from vegetables declined nearly 30% from the previous year.

### Provincial Gross Farm Income by Commodity

Although the national pattern of important commodities is reflected in the provinces, interesting provincial differences are present. Provincial variation in gross income growth is greater than that of the nation--an expected result.

**Punjab:** Cotton surpassed milk as the greatest generated of gross income in 1990/91, however, in 1983/84 it ranked third behind milk and wheat (Figure 2 and Table 2). These three commodities contributed 60% of Punjab's GFI in 1990/91, an increase of nearly 10% above that in 1983/84. Cotton showed the greatest average annual increase in gross income (26.2%) followed by meat with a 21.7% increase. The next highest commodity average annual increase was 13.8% by wheat. Gross income from meat increased 93% in 1988/89 compared to the previous year and wheat decreased gross income 22% in 1986/87 relative to 1985/86.

**Sindh:** As shown in Figure 3 and Table 3, the commodity contributing the most to GFI in Sindh is milk (Rs 18.6 billion in 1990/91). The gross income of milk production is two to three times the gross income of any other commodity. The two most important crops are wheat (Rs 6.7 billion in 1990/91) and rice (Rs 5.2 billion in 1990/91). In percentage terms, milk is 35% of the Sindh GFI in 1990/91 compared to 21% of Sindh GFI in 1983/84. The percentage of GFI generated by rice and wheat has stayed relatively constant at 10 to 13 percent over the eight years studied.

During the eight years analyzed, the commodities with the greatest average annual growth in Sindh GFI were from milk (17.4%) and sugarcane (16.7%). Over the study period the gross income of cotton production did not increase. Variation in single year growth in gross income was substantial; for example,

in 1986/87 vegetables showed a 42% decline and in 1989/90 they had a 62% increase.

**NWFP:** Figure 4 shows and Table 4 reports that Rs 12 billion (39%) of NWFP GFI was generated by milk in 1990/91. The importance of milk production has nearly doubled during the eight years between 1983/84 and 1990/91. Meat and wheat both provided about 11% of the GFI in 1990/91, a level unchanged since 1983/84.

The highest average annual growth rates were for the commodities milk (24.4%) and fruit (24.4%). Cotton had an average annual decline in gross income of nearly ten percent during the study years. Single year declines of more than 50% were realized in vegetables in 1984/85 and 1986/87. Fruit (1983/84) and vegetables (1988/89) had single year growth rates of greater than 50%.

**Baluchistan:** The commodity gross income generated between 1983/84 and 1990/91 in Baluchistan is shown in Figure 5 and reported in Table 5. In 1990/91 vegetables (23%), milk (21%), and fruit (19%) provided nearly two-thirds of the Rs 19.5 billion GFI generated. In the first year of the study (1983/84) the proportions were 36%, 8%, and 12% respectively, for vegetables, milk and fruit.

During the eight years analyzed, average annual gross income growth rates of more than 25% were achieved by milk (41%), fruit (33%), meat (29%), vegetables (27%), and maize (26%). All of the commodities had average annual growth rates of at least ten percent. Single year changes of more than 100% were recorded by maize, fruit and milk in 1988/89 and vegetables and meat in 1990/91.

## Commodity Gross Income

This section analyzes the sources and changes in gross income generated by the principal commodities produced in Pakistan. Basmati and irri rice are combined into "rice". Fruits and vegetables are two important aggregate commodities included in the analysis. The residual commodities analysis, other crops and other livestock, is not presented.

**Cotton:** The production of cotton is centered in Punjab with the residual being grown in Sindh (Figure 6). In 1983/84 Punjab produced 60% of Pakistan's cotton and this proportion has grown over the past eight years until the 1990/91 share was 88%. In 1990/91 Rs 33 billion of gross income was generated by cotton compared to only Rs 7 billion 1983/84.

**Wheat:** About two-thirds of the nation's wheat is grown in Punjab 17% in Sindh, 8% in NWFP, and 4% in Baluchistan (Figure 7). The nation's production of wheat has more than doubled since 1983/84 growing from Rs 18 billion to Rs 39 billion. The shares between the provinces has remained nearly constant over the eight years analyzed.

**Fruit:** The gross income from fruit in Pakistan has doubled in the last eight years increasing from Rs 8.7 billion in 1983/84 to Rs 18.7 billion in 1990/91 (Figure 8). The gross income from fruit has increased in all the provinces, however, proportionate shares from Punjab and Sindh have decreased while those of NWFP and Baluchistan have grown during the eight year study period. In 1990/91 Punjab produced 42%, Sindh 22%, NWFP 15% and Baluchistan 20%.

**Rice:** In Figure 9 rice is reported as the combined total of basmati and irri. Total rice production has increased 85% during the eight years increasing from Rs 8.5 billion in 1983/84 to Rs 15.7 billion in 1990/91. The proportionate shares have changed little during the eight years analyzed and in 1990/91 Punjab, Sindh, NWFP, and Baluchistan produced 55%, 33%, 3%, and 8%, respectively.

**Vegetables** Figure 10 shows the provincial distribution of the gross income from vegetable production between provinces by year. The gross income of vegetables has increased 65% during the eight years analyzed increasing from Rs 10 billion in 1983/84 to Rs 17 billion in 1990/91. Since 1984/85 Punjab has produced about half of the gross income from vegetables, about one-quarter from Baluchistan, and the residual equally divided between Sindh and NWFP.

**Sugarcane:** Sugarcane gross income by province is shown in Figure 11. In 1983/84 two-thirds of the gross income from sugarcane was produced in Punjab; in 1990/91 gross income from sugarcane production in Punjab was 54%. The share lost by Punjab has been gained by Sindh. Very little sugarcane is produced in Baluchistan and the share from NWFP has remained approximately 13 percent during the study period. The gross income from sugarcane has increased from Rs 7.9 billion in 1983/84 to Rs 13.9 billion in 1990/91, an increase of 75%.

**Maize:** The gross income from maize production has doubled during the eight years analyzed (Figure 12). About 40% of the gross income from maize is produced in Punjab and 60% in NWFP. Almost no maize is grown in Sindh and Baluchistan. In 1983/84 Rs 1.8 billion of maize was produced and in 1990/91 the gross income of maize production increased to Rs 3.4 billion.

**Milk:** As shown in Figure 13, the gross income from milk production in 1990/91 is more than 2.5 times the 1983/84 level.

**Basmati Rice:** Over the eight years the gross income generated by Pakistan basmati has increased 26%. The area of basmati production increased 36% while the yield declined 7%. The current rupee price of basmati increased 82% and the real basmati price is 12% above the price in 1983/84.

**Irri Rice:** The 1990/91 production of irri rice has declined 14% relative to 1983/84. This is due to a decline in area planted to irri accompanied with a small increase in the yield index. The 1990/91 nominal price of irri increased 76% and the real price 9% in relation to the base period.

**Maize:** The production of maize increased about 17% with both area and yield contributing to the increased production 1990/91. The nominal price index of maize increased to 166 and the real price index was flat at 102.

**Cotton:** Total bales of cotton produced in Pakistan increased 222% during the study period. The area index increased 20% but the yield index increased 168%. The nominal price of cotton in 1990/91 was 99% of the 1983/84 price. The real price of cotton has declined to 61% of the purchasing power of cotton in 1983/84. These changes taken together show cotton gross income per hectare in 1990/91 is nearly double that of 1983/84.

**Sugarcane:** Total production of sugarcane in 1990/91 is 5% greater than the 1983/84 production level. The hectares of sugarcane decreased less than 1.5% while the yield has increased 6.5%. The nominal price of sugarcane is 168% of the 1983/84 level, however, the real price has increased only 4%.

**Vegetables:** The production index for vegetables has increased one-third in the eight year study period. The area index has decline slightly (1.5%) but the yield index has increased 35%. The nominal price of vegetables has increased about one-fourth but the real price is only 76% of the 1983/84 level.

**Fruit:** The production of fruit in Pakistan has increased 30%, about equally split between area and yield index gains. The nominal price of fruit has increased 64% thus the real price is just above the 1983/84 level.

**Wheat:** The tons of wheat grown in 1990/91 was 34% greater than that grown in 1983/84. Yields increased 24% during the eight years and the area has expanded by 8%. The nominal price of wheat is 66% above the 1983/84 level or about 3% above the real price in 1983/84.

**Milk:** The volume of milk produced in Pakistan has increased 75% in the eight years since 1983/84. The current rupee price of milk is about 50% greater than the base year price and the real price level of milk is slightly below the price in 1983/84.

In 1983/84 the gross income generated by milk was Rs 24.5 billion; in 1990/91 the gross income was Rs 66.5 billion. During the study period the share of gross income generated by Punjab and decreased (from 60% to 48%) and each of the other provinces has enhanced their share of milk gross income.

**Meat:** The gross income from the production of meat by province and year is shown in Figure 14. The gross income from meat production has increased from Rs 6.7 billion in 1983/84 to Rs 19.6 billion in 1990/91; nearly a tripling of the gross income from meat in the eight years analyzed. The shares of gross income from meat from Punjab and Baluchistan have increased during the study period while those of Sindh and NWFP have declined. In 1990/91, the provincial shares were 52%, 18%, 17%, and 13% for Punjab, Sindh, NWFP, and Baluchistan, respectively.

### Analysis of Sources of Commodity Gross Income Changes

There are three sources of change in the gross income of a commodity: area, yield or production per unit, and price. For some commodities all three work in the same direction, for others one source may increase (decrease) while the other two decrease (increase). Table 6 presents indices reflecting the changes in area, yield, and price for the period 1983/84 to 1990/91 for nine principal Pakistan commodities. The indices presented are in terms of 1983/84 = 100. The price index is corrected for inflation with the 1983/84 GDP deflator = 100. Detail information by commodity by province is presented in an Economic Wing/MINFA publication entitled, "Pakistan Farm Income: Data Tables 1983/84 through 1990/91".

The Total Production Index column in Table 6 expresses the 1990/91 production of a commodity in terms of 1983/84. For example, basmati rice has a index value of 126 denoting that the production of basmati was 26% greater in 1990/91 compared to 1983/84. An Area Index that is greater than 100 shows that the hectares of the commodity grown in 1990/91 were greater than in the base period (1983/84). A Yield Index of less than 100 indicates that the production per hectare or yield was lower in 1990/91 than in 1983/84. The Area Index times the Yield Index will yield the Total Production Index in the same way that crop hectares times yield per hectare will yield total production. The Nominal Price Index reflects the price in 1990/91 vs the base period while the Real Price Index has inflation removed by adjusting the nominal index with the GDP deflator. The product of price times total production is the gross income of the commodity just as the price index times the total production index will generate an index of gross income.

Figure 1. Pakistan's Gross Farm Income by Crop and Livestock Commodities

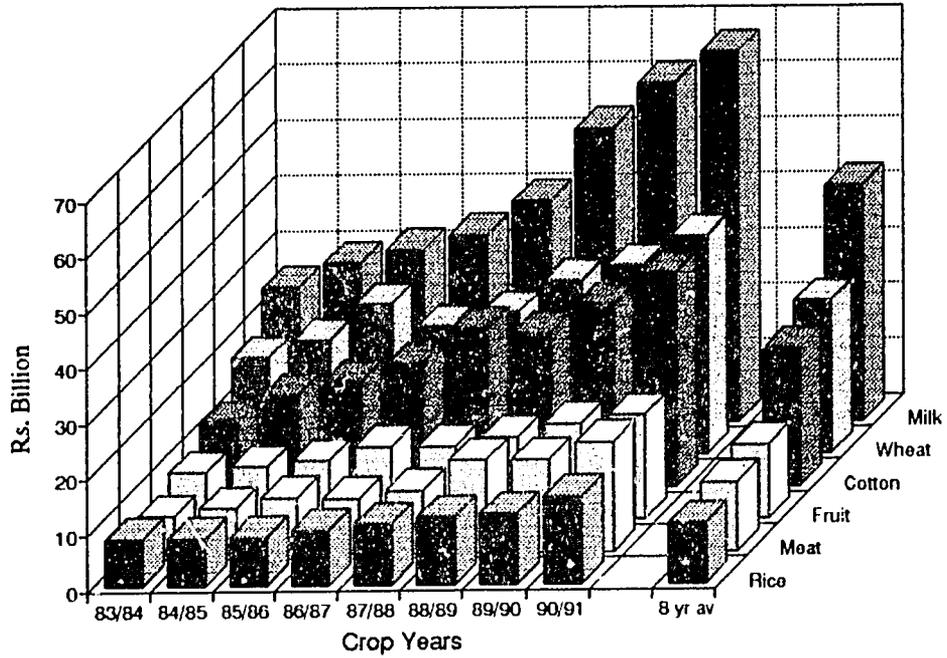


Figure 2. Punjab's Gross Farm Income by Crop and Livestock Commodities

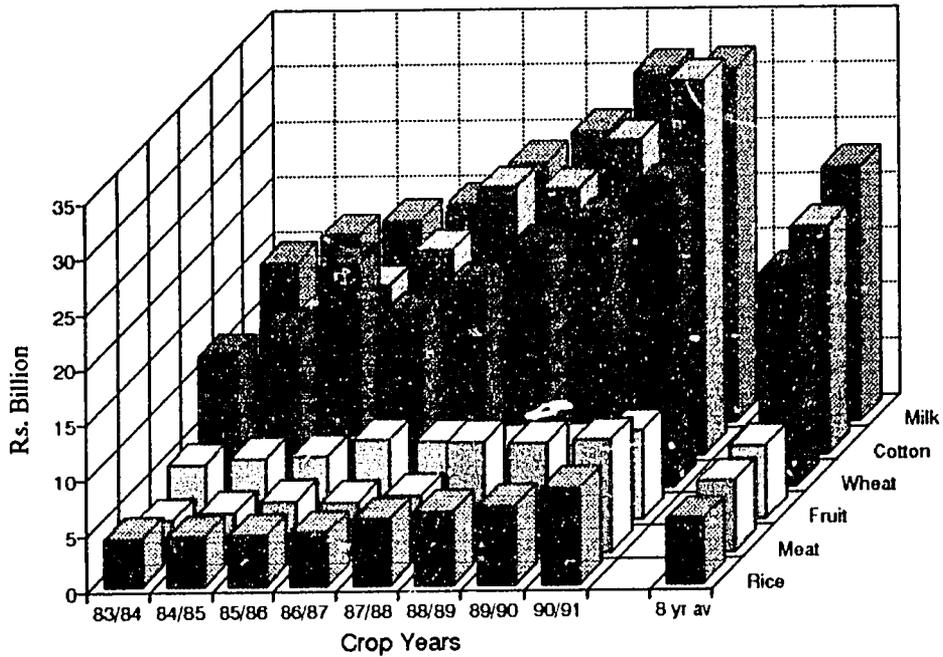


Figure 3. Sindh's Gross Farm Income by Crop and Livestock Commodities

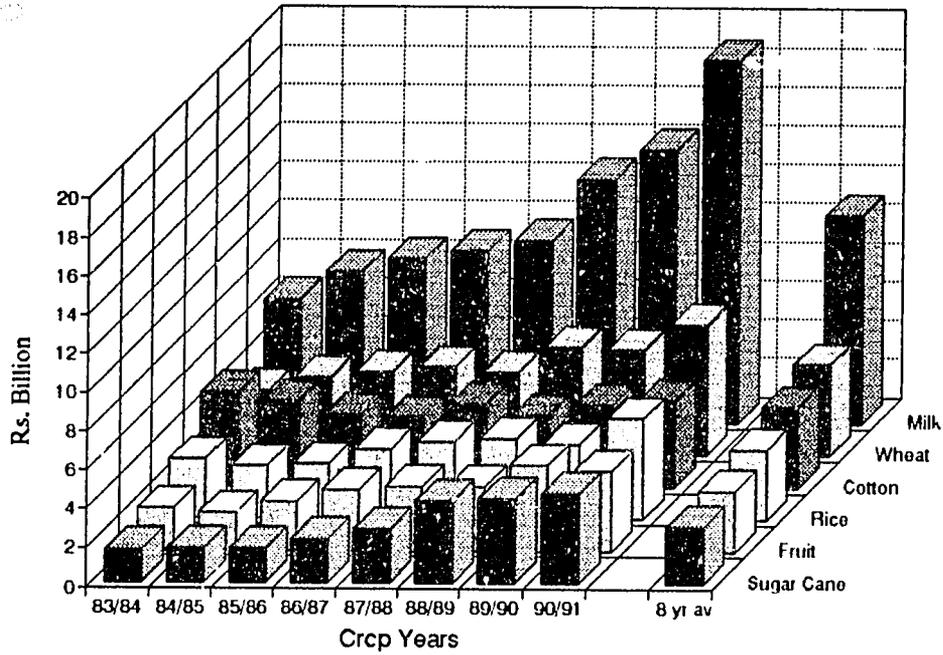


Figure 4. NWFP's Gross Farm Income by Crop and Livestock Commodities

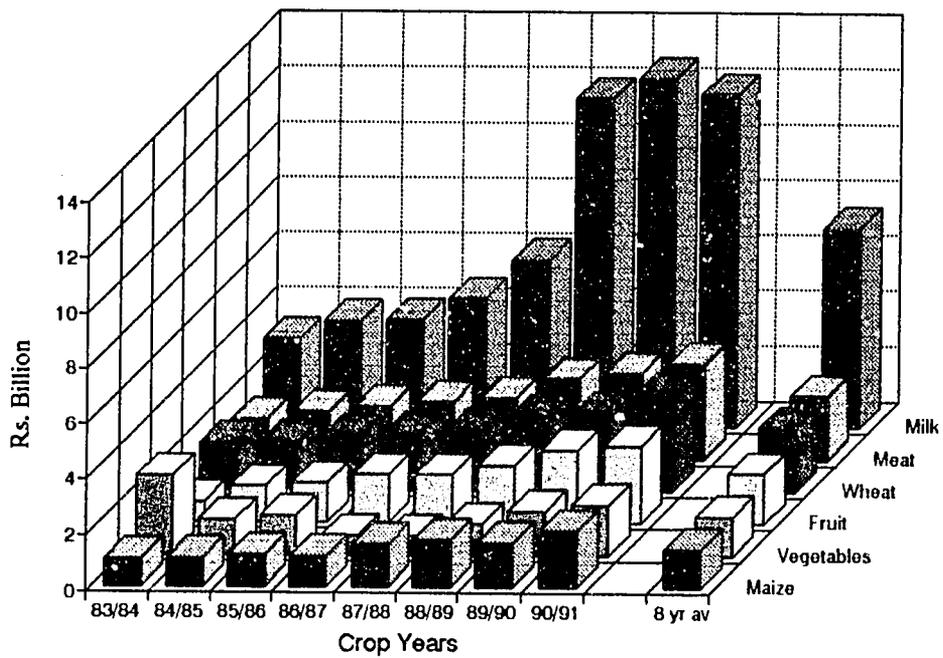


Figure 5. Baluchistan's GFI by Crop and Livestock Commodities

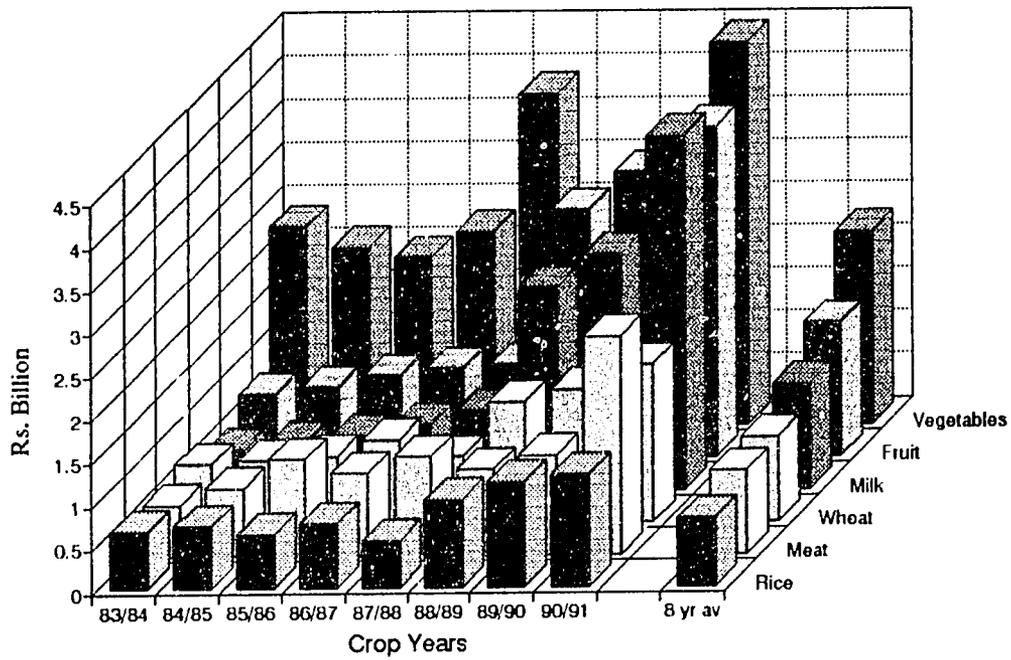


Figure 6. Pakistan's Gross Farm Income from Cotton by Province

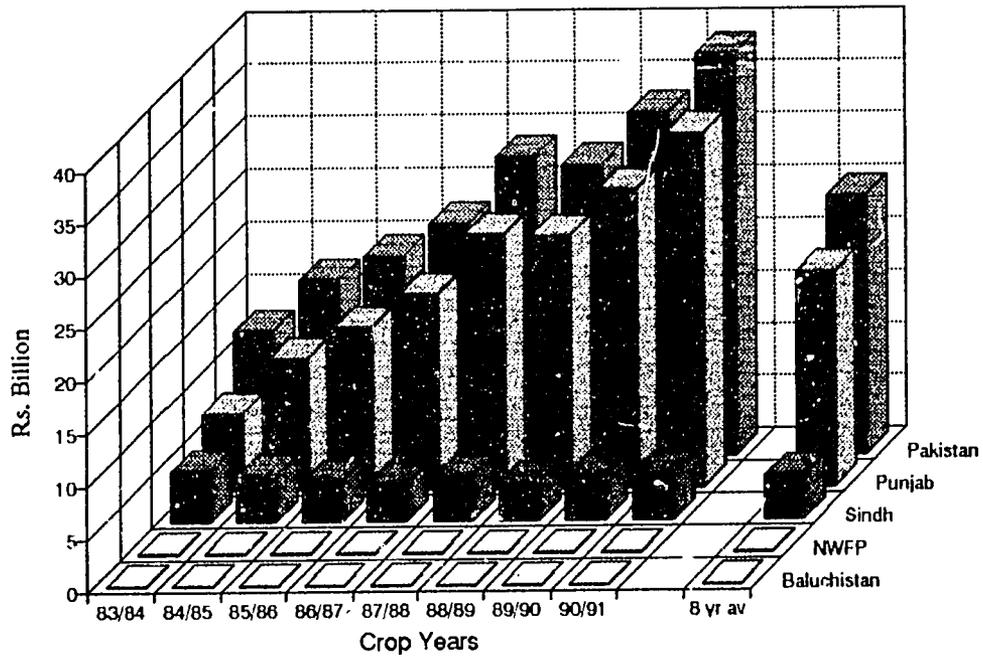


Figure 7. Pakistan's Gross Farm Income from Wheat by Province

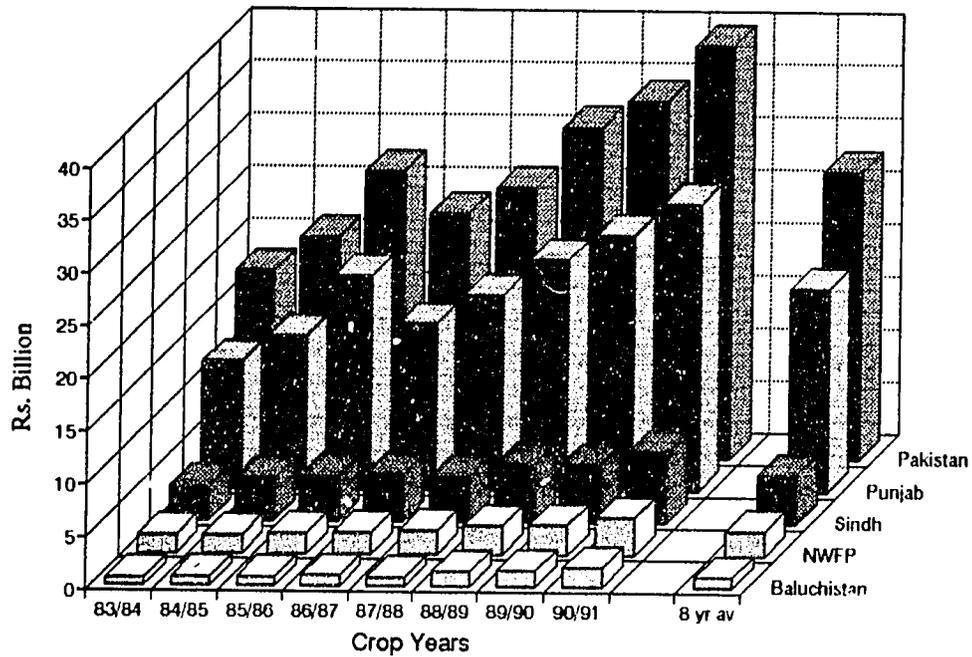


Figure 8. Pakistan's Gross Farm Income from Fruit by Province

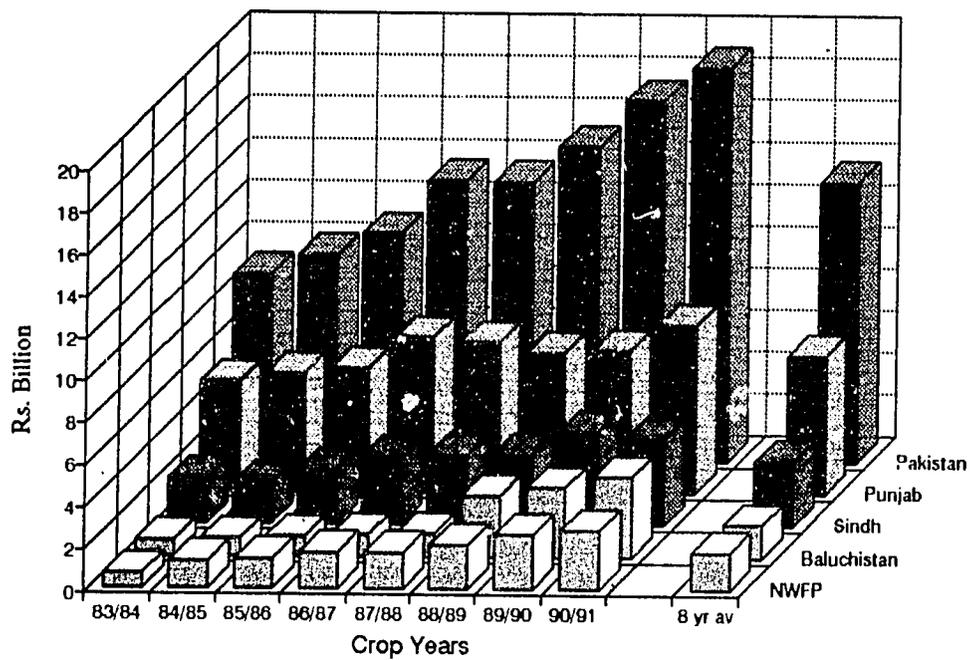


Figure 9. Pakistan's Gross Farm Income from Rice by Province

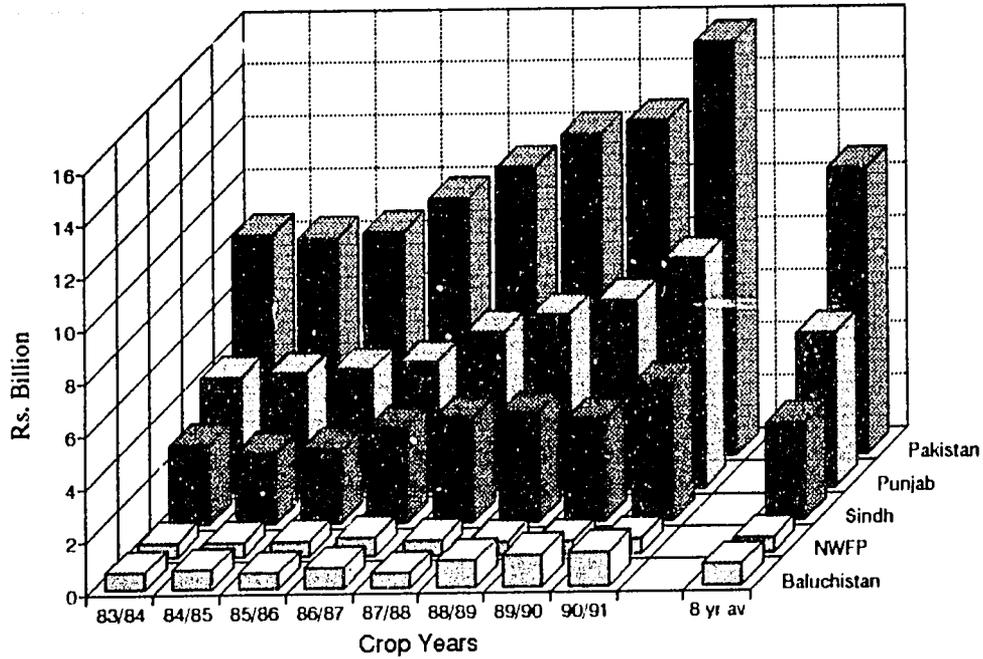


Figure 10. Pakistan's Gross Farm Income from Vegetables by Province

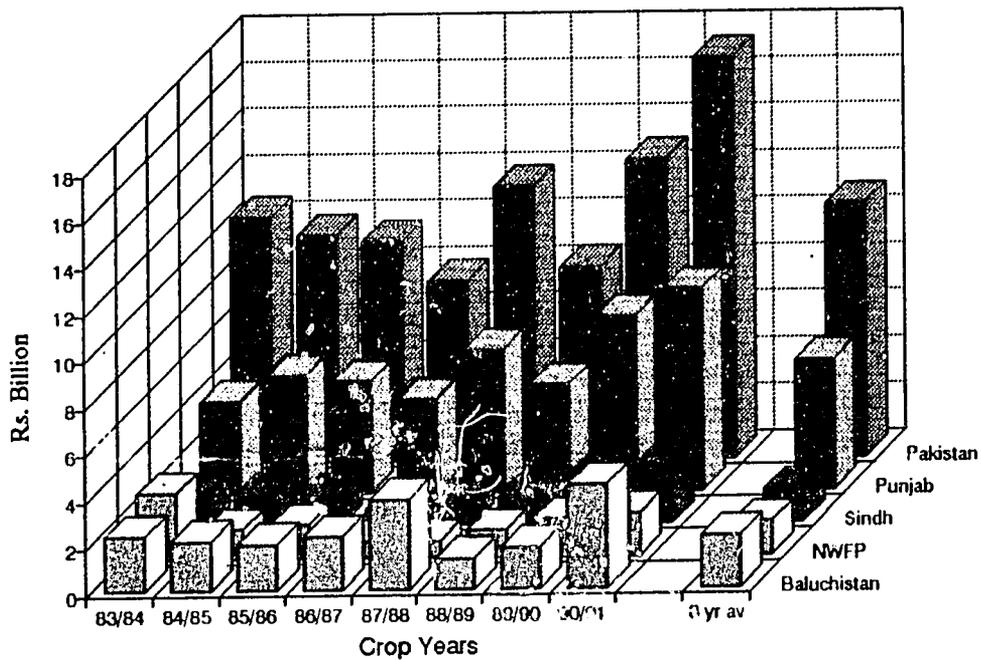


Figure 11. Pakistan's Gross Farm Income from Sugarcane by Province

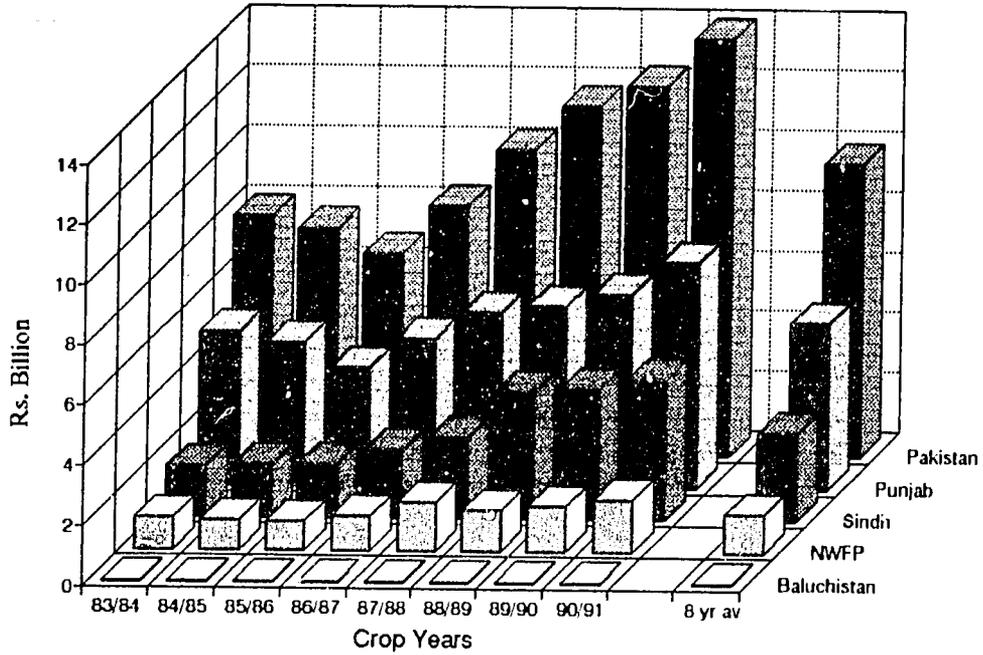


Figure 12. Pakistan's Gross Farm Income from Maize by Province

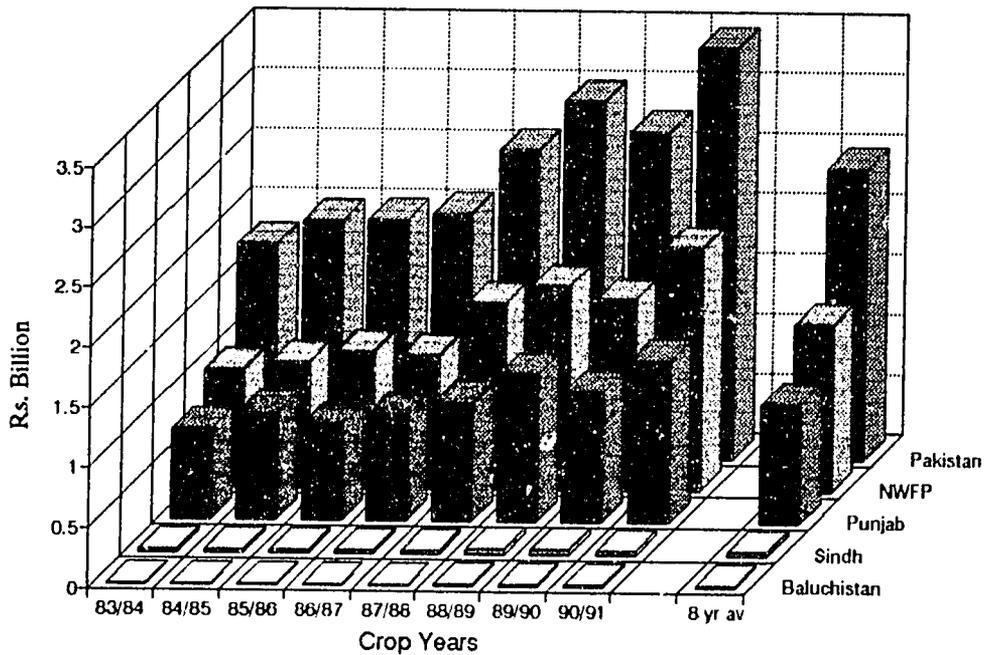


Figure 13. Pakistan's Gross Farm Income from Milk by Province

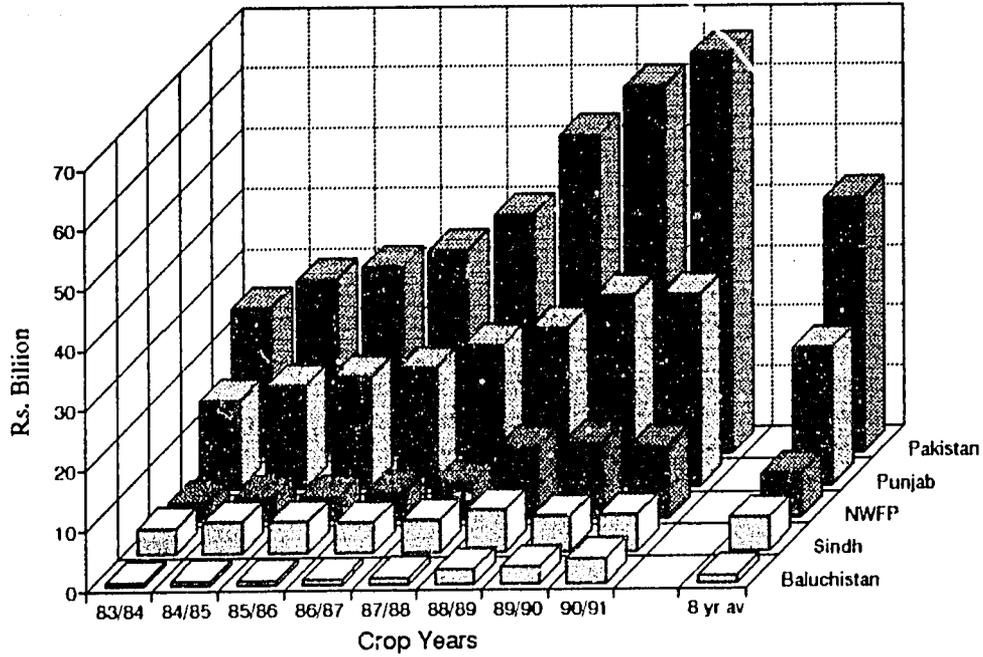


Figure 14. Pakistan's Gross Farm Income from Meat by Province

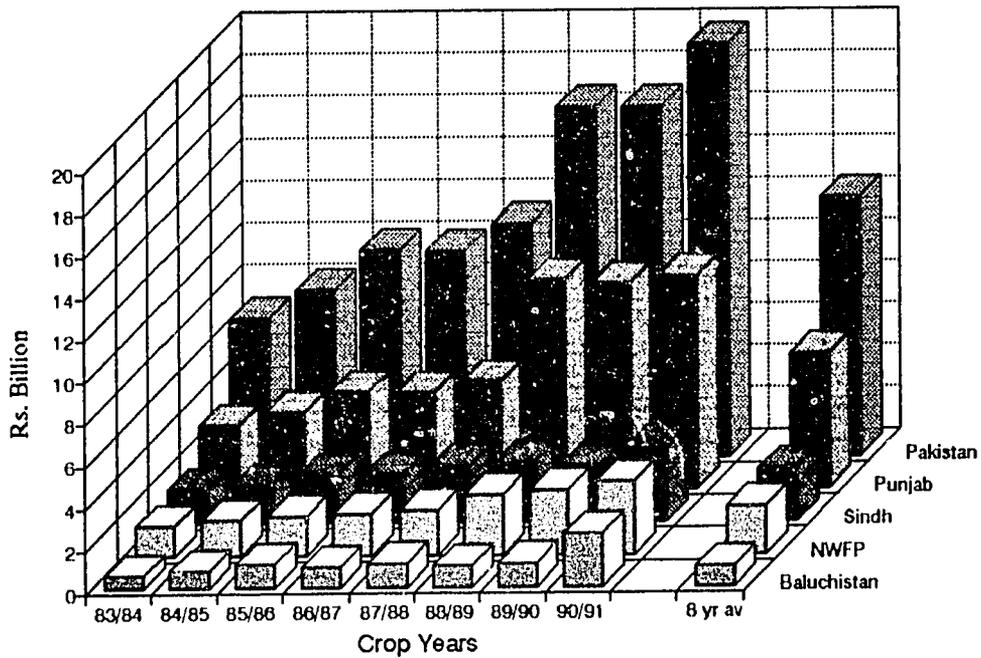


Table 1a. Gross income by principal crop and livestock commodities for 1983/84 through 1990/91 for Pakistan.

Commodity	1983-84	1984-85	1985-85	1986-87	1987-88	1988-89	1989-90	1990-91	8 Year Average
	-----Rs Billions-----								
Rice	8.500	8.350	8.560	9.838	10.991	12.213	12.708	15.711	11.196
Maize	1.759	1.955	1.963	2.016	2.558	2.970	2.713	3.414	2.513
Cotton	12.007	16.794	19.076	22.178	28.474	27.681	32.611	38.218	26.433
Sugarcane	7.878	7.456	6.647	8.270	10.105	11.572	12.254	13.869	10.025
Wheat	17.649	20.846	27.154	23.205	25.649	31.391	33.955	39.263	28.780
Vegetables	10.417	9.658	9.358	7.654	11.647	8.208	12.794	17.152	10.926
Fruit	8.772	9.704	10.738	13.256	13.207	14.907	17.111	18.721	13.949
Other Crops	6.916	10.643	9.234	8.672	9.035	12.173	10.203	9.432	9.913
Total Crops	73.897	85.405	92.740	95.089	111.666	121.113	134.349	155.780	113.734
Milk	24.520	29.083	31.245	33.928	39.836	52.927	60.986	66.539	44.935
Meat	6.677	7.987	9.895	9.837	11.142	16.636	16.671	19.625	13.113
Other LS	6.850	7.128	7.285	8.106	6.442	9.592	9.980	10.020	8.364
Total LS	38.046	44.198	48.425	51.871	57.419	79.154	87.637	96.184	66.413
Total Crop + LS	111.943	129.604	141.165	146.960	169.086	200.267	221.986	251.963	180.147

Table 1b. Percentage of previous year's gross income by principal crop and livestock commodities and average for 1983/84 through 1990/91 for Pakistan.

Commodity	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	8 Year Average
	-----%								
Rice	na	98.2	102.5	114.9	111.7	111.1	104.1	123.6	109.5
Maize	na	111.1	100.5	102.7	126.9	116.1	91.4	125.8	110.6
Cotton	na	139.9	113.6	116.3	128.4	97.2	117.8	117.2	118.6
Sugarcane	na	94.6	89.2	124.4	122.2	114.5	105.9	113.2	109.1
Wheat	na	118.1	130.3	85.5	110.5	122.4	108.2	115.6	112.9
Vegetables	na	92.7	97.0	81.7	152.2	70.5	155.9	134.1	112.0
Fruit	na	110.6	110.7	123.5	99.6	112.9	114.8	109.4	111.6
Other Crops	na	153.9	86.8	93.9	104.2	134.7	83.8	92.4	107.1
Total Crops	na	115.6	108.6	102.5	117.4	108.5	110.9	116.0	111.4
Milk	na	118.6	107.4	108.6	117.4	132.9	115.2	109.1	115.6
Meat	na	119.6	123.9	99.4	113.3	149.3	100.2	117.7	117.6
Other LS	na	104.1	102.2	111.3	79.5	148.9	104.0	100.4	107.2
Total LS	na	116.2	109.6	107.1	110.7	137.9	110.7	109.8	114.6
Total Crop + LS	na	115.8	108.9	104.1	115.1	118.4	110.8	113.5	112.4

Table 2a. Gross income by principal crop and livestock commodities for 1983/84 through 1990/91 for Punjab.

Commodity	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	8 Year
									Average
	Rs Billions								
Rice	4.317	4.463	4.598	4.843	5.954	6.620	7.161	8.678	6.045
Maize	0.751	0.887	0.796	0.879	0.984	1.221	1.074	1.350	1.027
Cotton	7.218	12.424	15.366	18.573	24.212	24.013	28.399	33.730	22.388
Sugarcane	5.095	4.746	3.934	4.887	5.772	6.009	6.425	7.485	5.608
Wheat	12.039	14.521	20.252	15.734	18.489	21.811	24.230	27.239	20.325
Vegetables	3.954	5.038	4.762	4.001	6.073	4.589	7.494	8.642	5.800
Fruit	5.197	5.625	5.861	7.337	7.136	6.640	6.772	7.991	6.766
Other Crops	4.097	5.138	5.056	4.913	5.264	6.968	5.855	5.929	5.589
Total Crop	42.567	52.841	60.624	61.167	73.884	77.870	87.409	101.044	73.548
Milk	14.611	16.998	18.379	19.816	23.558	26.295	31.671	31.858	24.082
Meat	3.082	3.722	4.656	4.612	5.163	9.945	9.818	10.168	6.869
Other LS	3.650	3.757	3.874	4.223	2.733	5.865	5.999	5.631	4.583
Total LS	21.343	24.476	26.909	28.651	31.454	42.105	47.488	47.657	35.534
Total Crop + LS	64.010	77.317	87.533	89.818	105.337	119.975	134.897	148.701	109.083

Table 2b. Percentage of previous year's gross income by principal crop and livestock commodities and average for 1983/84 through 1990/91 for Punjab.

Commodity	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	8 Year
									Average
	%								
Rice	na	103.4	103.0	105.3	122.9	111.2	108.2	121.2	110.7
Maize	na	118.1	89.7	110.5	111.9	124.2	87.9	125.7	109.7
Cotton	na	172.1	123.7	120.9	130.4	99.2	118.3	118.8	126.2
Sugarcane	na	93.2	82.9	124.2	118.1	104.1	106.9	116.5	106.6
Wheat	na	120.6	139.5	77.7	117.5	118.0	111.1	112.4	113.8
Vegetables	na	127.4	94.5	84.0	151.8	75.6	163.3	115.3	116.0
Fruit	na	108.2	104.2	125.2	97.3	93.0	102.0	118.0	106.8
Other Crops	na	125.4	98.4	97.2	107.1	132.4	84.0	101.3	106.5
Total Crop	na	123.8	114.7	100.9	120.8	105.4	112.2	115.6	113.4
Milk	na	116.3	108.1	107.8	118.9	111.6	120.4	100.6	112.0
Meat	na	120.8	125.1	99.1	111.9	192.6	98.7	103.6	121.7
Other LS	na	102.9	103.1	109.0	64.7	214.6	102.3	93.9	112.9
Total LS	na	114.7	109.9	106.5	109.8	133.9	112.8	100.4	112.6
Total Crop + LS	na	120.8	113.2	102.6	117.3	113.9	112.4	110.2	112.9

Table 3a. Gross income by principal crop and livestock commodities for 1983/84 through 1990/91 for Sindh.

Commodity	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	8 Year Average
	-----Rs Billions-----								
Rice	3.006	2.661	2.785	3.568	3.952	4.126	3.845	5.185	3.732
Maize	0.019	0.022	0.024	0.026	0.025	0.039	0.039	0.028	0.029
Cotton	4.776	4.359	3.699	3.593	4.251	3.660	4.204	4.480	4.035
Sugarcane	1.714	1.731	1.755	2.244	2.717	4.215	4.326	4.652	3.091
Wheat	3.260	3.916	4.199	4.468	4.209	5.512	5.406	6.673	4.912
Vegetables	1.328	1.329	1.276	0.735	1.044	1.188	1.927	2.256	1.393
Fruit	2.122	1.935	2.509	3.156	3.281	3.312	4.428	4.135	3.251
Other Crops	1.427	1.523	1.871	1.687	1.479	2.050	2.089	1.573	1.753
<b>Total Crops</b>	<b>17.653</b>	<b>17.476</b>	<b>18.117</b>	<b>19.476</b>	<b>20.959</b>	<b>24.101</b>	<b>26.263</b>	<b>28.982</b>	<b>22.196</b>
Milk	6.274	7.731	8.407	8.759	9.351	12.469	14.054	18.626	11.342
Meat	1.607	1.831	2.274	2.281	2.692	2.861	2.629	3.492	2.580
Other LS	1.467	1.520	1.555	1.706	1.363	1.720	1.799	2.115	1.682
<b>Total LS</b>	<b>9.347</b>	<b>11.082</b>	<b>12.236</b>	<b>12.746</b>	<b>13.406</b>	<b>17.049</b>	<b>18.482</b>	<b>24.233</b>	<b>15.605</b>
<b>Total Crop + LS</b>	<b>27.000</b>	<b>28.558</b>	<b>30.353</b>	<b>32.222</b>	<b>34.365</b>	<b>41.150</b>	<b>44.746</b>	<b>53.215</b>	<b>37.801</b>

Table 3b. Percentage of previous year's gross income by principal crop and livestock commodities and average for 1983/84 through 1990/91 for Sindh.

Commodity	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	8 Year Average
	-----%-----								
Rice	na	88.5	104.7	128.1	110.8	104.4	93.2	134.8	109.2
Maize	na	115.1	108.6	108.8	96.2	153.8	100.3	71.3	107.7
Cotton	na	91.3	84.9	97.1	118.3	86.1	114.9	106.6	99.9
Sugarcane	na	101.0	101.4	127.9	121.1	155.1	102.6	107.5	116.7
Wheat	na	120.1	107.2	106.4	94.2	130.9	98.1	123.4	111.5
Vegetables	na	100.0	96.0	57.6	142.2	113.7	162.2	117.1	112.7
Fruit	na	91.2	129.6	125.8	104.0	101.0	133.7	93.4	111.2
Other Crops	na	106.7	122.8	90.2	87.7	138.5	101.9	75.3	103.3
<b>Total Crops</b>	<b>na</b>	<b>99.0</b>	<b>103.7</b>	<b>107.5</b>	<b>107.6</b>	<b>115.0</b>	<b>109.0</b>	<b>110.4</b>	<b>107.4</b>
Milk	na	123.2	108.7	104.2	106.8	133.3	112.7	132.5	117.4
Meat	na	113.9	124.2	100.3	118.0	106.3	91.9	132.8	112.5
Other LS	na	103.6	102.3	109.7	79.9	126.2	104.6	117.6	106.3
<b>Total LS</b>	<b>na</b>	<b>118.6</b>	<b>110.4</b>	<b>104.2</b>	<b>105.2</b>	<b>127.2</b>	<b>108.4</b>	<b>131.1</b>	<b>115.0</b>
<b>Total Crop + LS</b>	<b>na</b>	<b>105.8</b>	<b>106.3</b>	<b>106.2</b>	<b>106.7</b>	<b>119.7</b>	<b>108.7</b>	<b>118.9</b>	<b>110.3</b>

Table 4a. Gross income by principal crop and livestock commodities for 1983/84 through 1990/91 for NWNP.

Commodity	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	8 Year Average
	-----Rs Billions-----								
Rice	0.523	0.504	0.565	0.684	0.543	0.457	0.482	0.543	0.539
Maize	0.984	1.039	1.137	1.103	1.541	1.692	1.589	2.019	1.446
Cotton	0.012	0.009	0.008	0.008	0.008	0.006	0.006	0.006	0.007
Sugarcane	1.062	0.973	0.955	1.133	1.608	1.341	1.494	1.722	1.318
Wheat	1.660	1.683	1.919	2.033	2.183	2.663	2.784	3.523	2.398
Vegetables	2.805	1.213	1.382	0.662	0.683	1.110	1.587	1.820	1.208
Fruit	0.699	1.317	1.406	1.724	1.708	2.081	2.606	2.780	1.946
Other Crops	1.107	3.703	1.961	1.792	2.002	2.575	1.706	1.338	2.154
Total Crop	8.851	10.439	9.331	9.137	10.277	11.924	12.254	13.750	11.016
Milk	3.141	3.782	3.820	4.591	6.002	11.818	12.532	11.962	7.787
Meat	1.391	1.650	1.855	1.986	2.146	2.840	3.067	3.437	2.426
Other LS	1.143	1.178	1.215	1.330	1.193	1.385	1.511	1.397	1.315
Total LS	5.675	6.610	6.890	7.907	9.340	16.044	17.111	16.797	11.528
Total Crop + LS	14.527	17.049	16.220	17.044	19.617	27.968	29.365	30.547	22.544

Table 4b. Percentage of previous year's gross income by principal crop and livestock commodities and average for 1983/84 through 1990/91 for Punjab.

Commodity	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	8 Year Average
	-----%-----								
Rice	na	96.4	112.1	121.1	79.4	84.0	105.5	112.6	101.6
Maize	na	105.6	109.4	97.0	139.7	109.8	93.9	127.1	111.8
Cotton	na	70.5	87.2	104.0	106.4	71.1	106.8	88.9	90.7
Sugarcane	na	91.6	98.2	118.6	142.0	83.4	111.5	115.2	108.6
Wheat	na	101.4	114.0	105.9	107.4	122.0	104.5	126.6	111.7
Vegetables	na	43.2	114.0	47.9	103.1	162.6	142.9	114.7	104.1
Fruit	na	188.6	106.7	122.6	99.1	121.8	125.3	106.7	124.4
Other Crops	na	334.5	53.0	91.4	111.7	128.6	66.2	78.4	123.4
Total Crop	na	117.9	89.4	97.9	112.5	116.0	102.8	112.2	107.0
Milk	na	120.4	101.0	120.2	130.7	196.9	106.0	95.5	124.4
Meat	na	118.6	112.4	107.1	108.0	132.4	108.0	112.1	114.1
Other LS	na	103.0	103.1	109.5	89.7	116.1	109.1	92.5	103.3
Total LS	na	116.5	104.2	114.8	118.1	171.8	106.7	98.2	118.6
Total Crop + LS	na	117.4	95.1	105.1	115.1	142.6	105.0	104.0	112.0

Table 5a. Gross income by principal crop and livestock commodities for 1983/84 through 1990/91 for Baluchistan.

Commodity	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	8 Year
									Average
-----Rs Billions-----									
Rice	0.654	0.722	0.613	0.744	0.542	1.010	1.220	1.306	0.880
Maize	0.005	0.007	0.007	0.008	0.008	0.018	0.012	0.018	0.011
Cotton	0.001	0.002	0.003	0.004	0.003	0.002	0.002	0.002	0.003
Sugarcane	0.007	0.007	0.004	0.007	0.008	0.008	0.008	0.009	0.007
Wheat	0.689	0.727	0.784	0.970	0.768	1.405	1.535	1.828	1.145
Vegetables	2.329	2.079	1.948	2.256	3.847	1.321	1.786	4.434	2.524
Fruit	0.755	0.826	0.962	1.040	1.082	2.874	3.305	3.816	1.986
Other Crops	0.285	0.279	0.346	0.280	0.290	0.579	0.554	0.592	0.417
Total Crops	4.726	4.649	4.668	5.308	6.547	7.217	8.422	12.004	6.974
Milk	0.494	0.572	0.639	0.762	0.926	2.345	2.729	4.093	1.724
Meat	0.597	0.785	1.111	0.957	1.141	0.990	1.156	2.527	1.238
Other LS	0.590	0.674	0.641	0.848	1.154	0.622	0.672	0.876	0.784
Total LS	1.681	2.031	2.391	2.567	3.220	3.957	4.557	7.497	3.746
Total Crop + LS	6.406	6.680	7.059	7.875	9.767	11.174	12.979	19.501	10.719

Table 5b. Percentage of previous year's gross income by principal crop and livestock commodities and average for 1983/84 through 1990/91 for Baluchistan.

Commodity	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	8 Year
									Average
-----%									
Rice	na	110.4	84.9	121.4	72.8	186.5	120.8	107.0	114.8
Maize	na	131.4	107.5	108.3	103.8	218.5	67.8	145.8	126.2
Cotton	na	184.6	137.5	109.1	83.3	53.3	106.2	117.6	113.1
Sugarcane	na	104.4	49.3	191.4	114.9	98.7	107.9	113.4	111.4
Wheat	na	105.4	107.9	123.7	79.1	183.1	109.2	119.1	118.2
Vegetables	na	89.3	93.7	115.8	170.5	34.3	135.2	248.2	126.7
Fruit	na	109.5	116.5	108.1	104.1	265.6	115.0	115.4	133.4
Other Crops	na	97.9	123.9	80.9	103.6	199.8	95.5	106.8	115.5
Total Crops	na	98.4	100.4	113.7	123.3	110.2	116.7	142.5	115.0
Milk	na	115.8	111.7	119.2	121.5	253.3	116.4	150.0	141.1
Meat	na	131.5	141.5	86.2	119.1	86.8	116.8	218.6	128.7
Other LS	na	114.3	95.1	132.2	136.1	53.9	107.9	130.5	110.0
Total LS	na	120.8	117.7	107.4	125.5	122.9	115.2	164.5	124.8
Total Crop + LS	na	104.3	105.7	111.6	124.0	114.4	116.2	150.3	118.0

Table 6. Pakistan Indices of Total Production, Area, Yield, Nominal Price, and Real Price for Principal Crop Enterprises and Milk for 1990/91.

Enterprise	Total Production Index	Area Index	Yield Index	Nominal Price Index	Real Price Index <sup>1</sup>
	----- 1983/84 = 100 -----				
Basmati Rice	126.4	135.7	93.2	181.6	112.2
Irrigated Rice	85.9	84.6	101.6	176.4	109.0
Maize	116.9	106.0	110.3	166.1	102.6
Cotton	321.6	119.9	268.2	99.0	61.2
Sugarcane	105.0	98.6	106.5	167.7	103.6
Vegetables	133.1	98.5	135.2	123.7	76.4
Fruit	130.0	115.2	112.8	164.2	101.5
Wheat	133.8	107.7	124.2	166.2	102.7
Milk	175.4	na	na	154.7	95.6

<sup>1</sup> 1983/84 GDP Deflator was used to compute real prices.

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# PAKISTAN FARM INCOME

## Data Tables

1983/84 through 1990/91



**Economic Wing Monograph No. 3**

**April 1993**

**Economic Wing**

**Ministry of Food, Agriculture and Co-operatives**

**Islamabad**

# PAKISTAN FARM INCOME

Data Tables

1983/84 through 1990/91

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## FOREWORD

Pakistan has an agricultural based economy and farm products are nearly one fourth of gross domestic products. It is, therefore, imperative to have reliable estimates of farm income on both provincial and national bases. Accordingly the Economic Wing has compiled farm income information and presents their work in a monograph series. The farm income estimates reflect agricultural production conditions, domestic and international prices, and government policies. In short, it is a measure of the nations agricultural economic health.

The farm income information and its analysis presented in this series provides a base to help planners, policy makers and researchers to evaluate and modify their policies. It will also assist in designing a rationale in making proper allocation of resources, identification of appropriate crop mixes in different regions and estimating impacts of alternative price mechanisms, subsidies, taxes and income transfer.

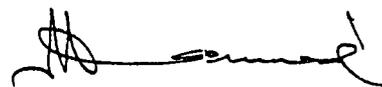
The Economic Wing has strived hard and put in its best efforts to collect, collate and analyze farm income data in a scientific manner. The results of this work are the following monographs.

- (1) PAKISTAN FARM INCOME, Gross and Net Farm Income by Province, 1983-84 through 1990-91. Monograph No. 1.
- (2) PAKISTAN FARM INCOME, Gross Farm Income Generated by Commodity, 1983-84 through 1990-91. Monograph No. 2.
- (3) PAKISTAN FARM INCOME, Data Tables, 1983-84 through 1990-91. Monograph No. 3.

The efforts made by M/S Aurangzeb Abbasi, Shabbir Ahmad Awan, Habib Ahmad and Salim Akhtar in compiling these series are commendable and are greatly acknowledged because without their untiring efforts it was not possible to accomplish this task. Thanks are also due to Dr. Donald W. Lybecker who by imparting technical knowledge and skills broaden the vision of the research staff. We must offer our thanks and gratitude to Dr. Richard J. McConnen for his cooperation and valuable advice rendered by him at every step without which it was not possible to accomplish this task. The computer graphics knowledge of Economic Wing intern Faiz M. Khan is noted and greatly appreciated. This study will remain

incomplete unless we acknowledge the keen interest taken by Dr. Zakir Hussain in enhancing the usefulness of the study.

Economic Wing being the technical arm of the Ministry of Food and Agriculture would continue its efforts to update these series and improve them further, in future.



( Dr. A. H. MAAN )  
Director General

## TABLE OF CONTENTS

Preface.....	ii
List of Tables.....	iii
Tables of Pakistan Gross and Net Farm Income.....	1
Tables of Commodity Gross Farm Income.....	21
Tables of Agricultural Productivity.....	34

## PREFACE

Three sets of tables are included in this publication. Tables 1-20 are in support of the analysis of Pakistan gross and net farm income by provincial and enterprise source (Crops and livestock) and the publication, "Pakistan Farm Income: Gross and Net Farm Income by Province 1983/84 through 1990/91." Some of the tables are presented in terms of current or nominal rupees, others are in terms of real rupees. When presented in terms of real rupees, the values are expressed in terms of 1980/81 rupees. Tables 21-33 provide additional data and analysis of the commodity analysis and the publication, "Pakistan Farm Income: Gross Farm Income Generated by Commodity 1983/84 through 1990/91." These tables and the two following tables are all expressed only in terms of current rupees. Tables 34 and 35 provide data and analysis of the sources of productivity of Pakistan agriculture. This information is discussed in the second publication, the one concerned with commodity gross income.

The data tables are printed separately to reduce the size of the parent publications and to consolidate the data and analysis tables in one source.

## LIST OF TABLES

Table 1.	Pakistan and Provincial Gross Farm Income in Current Rupees by Enterprise Origin.....	1
Table 2.	Percent Nominal GFI by Enterprise Source.....	2
Table 3.	Percent Nominal GFI by Provincial.....	3
Table 4.	Percentage Change from 1983/84 of Nominal GFI by Year and Enterprise.....	4
Table 5.	Percent Change from Previous Year of Nominal GFI by Enterprise.....	5
Table 6.	Pakistan and Provincial Net Farm Income in Current Rupees by Enterprise Origin.....	6
Table 7.	Percent Nominal NFI by Enterprise Source.....	7
Table 8.	Percent Nominal NFI by Provincial Source.....	8
Table 9.	Percentage Change from 1983/84 of Nominal NFI by Year and Enterprise.....	9
Table 10.	Percent Change from Previous Year of Nominal NFI by Enterprise.....	10
Table 11.	Pakistan and Provincial Gross Farm Income in 1980/81 Rupees by Enterprise.....	11
Table 12.	Percent Real GFI by Enterprise Source.....	12
Table 13.	Percent Real GFI by Provincial Source.....	13
Table 14.	Percentage Change from 1983/84 of Real GFI by Year and Enterprise.....	14
Table 15.	Percent Change from Previous Year of Real GFI by Enterprise.....	15
Table 16.	Pakistan and Provincial Net Farm Income in 1980/81 Rupees by Enterprise.....	16
Table 17.	Percent Real NFI by Enterprise Source.....	17
Table 18.	Percent Real NFI by Provincial Source.....	18
Table 19.	Percentage Change from 1983/84 of Real NFI by Year and Enterprise.....	19

# LIST OF TABLES

(CONTINUED)

Table 20.	Percent Change from Previous Year of Real NFI by Enterprise.....	20
Table 21.	Gross Income by Principal Crop and Livestock Commodities for 1983/84 through 1990/91 for Pakistan.....	21
Table 22.	Percentage of Previous Year's Gross Income by Principal Crop and Livestock Commodities and Average for 1983/84 through 1990/91 for Pakistan.....	22
Table 23.	Gross Income by Principal Crop and Livestock Commodities for 1983/84 through 1990/91 for Punjab.....	23
Table 24.	Percentage of Previous Year's Gross Income by Principal Crop and Livestock Commodities and Average for 1983/84 through 1990/91 for Punjab.....	24
Table 25.	Gross Income by Principal Crop and Livestock Commodities for 1983/84 through 1990/91 for Sindh.....	25
Table 26.	Percentage of Previous Year's Gross Income by Principal Crop and Livestock Commodities and Average for 1983/84 through 1990/91 for Sindh.....	26
Table 27.	Gross Income by Principal Crop and Livestock Commodities for 1983/84 through 1990/91 for NWFP.....	27
Table 28.	Percentage of Previous Year's Gross Income by Principal Crop and Livestock Commodities and Average for 1983/84 through 1990/91 for Punjab.....	28
Table 29.	Gross Income by Principal Crop and Livestock Commodities for 1983/84 through 1990/91 for Baluchistan.....	29
Table 30.	Percentage of Previous Year's Gross Income by Principal Crop and Livestock Commodities and Average for 1983/84 through 1990/91 for Baluchistan.....	30

## LIST OF TABLES

(CONTINUED)

Table 31.	Cotton, Wheat, and Fruit GFI by Province and Pakistan 1983/84 through 1990/91.....	31
Table 32.	Rice, Vegetables, and Sugarcane GFI by Province and Pakistan 1983/84 through 1990/91.	32
Table 33.	Maize, Milk, and Meat GFI by Province and Pakistan 1983/84 through 1990/91.....	33
Table 34.	Pakistan indices of total production, area, yield, nominal price, and real price for principal crop enterprises and milk for 1990/91.....	34
Table 35.	Provincial total production, area, yield, and price indices and percent of 1990/91 Pakistan production.....	35

Table 1. Pakistan and Provincial Gross Farm Income in Current Rupees by Enterprise Origin.

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	42.7	52.8	60.6	61.2	73.9	77.9	84.1	101.0	69.3
Livestock	21.3	24.5	26.9	28.7	31.5	42.1	48.0	47.7	33.8
Total	64.0	77.3	87.5	89.8	105.3	120.0	132.1	148.7	103.1
<b>SINDH</b>									
Crops	17.7	17.5	18.1	19.5	21.0	24.1	26.0	29.0	21.6
Livestock	9.3	11.1	12.2	12.7	13.4	17.0	18.4	24.2	14.8
Total	27.0	28.6	30.4	32.2	34.4	41.2	44.5	53.2	36.4
<b>NWFP</b>									
Crops	8.9	10.4	9.3	9.1	10.3	11.9	12.3	13.8	10.7
Livestock	5.7	6.6	6.9	7.9	9.3	16.0	16.6	16.8	10.7
Total	14.5	17.0	16.2	17.0	19.6	28.0	28.8	30.5	21.5
<b>BALUCHISTAN</b>									
Crops	4.7	4.6	4.7	5.3	6.5	7.2	8.4	12.0	6.7
Livestock	1.7	2.0	2.4	2.6	3.2	4.0	4.4	7.5	3.5
Total	6.4	6.7	7.1	7.9	9.8	11.2	12.8	19.5	10.2
<b>PAKISTAN</b>									
Crops	73.9	85.4	92.7	95.1	111.7	121.2	130.8	155.8	108.3
Livestock	38.0	44.2	48.4	51.9	57.4	79.2	87.4	96.2	62.8
Total	111.9	129.6	141.2	147.0	169.1	200.3	218.2	252.0	171.2

04-Feb-93

Table 2. Percent Nominal GFI by Enterprise Source.

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
PUNJAB									
Crops	66.7%	68.3%	69.3%	68.1%	70.1%	64.9%	63.7%	68.0%	67.4%
Livestock	33.3%	31.7%	30.7%	31.9%	29.9%	35.1%	36.3%	32.0%	32.6%
SINDH									
Crops	65.4%	61.2%	59.7%	60.4%	61.0%	58.6%	58.6%	54.5%	59.9%
Livestock	34.6%	38.8%	40.3%	39.6%	39.0%	41.4%	41.4%	45.5%	40.1%
NWFP									
Crops	60.9%	61.2%	57.5%	53.6%	52.4%	42.6%	42.5%	45.0%	52.0%
Livestock	39.1%	38.8%	42.5%	46.4%	47.6%	57.4%	57.5%	55.0%	48.0%
2 BALUCHISTAN									
Crops	73.8%	69.6%	66.1%	67.4%	67.0%	64.6%	65.6%	61.6%	67.0%
Livestock	26.2%	30.4%	33.9%	32.6%	33.0%	35.4%	34.4%	38.4%	33.0%
PAKISTAN									
Crops	66.0%	65.9%	65.7%	64.7%	66.0%	60.5%	59.9%	61.8%	63.8%
Livestock	34.0%	34.1%	34.3%	35.3%	34.0%	39.5%	40.1%	38.2%	36.2%

04-Feb-93

Table 3. Percent Nominal GFI by Provincial.

Province	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
PUNJAB	57.2%	59.7%	62.0%	61.1%	62.3%	59.9%	60.5%	59.0%	60.2%
SINDH	24.1%	22.0%	21.5%	21.9%	20.3%	20.6%	20.4%	21.1%	21.5%
NWFP	13.0%	13.2%	11.5%	11.6%	11.6%	14.0%	13.2%	12.1%	12.5%
BALUCHISTAN	5.7%	5.2%	5.0%	5.4%	5.8%	5.6%	5.9%	7.7%	5.8%

04-Feb-93

Table 4. Percentage Change from 1983/84 of Nominal GFI by Year and Enterprise.

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	na	23.8%	42.1%	43.4%	73.2%	82.5%	97.2%	136.8%	62.4%
Livestock	na	14.7%	26.1%	34.2%	47.4%	97.3%	125.0%	123.3%	58.5%
Total	na	20.8%	36.7%	40.3%	64.6%	87.4%	106.4%	132.3%	61.1%
<b>SINDH</b>									
Crops	na	-1.0%	2.6%	10.3%	18.7%	36.8%	47.6%	64.2%	22.4%
Livestock	na	18.6%	30.9%	36.4%	43.4%	82.4%	97.0%	159.3%	58.5%
Total	na	5.8%	12.4%	19.3%	27.3%	52.6%	64.7%	97.1%	34.9%
<b>NWFP</b>									
Crops	na	17.9%	5.4%	3.2%	16.1%	34.7%	38.4%	55.3%	21.4%
Livestock	na	16.5%	21.4%	39.3%	64.6%	182.7%	192.0%	196.0%	89.1%
Total	na	17.4%	11.7%	17.3%	35.0%	92.5%	98.4%	110.3%	47.8%
<b>BALUCHISTAN</b>									
Crops	na	-1.6%	-1.2%	12.3%	38.5%	52.7%	77.8%	154.0%	41.6%
Livestock	na	20.8%	42.2%	52.7%	91.6%	135.4%	162.1%	346.0%	106.3%
Total	na	4.3%	10.2%	22.9%	52.5%	74.4%	99.9%	204.4%	58.6%
<b>PAKISTAN</b>									
Crops	na	15.6%	25.5%	28.7%	51.1%	64.0%	77.0%	110.8%	46.6%
Livestock	na	16.2%	27.3%	36.3%	50.9%	108.0%	129.7%	152.8%	65.2%
Total	na	15.8%	26.1%	31.3%	51.0%	78.9%	94.9%	125.1%	52.9%

04-Feb-93

4

Table 5. Percent Change from Previous Year of Nominal GFI by Enterprise.

Province/Source	AVG	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	13.4%	23.8%	14.7%	0.9%	20.8%	5.4%	8.0%	20.1%	13.4%
Livestock	12.6%	14.7%	9.9%	6.5%	9.8%	33.9%	14.0%	-0.7%	12.6%
Total	12.9%	20.8%	13.2%	2.6%	17.3%	13.9%	10.1%	12.5%	12.9%
<b>SINDH</b>									
Crops	7.4%	-1.0%	3.7%	7.5%	7.6%	15.2%	7.9%	11.3%	7.4%
Livestock	15.0%	18.6%	10.4%	4.2%	5.2%	27.2%	8.0%	31.6%	15.0%
Total	10.3%	5.8%	6.3%	6.2%	6.7%	19.9%	7.9%	19.7%	10.3%
<b>NWFP</b>									
Crops	7.0%	17.9%	-10.6%	-2.1%	12.5%	16.0%	2.8%	12.2%	7.0%
Livestock	18.6%	16.5%	4.2%	14.8%	18.1%	71.8%	3.3%	1.4%	18.6%
Total	12.0%	17.4%	-4.9%	5.1%	15.1%	42.6%	3.1%	6.0%	12.0%
<b>BALUCHISTAN</b>									
Crops	15.1%	-1.6%	0.4%	13.7%	23.3%	10.2%	16.4%	42.9%	15.1%
Livestock	25.1%	20.8%	17.7%	7.4%	25.5%	22.9%	11.3%	70.2%	25.1%
Total	18.1%	4.3%	5.7%	11.6%	24.0%	14.4%	14.6%	52.3%	18.1%
<b>PAKISTAN</b>									
Crops	11.4%	15.6%	8.6%	2.5%	17.4%	8.5%	8.0%	19.1%	11.4%
Livestock	14.6%	16.2%	9.6%	7.1%	10.7%	37.9%	10.4%	10.0%	14.6%
Total	12.4%	15.8%	8.9%	4.1%	15.1%	18.5%	8.9%	15.5%	12.4%

04-Feb-93

Table 6. Pakistan and Provincial Net Farm Income in Current Rupees by Enterprise Origin.

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	18.0	25.6	29.8	27.6	37.1	31.5	33.4	42.2	30.7
Livestock	5.1	6.5	7.5	8.4	8.3	9.2	10.3	8.0	7.9
Total	23.2	32.1	37.3	36.0	45.4	40.6	43.7	50.9	38.6
<b>SINDH</b>									
Crops	9.0	8.6	8.8	9.1	9.5	12.3	13.1	14.8	10.6
Livestock	4.8	5.8	6.6	6.4	6.3	7.3	8.6	10.3	7.0
Total	13.7	14.4	15.3	15.5	15.8	19.6	21.7	25.1	17.6
<b>NWFP</b>									
Crops	6.0	7.5	6.1	5.7	6.5	7.5	7.4	8.3	6.9
Livestock	2.5	3.2	3.3	3.9	4.8	9.1	9.6	8.5	5.6
Total	8.5	10.6	9.4	9.6	11.4	16.6	17.0	16.8	12.5
<b>BALUCHISTAN</b>									
Crops	3.6	3.4	3.4	3.9	5.1	5.3	6.3	9.6	5.1
Livestock	0.6	0.8	1.1	1.1	1.5	2.1	2.2	3.9	1.7
Total	4.2	4.3	4.5	5.0	6.6	7.4	8.5	13.5	6.8
<b>PAKISTAN</b>									
Crops	36.6	45.1	48.2	46.2	58.2	56.6	60.2	75.6	53.3
Livestock	13.0	16.3	18.4	19.8	20.9	27.6	30.7	30.8	22.2
Total	49.6	61.3	66.5	66.0	79.1	84.3	90.9	106.4	75.5

04-Feb-93

Table 7. Percent Nominal NFI by Enterprise Source.

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	28.2%	33.1%	34.1%	30.7%	35.2%	26.3%	25.2%	28.8%	30.2%
Livestock	8.0%	8.4%	8.5%	9.3%	7.9%	7.6%	7.8%	5.4%	7.9%
<b>SINDH</b>									
Crops	33.2%	29.9%	28.9%	28.1%	27.7%	29.9%	29.5%	27.8%	29.4%
Livestock	17.6%	20.4%	21.7%	19.8%	18.2%	17.8%	19.3%	19.3%	19.3%
<b>NWFP</b>									
Crops	41.2%	43.7%	37.8%	33.3%	33.2%	26.8%	25.7%	27.2%	33.6%
Livestock	17.3%	18.7%	20.2%	23.1%	24.7%	32.6%	33.2%	27.9%	24.7%
<b>BALUCHISTAN</b>									
Crops	56.0%	51.4%	48.5%	49.7%	52.4%	47.7%	49.2%	49.3%	50.5%
Livestock	9.4%	12.6%	15.3%	14.0%	15.2%	18.4%	17.4%	20.2%	15.3%
<b>PAKISTAN</b>									
Crops	32.7%	34.8%	34.1%	31.5%	34.4%	28.3%	27.6%	30.0%	31.7%
Livestock	11.6%	12.6%	13.0%	13.5%	12.4%	13.8%	14.1%	12.2%	12.9%

04-Feb-93

Table 8. Percent Nominal NFI by Provincial Source.

Province	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
PUNJAB	20.7%	24.7%	26.4%	24.5%	26.8%	20.3%	20.0%	20.2%	23.0%
SINDH	12.3%	11.1%	10.9%	10.5%	9.3%	9.8%	10.0%	10.0%	10.5%
NWFP	7.6%	8.2%	6.7%	6.5%	6.7%	8.3%	7.8%	6.7%	7.3%
BALUCHISTAN	3.7%	3.3%	3.2%	3.4%	3.9%	3.7%	3.9%	5.4%	3.8%

04-Feb-93

Table 9. Percentage Change from 1983/84 of Nominal NFI by Year and Enterprise.

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	na	42.1%	65.5%	53.0%	105.8%	74.7%	85.1%	137.5%	70.5%
Livestock	na	26.1%	45.6%	63.3%	62.1%	78.6%	101.5%	57.0%	54.3%
Total	na	38.5%	61.1%	55.3%	96.1%	75.6%	88.7%	119.7%	66.9%
<b>SINDH</b>									
Crops	na	-4.5%	-2.2%	1.2%	6.1%	37.5%	46.6%	65.4%	18.8%
Livestock	na	22.0%	38.0%	34.1%	31.3%	53.8%	80.4%	116.1%	47.0%
Total	na	4.7%	11.8%	12.6%	14.9%	43.2%	58.3%	83.0%	28.6%
<b>NWFP</b>									
Crops	na	24.5%	2.4%	-5.3%	8.6%	25.1%	23.4%	38.9%	14.7%
Livestock	na	26.8%	30.5%	57.2%	92.9%	263.3%	281.6%	239.4%	124.0%
Total	na	25.1%	10.7%	13.2%	33.5%	95.4%	99.6%	98.1%	46.9%
<b>BALUCHISTAN</b>									
Crops	na	-4.3%	-4.6%	9.1%	42.7%	48.3%	75.4%	167.6%	41.8%
Livestock	na	39.6%	80.2%	83.9%	146.8%	241.7%	271.1%	554.5%	177.2%
Total	na	2.0%	7.5%	19.8%	57.6%	76.0%	103.5%	223.1%	61.2%
<b>PAKISTAN</b>									
Crops	na	23.2%	31.7%	26.5%	59.2%	54.9%	64.6%	106.6%	45.8%
Livestock	na	25.3%	41.5%	52.4%	60.7%	112.7%	136.4%	136.9%	70.7%
Total	na	23.8%	34.3%	33.3%	59.6%	70.0%	83.4%	114.6%	52.4%

04-Feb-93

Table 10. Percent Change from Previous Year of Nominal NFI by Enterprise.

Province/Source	AVG	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	14.9%	42.1%	16.5%	-7.5%	34.4%	-15.1%	5.9%	28.3%	14.9%
Livestock	7.7%	26.1%	15.5%	12.2%	-0.7%	10.2%	12.9%	-22.1%	7.7%
Total	13.0%	38.5%	16.3%	-3.6%	26.3%	-10.5%	7.5%	16.4%	13.0%
<b>SINDH</b>									
Crops	7.9%	-4.5%	2.5%	3.4%	4.9%	29.6%	6.6%	12.9%	7.9%
Livestock	12.1%	22.0%	13.1%	-2.8%	-2.1%	17.2%	17.2%	19.8%	12.1%
Total	9.3%	4.7%	6.8%	0.7%	2.0%	24.7%	10.6%	15.6%	9.3%
<b>NWFP</b>									
Crops	5.8%	24.5%	-17.7%	-7.5%	14.7%	15.1%	-1.3%	12.6%	5.8%
Livestock	22.2%	26.8%	2.9%	20.5%	22.7%	88.3%	5.0%	-11.0%	22.2%
Total	11.7%	25.1%	-11.6%	2.2%	18.0%	46.3%	2.2%	-0.8%	11.7%
<b>BALUCHISTAN</b>									
Crops	16.5%	-4.3%	-0.3%	14.4%	30.8%	3.9%	18.3%	52.6%	16.5%
Livestock	32.6%	39.6%	29.1%	2.0%	34.3%	38.4%	8.6%	76.4%	32.6%
Total	19.5%	2.0%	5.4%	11.4%	31.5%	11.7%	15.6%	58.8%	19.5%
<b>PAKISTAN</b>									
Crops	11.6%	23.2%	6.9%	-4.0%	25.9%	-2.7%	6.3%	25.6%	11.6%
Livestock	13.6%	25.3%	12.9%	7.7%	5.4%	32.4%	11.1%	0.2%	13.6%
Total	11.8%	23.8%	8.5%	-0.8%	19.8%	6.5%	7.9%	17.0%	11.8%

04-Feb-93

10

67

Table 11. Pakistan and Provincial Gross Farm Income in 1980/81 Rupees by Enterprise Origin.

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	33.8	40.0	44.5	42.9	47.3	45.9	46.6	49.5	43.8
Livestock	16.9	18.5	19.7	20.1	20.1	24.8	26.6	23.3	21.3
Total	50.7	58.6	64.2	63.0	67.4	70.7	73.2	72.8	65.1
<b>SINDH</b>									
Crops	14.0	13.2	13.3	13.7	13.4	14.2	14.4	14.2	13.8
Livestock	7.4	8.4	9.0	8.9	8.6	10.1	10.2	11.9	9.3
Total	21.4	21.6	22.3	22.6	22.0	24.3	24.6	26.0	23.1
<b>NWFP</b>									
Crops	7.0	7.9	6.8	6.4	6.6	7.0	6.8	6.7	6.9
Livestock	4.5	5.0	5.1	5.5	6.0	9.5	9.2	8.2	6.6
Total	11.5	12.9	11.9	12.0	12.6	16.5	16.0	15.0	13.5
<b>BALUCHISTAN</b>									
Crops	3.7	3.5	3.4	3.7	4.2	4.3	4.7	5.9	4.2
Livestock	1.3	1.5	1.8	1.8	2.1	2.3	2.4	3.7	2.1
Total	5.1	5.0	5.2	5.5	6.3	6.6	7.1	9.5	6.3
<b>PAKISTAN</b>									
Crops	58.5	64.7	68.0	66.7	71.5	71.4	72.4	76.2	68.7
Livestock	30.1	33.5	35.5	36.4	36.8	46.7	48.4	47.1	39.3
Total	88.7	98.2	103.5	103.1	108.3	118.1	120.9	123.3	108.0

04-Feb-93

Table 12. Percent Real GFI by Enterprise Source.

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	66.7%	68.3%	69.3%	68.1%	70.1%	64.9%	63.7%	68.0%	67.4%
Livestock	33.3%	31.7%	30.7%	31.9%	29.9%	35.1%	36.3%	32.0%	32.6%
<b>SINDH</b>									
Crops	65.4%	61.2%	59.7%	60.4%	61.0%	58.6%	58.6%	54.5%	59.9%
Livestock	34.6%	38.8%	40.3%	39.6%	39.0%	41.4%	41.4%	45.5%	40.1%
<b>NWFP</b>									
Crops	60.9%	61.2%	57.5%	53.6%	52.4%	42.6%	42.5%	45.0%	52.0%
Livestock	39.1%	38.8%	42.5%	46.4%	47.6%	57.4%	57.5%	55.0%	48.0%
<b>BALUCHISTAN</b>									
Crops	73.8%	69.6%	66.1%	67.4%	67.0%	64.6%	65.6%	61.6%	67.0%
Livestock	26.2%	30.4%	33.9%	32.6%	33.0%	35.4%	34.4%	38.4%	33.0%
<b>PAKISTAN</b>									
Crops	66.0%	65.9%	65.7%	64.7%	66.0%	60.5%	59.9%	61.8%	63.8%
Livestock	34.0%	34.1%	34.3%	35.3%	34.0%	39.5%	40.1%	38.2%	36.2%

04-Feb-93

Table 13. Percent Real GFI by Provincial Source.

Province	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
PUNJAB	57.2%	59.7%	62.0%	61.1%	62.3%	59.9%	60.5%	59.0%	60.2%
SINDH	24.1%	22.0%	21.5%	21.9%	20.3%	20.6%	20.4%	21.1%	21.5%
NWFP	13.0%	13.2%	11.5%	11.6%	11.6%	14.0%	13.2%	12.1%	12.5%
BALUCHISTAN	5.7%	5.2%	5.0%	5.4%	5.8%	5.6%	5.9%	7.7%	5.8%

04-Feb-93

Table 14. Percentage Change from 1983/84 of Real GFI by Year and Enterprise.

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	na	-6.2%	4.2%	0.6%	10.9%	7.6%	9.2%	15.9%	5.3%
Livestock	na	-13.1%	-7.5%	-5.8%	-5.6%	16.3%	24.6%	9.3%	2.3%
Total	na	-8.5%	0.3%	-1.5%	5.4%	10.5%	14.3%	13.7%	4.3%
<b>SINDH</b>									
Crops	na	-25.0%	-24.7%	-22.6%	-24.0%	-19.4%	-18.3%	-19.6%	-19.2%
Livestock	na	-10.2%	-4.0%	-4.3%	-8.2%	7.6%	9.1%	26.9%	2.1%
Total	na	-19.9%	-17.5%	-16.2%	-18.5%	-10.0%	-8.8%	-3.5%	-11.8%
<b>NWFP</b>									
Crops	na	-10.6%	-22.7%	-27.6%	-25.7%	-20.6%	-23.3%	-24.0%	-19.3%
Livestock	na	-11.8%	-11.0%	-2.2%	5.4%	66.7%	61.7%	44.9%	19.2%
Total	na	-11.1%	-18.1%	-17.7%	-13.5%	13.5%	9.9%	2.9%	-4.3%
<b>BALUCHISTAN</b>									
Crops	na	-25.5%	-27.5%	-21.2%	-11.3%	-10.0%	-1.6%	24.3%	-9.1%
Livestock	na	-8.5%	4.3%	7.2%	22.6%	38.8%	45.1%	118.3%	28.5%
Total	na	-21.0%	-19.2%	-13.7%	-2.4%	2.8%	10.7%	49.0%	0.8%
<b>PAKISTAN</b>									
Crops	na	-12.4%	-7.9%	-9.7%	-3.3%	-3.3%	-2.0%	3.2%	-4.4%
Livestock	na	-12.0%	-6.6%	-4.3%	-3.4%	22.7%	27.2%	23.7%	5.9%
Total	na	-12.3%	-7.5%	-7.9%	-3.3%	5.5%	8.0%	10.2%	-0.9%

04-Feb-93

Table 15. Percent Change from Previous Year of Real GFI by Enterprise.

Province/Source	AVG	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	5.9%	18.5%	11.1%	-3.5%	10.2%	-2.9%	1.5%	6.2%	5.9%
Livestock	5.2%	9.7%	6.4%	1.9%	0.2%	23.3%	7.1%	-12.3%	5.2%
Total	5.4%	15.5%	9.6%	-1.8%	7.0%	4.9%	3.4%	-0.5%	5.4%
<b>SINDH</b>									
Crops	0.3%	-5.3%	0.4%	2.8%	-1.8%	6.1%	1.3%	-1.7%	0.3%
Livestock	7.3%	13.4%	6.9%	-0.3%	-4.1%	17.1%	1.4%	16.3%	7.3%
Total	2.9%	1.2%	2.9%	1.6%	-2.7%	10.4%	1.4%	5.8%	2.9%
<b>NWFP</b>									
Crops	-0.3%	12.8%	-13.5%	-6.3%	2.6%	6.9%	-3.5%	-0.8%	-0.3%
Livestock	10.7%	11.4%	0.9%	9.8%	7.8%	58.2%	-3.0%	-10.4%	10.7%
Total	4.5%	12.3%	-7.9%	0.5%	5.0%	31.3%	-3.2%	-6.3%	4.5%
<b>BALUCHISTAN</b>									
Crops	7.1%	-5.9%	-2.8%	8.8%	12.5%	1.5%	9.3%	26.3%	7.1%
Livestock	16.4%	15.6%	14.0%	2.7%	14.4%	13.2%	4.6%	50.4%	16.4%
Total	9.9%	-0.3%	2.3%	6.7%	13.2%	5.4%	7.6%	34.6%	9.9%
<b>PAKISTAN</b>									
Crops	3.9%	10.6%	5.1%	-1.9%	7.1%	-0.1%	1.4%	5.2%	3.9%
Livestock	6.9%	11.1%	6.1%	2.5%	1.0%	27.0%	3.7%	-2.7%	6.9%
Total	4.9%	10.8%	5.5%	-0.4%	5.0%	9.1%	2.3%	2.0%	4.9%

04-Feb-93

15

Table 16. Pakistan and Provincial Net Farm Income in 1980/81 Rupees by Enterprise Origin.

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	14.3	19.4	21.9	19.4	23.7	18.6	18.5	21.0	19.6
Livestock	4.1	4.9	5.5	5.9	5.3	5.4	5.7	3.9	5.1
Total	18.3	24.3	27.4	25.2	29.1	24.0	24.2	24.9	24.7
<b>SINDH</b>									
Crops	7.1	6.5	6.4	6.4	6.1	7.3	7.3	7.3	6.8
Livestock	3.8	4.4	4.8	4.5	4.0	4.3	4.8	5.0	4.5
Total	10.9	10.9	11.3	10.8	10.1	11.6	12.0	12.3	11.2
<b>NWFP</b>									
Crops	4.7	5.7	4.5	4.0	4.2	4.4	4.1	4.1	4.5
Livestock	2.0	2.4	2.4	2.8	3.1	5.4	5.3	4.2	3.4
Total	6.7	8.1	6.9	6.8	7.3	9.8	9.4	8.2	7.9
<b>BALUCHISTAN</b>									
Crops	2.8	2.6	2.5	2.7	3.3	3.1	3.5	4.7	3.2
Livestock	0.5	0.6	0.8	0.8	0.9	1.2	1.2	1.9	1.0
Total	3.3	3.2	3.3	3.5	4.2	4.4	4.7	6.6	4.2
<b>PAKISTAN</b>									
Crops	29.0	34.1	35.3	32.5	37.3	33.4	33.3	37.0	34.0
Livestock	10.3	12.3	13.5	13.9	13.4	16.3	17.0	15.1	14.0
Total	39.3	46.5	48.8	46.4	50.7	49.7	50.3	52.1	48.0

04-Feb-93

Table 17. Percent Real NFI by Enterprise Source.

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	28.2%	33.1%	34.1%	30.7%	35.2%	26.3%	25.2%	28.8%	30.2%
Livestock	8.0%	8.4%	8.5%	9.3%	7.9%	7.6%	7.8%	5.4%	7.9%
<b>SINDH</b>									
Crops	33.2%	29.9%	28.9%	28.1%	27.7%	29.9%	29.5%	27.8%	29.4%
Livestock	17.6%	20.4%	21.7%	19.8%	18.2%	17.8%	19.3%	19.3%	19.3%
<b>NWFP</b>									
Crops	41.2%	43.7%	37.8%	33.3%	33.2%	26.8%	25.7%	27.2%	33.6%
Livestock	17.3%	18.7%	20.2%	23.1%	24.7%	32.6%	33.2%	27.9%	24.7%
<b>BALUCHISTAN</b>									
Crops	56.0%	51.4%	48.5%	49.7%	52.4%	47.7%	49.2%	49.3%	50.5%
Livestock	9.4%	12.6%	15.3%	14.0%	15.2%	18.4%	17.4%	20.2%	15.3%
<b>PAKISTAN</b>									
Crops	32.7%	34.8%	34.1%	31.5%	34.4%	28.3%	27.6%	30.0%	31.7%
Livestock	11.6%	12.6%	13.0%	13.5%	12.4%	13.8%	14.1%	12.2%	12.9%

04-Feb-93

Table 18. Percent Real NFI by Provincial Source.

Province	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
PUNJAB	20.7%	24.7%	26.4%	24.5%	26.8%	20.3%	20.0%	20.2%	23.0%
SINDH	12.3%	11.1%	10.9%	10.5%	9.3%	9.8%	10.0%	10.0%	10.5%
NWFP	7.6%	8.2%	6.7%	6.5%	6.7%	8.3%	7.8%	6.7%	7.3%
BALUCHISTAN	3.7%	3.3%	3.2%	3.4%	3.9%	3.7%	3.9%	5.4%	3.8%

04-Feb-93

Table 19. Percentage Change from 1983/84 of Real NFI by Year and Enterprise.

Province/Source	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	na	7.6%	21.4%	7.4%	31.7%	3.0%	2.5%	16.2%	11.2%
Livestock	na	-4.5%	6.8%	14.6%	3.8%	5.3%	11.6%	-23.2%	1.8%
Total	na	4.9%	18.1%	9.0%	25.5%	3.5%	4.5%	7.5%	9.1%
<b>SINDH</b>									
Crops	na	-27.7%	-28.2%	-29.0%	-32.0%	-18.9%	-18.8%	-19.0%	-21.7%
Livestock	na	-7.5%	1.2%	-5.9%	-16.0%	-9.3%	-0.1%	5.8%	-4.0%
Total	na	-20.7%	-18.0%	-21.0%	-26.5%	-15.6%	-12.3%	-10.4%	-15.6%
<b>NWFP</b>									
Crops	na	-5.7%	-24.9%	-33.5%	-30.4%	-26.2%	-31.7%	-32.0%	-23.1%
Livestock	na	-4.0%	-4.3%	10.3%	23.5%	114.2%	111.3%	66.1%	39.7%
Total	na	-5.2%	-18.8%	-20.6%	-14.5%	15.2%	10.5%	-3.0%	-4.6%
<b>BALUCHISTAN</b>									
Crops	na	-27.5%	-30.0%	-23.4%	-8.7%	-12.6%	-2.9%	31.0%	-9.3%
Livestock	na	5.8%	32.2%	29.0%	58.0%	101.5%	105.5%	220.3%	69.1%
Total	na	-22.7%	-21.1%	-15.9%	0.9%	3.8%	12.7%	58.1%	2.0%
<b>PAKISTAN</b>									
Crops	na	-6.7%	-3.4%	-11.3%	2.0%	-8.7%	-8.9%	1.1%	-4.5%
Livestock	na	-5.0%	3.8%	6.9%	2.9%	25.4%	30.9%	15.9%	10.1%
Total	na	-6.2%	-1.5%	-6.5%	2.2%	0.3%	1.6%	5.0%	-0.6%

04-Feb-93

Table 20. Percent Change from Previous Year of Real NFI by Enterprise.

Province/Source	AVG	84/85	85/86	86/87	87/88	88/89	89/90	90/91	Average
<b>PUNJAB</b>									
Crops	7.3%	35.9%	12.8%	-11.5%	22.7%	-21.8%	-0.5%	13.4%	7.3%
Livestock	0.9%	20.6%	11.8%	7.3%	-9.4%	1.5%	6.0%	-31.2%	0.9%
Total	5.5%	32.5%	12.6%	-7.7%	15.2%	-17.5%	1.0%	2.9%	5.5%
<b>SINDH</b>									
Crops	0.6%	-8.7%	-0.8%	-1.1%	-1.3%	19.3%	0.1%	-0.2%	0.6%
Livestock	4.6%	16.7%	9.5%	-7.0%	-10.7%	7.9%	10.1%	5.9%	4.6%
Total	2.0%	0.2%	3.4%	-3.6%	-6.9%	14.8%	3.9%	2.2%	2.0%
<b>NWFP</b>									
Crops	-1.4%	19.1%	-20.4%	-11.5%	4.7%	6.0%	-7.3%	-0.5%	-1.4%
Livestock	14.1%	21.3%	-0.3%	15.3%	12.0%	73.4%	-1.3%	-21.4%	14.1%
Total	4.2%	19.7%	-14.4%	-2.2%	7.7%	34.8%	-4.0%	-12.3%	4.2%
<b>BALUCHISTAN</b>									
Crops	8.4%	-8.5%	-3.5%	9.4%	19.3%	-4.3%	11.1%	34.9%	8.4%
Livestock	23.4%	33.5%	25.0%	-2.4%	22.5%	27.5%	2.0%	55.9%	23.4%
Total	11.1%	-2.4%	2.1%	6.6%	20.0%	2.9%	8.6%	40.4%	11.1%
<b>PAKISTAN</b>									
Crops	4.1%	17.9%	3.5%	-8.1%	14.9%	-10.4%	-0.2%	11.0%	4.1%
Livestock	6.2%	19.9%	9.3%	3.0%	-3.8%	21.9%	4.4%	-11.4%	6.2%
Total	4.4%	18.4%	5.0%	-5.0%	9.3%	-1.9%	1.3%	3.4%	4.4%

04-Feb-93

Table 21. Gross Income by Principal Crop and Livestock Commodities for 1983/84 through 1990/91 for Pakistan.

Commodity	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
-----Rs Billions-----									
Rice	8.500	8.350	8.560	9.838	10.991	12.213	12.708	15.711	11.196
Maize	1.759	1.955	1.963	2.016	2.558	2.970	2.713	3.414	2.513
Cotton	12.007	16.794	19.076	22.178	28.474	27.681	32.611	38.218	26.433
Sugarcane	7.878	7.456	6.647	8.270	10.105	11.572	12.254	13.869	10.025
Wheat	17.649	20.846	27.154	23.205	25.649	31.391	33.955	39.263	28.780
Vegetables	10.417	9.658	9.368	7.654	11.647	8.208	12.794	17.152	10.926
Fruit	8.772	9.704	10.738	13.256	13.207	14.907	17.111	18.721	13.949
Other Crops	6.916	10.643	9.234	8.672	9.035	12.173	10.203	9.432	9.913
<b>Total Crops</b>	<b>73.897</b>	<b>85.405</b>	<b>92.740</b>	<b>95.089</b>	<b>111.666</b>	<b>121.113</b>	<b>134.349</b>	<b>155.780</b>	<b>113.734</b>
Milk	24.520	29.083	31.245	33.928	39.836	52.927	60.986	66.539	44.935
Meat	6.677	7.987	9.895	9.837	11.142	16.636	16.671	19.625	13.113
Other LS	6.850	7.128	7.285	8.106	6.442	9.592	9.980	10.020	8.364
<b>Total LS</b>	<b>38.046</b>	<b>44.198</b>	<b>48.425</b>	<b>51.871</b>	<b>57.419</b>	<b>79.154</b>	<b>87.637</b>	<b>96.184</b>	<b>66.413</b>
<b>Total Crop+LS</b>	<b>111.943</b>	<b>129.604</b>	<b>141.165</b>	<b>146.960</b>	<b>169.086</b>	<b>200.267</b>	<b>221.986</b>	<b>251.963</b>	<b>180.147</b>

04-Feb-93

Table 22. Percentage of Previous Year's Gross Income by Principal Crop and Livestock Commodities and Average for 1983/84 through 1990/91 for Pakistan.

	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
	----- % -----								
Rice	na	98.2	102.5	114.9	111.7	111.1	104.1	123.6	109.5
Maize	na	111.1	100.5	102.7	126.9	116.1	91.4	125.8	110.6
Cotton	na	139.9	113.6	116.3	128.4	97.2	117.8	117.2	118.6
Sugarcane	na	94.6	89.2	124.4	122.2	114.5	105.9	113.2	109.1
Wheat	na	118.1	130.3	85.5	110.5	122.4	108.2	115.6	112.9
Vegetables	na	92.7	97.0	81.7	152.2	70.5	155.9	134.1	112.0
Fruit	na	110.6	110.7	123.5	99.6	112.9	114.8	109.4	111.6
Other Crops	na	153.9	86.8	93.9	104.2	134.7	73.8	92.4	107.1
<b>Total Crops</b>	na	115.6	108.6	102.5	117.4	108.5	110.9	116.0	111.4
Milk	na	118.6	107.4	108.6	117.4	132.9	115.2	109.1	115.6
Meat	na	119.6	123.9	99.4	113.3	149.3	100.2	117.7	117.6
Other LS	na	104.1	102.2	111.3	79.5	148.9	104.0	100.4	107.2
<b>Total LS</b>	na	115.2	109.6	107.1	110.7	137.9	110.7	109.8	114.6
<b>Total Crop+LS</b>	na	115.8	108.9	104.1	115.1	118.4	110.8	113.5	112.4

04-Feb-93

Table 23. Gross Income by Principal Crop and Livestock Commodities for 1983/84 through 1990/91 for Punjab.

Commodity	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
-----Rs Billions-----									
Rice	4.317	4.463	4.598	4.843	5.954	6.620	7.161	8.678	6.045
Maize	0.751	0.887	0.796	0.879	0.984	1.221	1.074	1.350	1.027
Cotton	7.218	12.424	15.366	18.573	24.212	24.013	28.399	33.730	22.388
Sugarcane	5.095	4.746	3.934	4.887	5.772	6.009	6.425	7.485	5.608
Wheat	12.039	14.521	20.252	15.734	18.489	21.811	24.230	27.239	20.325
Vegetables	3.954	5.038	4.762	4.001	6.073	4.589	7.494	8.642	5.800
Fruit	5.197	5.625	5.861	7.337	7.136	6.640	6.772	7.991	6.766
Other Crops	4.097	5.138	5.056	4.913	5.264	6.968	5.855	5.929	5.589
<b>TOTAL Crop</b>	<b>42.667</b>	<b>52.841</b>	<b>60.624</b>	<b>61.167</b>	<b>73.884</b>	<b>77.870</b>	<b>87.409</b>	<b>101.044</b>	<b>73.548</b>
Milk	14.611	16.998	18.379	19.816	23.558	26.295	31.671	31.858	24.082
Meat	3.082	3.722	4.656	4.612	5.163	9.945	9.818	10.168	6.869
Other LS	3.650	3.757	3.874	4.223	2.733	5.865	5.999	5.631	4.583
<b>Total LS</b>	<b>21.343</b>	<b>24.476</b>	<b>26.909</b>	<b>28.651</b>	<b>31.454</b>	<b>42.105</b>	<b>47.488</b>	<b>47.657</b>	<b>35.534</b>
<b>Total Crop+LS</b>	<b>64.010</b>	<b>77.317</b>	<b>87.533</b>	<b>89.818</b>	<b>105.337</b>	<b>119.975</b>	<b>134.897</b>	<b>148.701</b>	<b>109.083</b>

04-Feb-93

Table 24. Percentage of Pervious Year's Gross Income by Principal Crop and Livestock Commodities and Average for 1983/84 through 1990/91 for Punjab.

	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average	
	-----									
		----- % -----								
Rice	na	103.4	103.0	105.3	122.9	111.2	108.2	121.2	110.7	
Maize	na	118.1	89.7	110.5	111.9	124.2	87.9	125.7	109.7	
Cotton	na	172.1	123.7	120.9	130.4	99.2	118.3	118.8	126.2	
Sugarcane	na	93.2	82.9	124.2	118.1	104.1	106.9	116.5	106.6	
Wheat	na	120.6	139.5	77.7	117.5	118.0	111.1	112.4	113.8	
Vegetables	na	127.4	94.5	84.0	151.8	75.6	163.3	115.3	116.0	
Fruit	na	108.2	104.2	125.2	97.3	93.0	102.0	118.0	106.8	
Other Crops	na	125.4	98.4	97.2	107.1	132.4	84.0	101.3	106.5	
	-----									
TOTAL Crop	na	123.8	114.7	100.9	120.8	105.4	112.2	115.6	113.4	
	-----									
Milk	na	116.3	108.1	107.8	118.9	111.6	120.4	100.6	112.0	
Meat	na	120.8	125.1	99.1	111.9	192.6	98.7	103.6	121.7	
Other LS	na	102.9	103.1	109.0	64.7	214.6	102.3	93.9	112.9	
	-----									
Total LS	na	114.7	109.9	106.5	109.8	133.9	112.8	100.4	112.6	
	-----									
Total Crop+LS	na	120.8	113.2	102.6	117.3	113.9	112.4	110.2	112.9	
	=====									

04-Feb-93

Table 25. Gross Income by Principal Crop and Livestock Commodities for 1983/84 through 1990/91 for Sindh.

Commodity	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
	-----Rs Billions-----								
Rice	3.006	2.661	2.785	3.568	3.952	4.126	3.845	5.185	3.732
Maize	0.019	0.022	0.024	0.026	0.025	0.039	0.039	0.028	0.029
Cotton	4.776	4.359	3.699	3.593	4.251	3.660	4.204	4.480	4.035
Sugarcane	1.714	1.731	1.755	2.244	2.717	4.215	4.326	4.652	3.091
Wheat	3.260	3.916	4.199	4.468	4.209	5.512	5.406	6.673	4.912
Vegetables	1.328	1.329	1.276	0.735	1.044	1.188	1.927	2.256	1.393
Fruit	2.122	1.935	2.509	3.156	3.281	3.212	4.428	4.135	3.251
Other Crops	1.427	1.523	1.871	1.687	1.479	2.050	2.089	1.573	1.753
<b>Total Crops</b>	<b>17.653</b>	<b>17.476</b>	<b>18.117</b>	<b>19.476</b>	<b>20.959</b>	<b>24.101</b>	<b>26.263</b>	<b>28.982</b>	<b>22.196</b>
Milk	6.274	7.731	8.407	8.759	9.351	12.469	14.054	18.626	11.342
Meat	1.607	1.831	2.274	2.281	2.692	2.861	2.629	3.492	2.580
Other LS	1.467	1.520	1.555	1.706	1.363	1.720	1.799	2.115	1.682
<b>Total LS</b>	<b>9.347</b>	<b>11.082</b>	<b>12.236</b>	<b>12.746</b>	<b>13.406</b>	<b>17.049</b>	<b>18.482</b>	<b>24.233</b>	<b>15.605</b>
<b>Total Crop+LS</b>	<b>27.000</b>	<b>28.558</b>	<b>30.353</b>	<b>32.222</b>	<b>34.365</b>	<b>41.150</b>	<b>44.746</b>	<b>53.215</b>	<b>37.801</b>

04-Feb-93

Table 26. Percentage of Previous Year's Gross Income by Principal Crop and Livestock Commodities and Average for 1983/84 through 1990/91 for Sindh.

	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
	----- % -----								
Rice	na	88.5	104.7	128.1	110.8	104.4	93.2	134.8	109.2
Maize	na	115.1	108.6	108.8	96.2	153.8	100.3	71.3	107.7
Cotton	na	91.3	84.9	97.1	118.3	86.1	114.9	106.6	99.9
Sugarcane	na	101.0	101.4	127.9	121.1	155.1	102.6	107.5	116.7
Wheat	na	120.1	107.2	106.4	94.2	130.9	98.1	123.4	111.5
Vegetables	na	100.0	96.0	57.6	142.2	113.7	162.2	117.1	112.7
Fruit	na	91.2	129.6	125.8	104.0	101.0	133.7	93.4	111.2
Other Crops	na	106.7	122.8	90.2	87.7	138.5	101.9	75.3	103.3
<b>Total Crops</b>	na	99.0	103.7	107.5	107.6	115.0	109.0	110.4	107.4
Milk	na	123.2	108.7	104.2	106.8	133.3	112.7	132.5	117.4
Meat	na	113.9	124.2	100.3	118.0	106.3	91.9	132.8	112.5
Other LS	na	103.6	102.3	109.7	79.9	126.2	104.6	117.6	106.3
<b>Total LS</b>	na	118.6	110.4	104.2	105.2	127.2	108.4	131.1	115.0
<b>Total Crop+ LS</b>	na	105.8	106.3	106.2	106.7	119.7	108.7	118.9	110.3

04-Feb-93

Table 27. Gross Income by Principal Crop and Livestock Commodities for 1983/84 through 1990/91 for NWFP.

Commodity	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
	-----Rs Billions-----								
Rice	0.523	0.504	0.565	0.684	0.543	0.457	0.482	0.543	0.539
Maize	0.984	1.039	1.137	1.103	1.541	1.692	1.589	2.019	1.446
Cotton	0.012	0.009	0.008	0.008	0.008	0.006	0.006	0.006	0.007
Sugarcane	1.062	0.973	0.955	1.133	1.608	1.341	1.494	1.722	1.318
Wheat	1.660	1.683	1.919	2.033	2.183	2.663	2.784	3.523	2.398
Vegetables	2.805	1.213	1.382	0.662	0.683	1.110	1.587	1.820	1.208
Fruit	0.699	1.317	1.406	1.724	1.708	2.081	2.606	2.780	1.946
Other Crops	1.107	3.703	1.961	1.792	2.002	2.575	1.706	1.338	2.154
<b>Total Crop</b>	<b>8.851</b>	<b>10.439</b>	<b>9.331</b>	<b>9.137</b>	<b>10.277</b>	<b>11.924</b>	<b>12.254</b>	<b>13.750</b>	<b>11.016</b>
Milk	3.141	3.782	3.820	4.591	6.002	11.818	12.532	11.962	7.787
Meat	1.391	1.650	1.855	1.986	2.146	2.840	3.067	3.437	2.426
Other LS	1.143	1.178	1.215	1.330	1.193	1.385	1.511	1.397	1.315
<b>Total LS</b>	<b>5.675</b>	<b>6.610</b>	<b>6.890</b>	<b>7.907</b>	<b>9.340</b>	<b>16.044</b>	<b>17.111</b>	<b>16.797</b>	<b>11.528</b>
<b>Total Crop+LS</b>	<b>14.527</b>	<b>17.049</b>	<b>16.220</b>	<b>17.044</b>	<b>19.617</b>	<b>27.968</b>	<b>29.365</b>	<b>30.547</b>	<b>22.544</b>

04-Feb-93

Table 28. Percentage of Pervious Year's Gross Income by Principal Crop and Livestock Commodities and Average for 1983/84 through 1990/91 for Punjab.

	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
	----- % -----								
Rice	na	96.4	112.1	121.1	79.4	84.0	105.5	112.6	101.6
Maize	na	105.6	109.4	97.0	139.7	109.8	93.9	127.1	111.8
Cotton	na	70.5	87.2	104.0	106.4	71.1	106.8	88.9	90.7
Sugarcane	na	91.6	98.2	118.6	142.0	83.4	111.5	115.2	108.6
Wheat	na	101.4	114.0	105.9	107.4	122.0	104.5	126.6	111.7
Vegetables	na	43.2	114.0	47.9	103.1	162.6	142.9	114.7	104.1
Fruit	na	188.6	106.7	122.6	99.1	121.8	125.3	106.7	124.4
Other Crops	na	334.5	53.0	91.4	111.7	128.6	66.2	78.4	123.4
<b>Total Crop</b>	na	117.9	89.4	97.9	112.5	116.0	102.8	112.2	107.0
Milk	na	120.4	101.0	120.2	130.7	196.9	106.0	95.5	124.4
Meat	na	118.6	112.4	107.1	108.0	132.4	108.0	112.1	114.1
Other LS	na	103.0	103.1	109.5	89.7	116.1	109.1	92.5	103.3
<b>Total LS</b>	na	116.5	104.2	114.8	118.1	171.8	106.7	98.2	118.6
<b>Total Crop+LS</b>	na	117.4	95.1	105.1	115.1	142.6	105.0	104.0	112.0

04-Feb-93

Table 29. Gross Income by Principal Crop and Livestock Commodities for 1983/84 through 1990/91 for Baluchistan.

Commodity	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
	-----Rs Billions-----								
Rice	0.654	0.722	0.613	0.744	0.542	1.010	1.220	1.306	0.880
Maize	0.005	0.007	0.007	0.008	0.008	0.018	0.012	0.018	0.011
Cotton	0.001	0.002	0.003	0.004	0.003	0.002	0.002	0.002	0.003
Sugarcane	0.007	0.007	0.004	0.007	0.008	0.008	0.008	0.009	0.007
Wheat	0.689	0.727	0.784	0.970	0.768	1.405	1.535	1.828	1.145
Vegetables	2.329	2.079	1.948	2.256	3.847	1.321	1.786	4.434	2.524
Fruit	0.755	0.826	0.962	1.040	1.082	2.874	3.305	3.816	1.986
Other Crops	0.285	0.279	0.346	0.280	0.290	0.579	0.554	0.592	0.417
<b>Total Crops</b>	<b>4.726</b>	<b>4.649</b>	<b>4.668</b>	<b>5.308</b>	<b>6.547</b>	<b>7.217</b>	<b>8.422</b>	<b>12.004</b>	<b>6.974</b>
Milk	0.494	0.572	0.639	0.762	0.926	2.345	2.729	4.093	1.724
Meat	0.597	0.785	1.111	0.957	1.141	0.990	1.156	2.527	1.238
Other LS	0.590	0.674	0.641	0.848	1.154	0.622	0.672	0.876	0.784
<b>Total LS</b>	<b>1.681</b>	<b>2.031</b>	<b>2.391</b>	<b>2.567</b>	<b>3.220</b>	<b>3.957</b>	<b>4.557</b>	<b>7.497</b>	<b>3.746</b>
<b>Total Crop+LS</b>	<b>6.406</b>	<b>6.680</b>	<b>7.059</b>	<b>7.875</b>	<b>9.767</b>	<b>11.174</b>	<b>12.979</b>	<b>19.501</b>	<b>10.719</b>

04-Feb-93

Table 30. Percentage of Previous Year's Gross Income by Principal Crop and Livestock Commodities and Average for 1983/84 through 1990/91 for Baluchistan.

	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average	
	-----									
		----- % -----								
Rice	na	110.4	84.9	121.4	72.8	186.5	120.8	107.0	114.8	
Maize	na	131.4	107.5	108.3	103.8	218.5	67.8	145.8	126.2	
Cotton	na	184.6	137.5	109.1	83.3	53.3	106.2	117.6	113.1	
Sugarcane	na	104.4	49.3	191.4	114.9	98.7	107.9	113.4	111.4	
Wheat	na	105.4	107.9	123.7	79.1	183.1	109.2	119.1	118.2	
Vegetables	na	89.3	93.7	115.8	170.5	34.3	135.2	248.2	126.7	
Fruit	na	109.5	116.5	108.1	104.1	265.6	115.0	115.4	133.4	
Other Crops	na	97.9	123.9	80.9	103.6	199.8	95.5	106.8	115.5	
	-----									
Total Crops	na	98.4	100.4	113.7	123.3	110.2	116.7	142.5	115.0	
	-----									
Milk	na	115.8	111.7	119.2	121.5	253.3	116.4	150.0	141.1	
Meat	na	131.5	141.5	86.2	119.1	86.8	116.8	218.6	128.7	
Other LS	na	114.3	95.1	132.2	136.1	53.9	107.9	130.5	110.0	
	-----									
Total LS	na	120.8	117.7	107.4	125.5	122.9	115.2	164.5	124.8	
	-----									
Total Crop+ LS	na	104.3	105.7	111.6	124.0	114.4	116.2	150.3	118.0	
	=====									

04-Feb-93

Table 31. Cotton, Wheat, and Fruit GFI by Province and Pakistan 1983/84 through 1990/91.

COTTON									
	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
-----Rs Billions-----									
Punjab	7.218	12.424	15.366	18.573	24.212	24.013	28.399	33.730	20.492
Sindh	4.776	4.359	3.699	3.593	4.251	3.660	4.204	4.480	4.128
NWFP	0.012	0.009	0.008	0.008	0.008	0.006	0.006	0.006	0.008
Baluchistan	0.001	0.002	0.003	0.004	0.003	0.002	0.002	0.002	0.002
Pakistan	12.007	16.794	19.076	22.178	28.474	27.681	32.611	38.218	24.630
WHEAT									
	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
-----Rs Billions-----									
Punjab	12.039	14.521	20.252	15.734	18.489	21.811	24.230	27.239	19.289
Sindh	3.260	3.916	4.199	4.468	4.209	5.512	5.406	6.673	4.705
NWFP	1.660	1.683	1.919	2.033	2.183	2.663	2.784	3.523	2.306
Baluchistan	0.689	0.727	0.784	0.970	0.768	1.405	1.535	1.828	1.088
Pakistan	17.649	20.846	27.154	23.205	25.649	31.391	33.955	39.263	27.389
FRUIT									
	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
-----Rs Billions-----									
Punjab	5.197	5.625	5.861	7.337	7.136	6.640	6.772	7.991	6.570
Sindh	2.122	1.935	2.509	3.156	3.281	3.312	4.428	4.135	3.110
NWFP	0.699	1.317	1.406	1.724	1.708	2.081	2.606	2.780	1.790
Baluchistan	0.755	0.826	0.962	1.040	1.082	2.874	3.305	3.816	1.832
Pakistan	8.772	9.704	10.738	13.256	13.207	14.907	17.111	18.721	13.302

04-Feb-93

Table 32. Rice, Vegetables, and Sugarcane GFI by Province and Pakistan 1983/84 through 1990/91.

RICE	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
-----Rs Billions-----									
Punjab	4.317	4.463	4.598	4.843	5.954	6.620	7.161	8.678	5.829
Sindh	3.006	2.661	2.785	3.568	3.952	4.126	3.845	5.185	3.641
NWFP	0.523	0.504	0.565	0.684	0.543	0.457	0.482	0.543	0.537
Baluchistan	0.654	0.722	0.613	0.744	0.542	1.010	1.220	1.306	0.851
Pakistan	8.500	8.350	8.560	9.838	10.991	12.213	12.708	15.711	10.859
VEGETABLES	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
-----Rs Billions-----									
Punjab	3.954	5.038	4.762	4.001	6.073	4.589	7.494	8.642	5.569
Sindh	1.328	1.329	1.276	0.735	1.044	1.188	1.927	2.256	1.385
NWFP	2.805	1.213	1.382	0.662	0.683	1.110	1.587	1.820	1.408
Baluchistan	2.329	2.079	1.948	2.256	3.847	1.321	1.786	4.434	2.500
Pakistan	10.417	9.658	9.368	7.654	11.647	8.208	12.794	17.152	10.862
SUGARCANE	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
-----Rs Billions-----									
Punjab	5.095	4.746	3.934	4.887	5.772	6.009	6.425	7.485	5.544
Sindh	1.714	1.731	1.755	2.244	2.717	4.215	4.326	4.652	2.919
NWFP	1.062	0.973	0.955	1.133	1.608	1.341	1.494	1.722	1.286
Baluchistan	0.007	0.007	0.004	0.007	0.008	0.008	0.008	0.009	0.007
Pakistan	7.878	7.456	6.647	8.270	10.105	11.572	12.254	13.869	9.756

04-Feb-93

Table 33. Maize, Milk, and Meat GFI by Province and Pakistan 1983/84 through 1990/91.

MAIZE	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
-----Rs Billions-----									
Punjab	0.751	0.887	0.796	0.879	0.984	1.221	1.074	1.350	0.993
Sindh	0.019	0.022	0.024	0.026	0.025	0.039	0.039	0.028	0.028
NWFP	0.984	1.039	1.137	1.103	1.541	1.692	1.589	2.019	1.388
Baluchistan	0.005	0.007	0.007	0.008	0.008	0.018	0.012	0.018	0.010
Pakistan	1.759	1.955	1.963	2.016	2.558	2.970	2.713	3.414	2.418
MILK	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
-----Rs Billions-----									
Punjab	14.611	3.722	4.656	4.612	5.163	9.945	9.818	10.168	7.837
Sindh	6.274	1.831	2.274	2.281	2.692	2.861	2.629	3.492	3.042
NWFP	3.141	1.650	1.855	1.986	2.146	2.840	3.067	3.437	2.515
Baluchistan	0.494	0.572	0.639	0.762	0.926	2.345	2.729	4.093	1.570
Pakistan	24.520	7.775	9.424	9.641	10.927	17.991	18.244	21.191	14.964
MEAT	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	Average
-----Rs Billions-----									
Punjab	3.082	3.722	4.656	4.612	5.163	9.945	9.818	10.168	6.396
Sindh	1.607	1.831	2.274	2.281	2.692	2.861	2.629	3.492	2.458
NWFP	1.391	1.650	1.855	1.986	2.146	2.840	3.067	3.437	2.297
Baluchistan	0.597	0.785	1.111	0.957	1.141	0.990	1.156	2.527	1.158
Pakistan	6.677	7.987	9.895	9.837	11.142	16.636	16.671	19.625	12.309

04-Feb-93

Table 34. Pakistan indices of total production, area, yield, nominal price, and real price for principal crop enterprises and milk for 1990/91.

Enterprise	Total Production Index	Area Index	Yield Index	Nominal Price Index	Real Price Index*
	----- 1983/84 = 100 -----				
Basmati Rice	126.4	135.7	93.2	181.6	112.2
Irrigated Rice	85.9	84.6	101.6	176.4	109.0
Maize	116.9	106.0	110.3	166.1	102.6
Cotton	321.6	119.9	268.2	99.0	61.2
Sugarcane	105.0	98.6	106.5	167.7	103.6
Vegetables	133.1	98.5	135.2	123.7	76.4
Fruit	130.0	115.2	112.8	164.2	101.5
Wheat	133.8	107.7	124.2	166.2	102.7
Milk	175.4	na	na	154.7	95.6

\* 1983/84 GDP Deflator was used to compute real prices.

04-Feb-93

Table 35. Provincial total production, area, yield, and price indices and percent of 1990/91 Pakistan production.

Enter- prise	Province	-----1983/84 = 100-----					Percent Pakistan 1990/91 Prod'n
		Total Prod'n Index	Area Index	Yield Index	Price Index	Real Price Index	
Basmati Rice	Punjab	125.1	135.4	92.4	185.4	114.6	95.0%
	Sindh	na	na	na	na	na	na
	NWFP	127.5	96.3	132.4	77.4	47.8	2.2%
	Baluchistan	187.9	232.1	80.9	290.8	179.7	2.9%
Irri Rice	Punjab	54.5	59.5	91.6	173.7	107.3	12.9%
	Sindh	96.9	94.2	102.9	177.9	110.0	70.2%
	NWFP	96.3	84.0	114.7	111.6	69.0	4.5%
	Baluchistan	79.5	89.6	88.8	203.9	126.0	12.3%
Maize	Punjab	94.4	95.1	99.3	190.2	117.6	35.9%
	Sindh	98.0	103.2	95.0	146.7	90.7	0.8%
	NWFP	135.3	114.2	118.5	151.7	93.7	63.0%
	Baluchistan	150.0	140.6	106.7	228.8	141.4	0.4%
Cotton	Punjab	487.3	136.0	358.4	95.9	59.3	88.3%
	Sindh	96.3	81.9	110.3	103.9	64.2	11.7%
	NWFP	46.7	32.0	145.8	98.4	60.8	0.0%
	Baluchistan	100.0	100.0	100.0	153.8	95.1	0.0%
Sugar- cane	Punjab	86.0	85.6	100.4	170.9	105.6	54.6%
	Sindh	160.6	142.8	112.5	169.0	104.4	32.8%
	NWFP	111.1	99.9	111.2	145.9	90.2	12.5%
	Baluchistan	81.4	62.5	130.2	168.1	103.9	0.1%

04-Feb-93

Table 35. Provincial total production, area, yield, and price indices and percent of 1990/91 Pakistan production (Continued).

Enter- prise	Province	-----1983/84 = 100-----					Percent Pakistan 1990/91 Prod'n
		Total Prod'n Index	Area Index	Yield Index	Price Index	Real Price Index	
Vege- tables	Punjab	153.3	101.5	151.0	142.5	88.1	56.8%
	Sindh	122.3	108.3	113.0	138.8	85.8	12.4%
	NWFP	78.4	47.4	165.3	82.7	51.1	13.8%
	Baluchistan	164.5	147.8	111.3	115.7	71.5	17.0%
Fruit	Punjab	114.5	107.5	106.5	134.3	83.0	65.6%
	Sindh	121.8	122.9	99.1	160.0	98.9	15.9%
	NWFP	174.7	118.9	146.9	227.8	140.8	7.7%
	Baluchistan	500.7	194.2	257.9	101.0	62.4	10.8%
Wheat	Punjab	137.9	108.8	126.7	164.0	101.4	72.2%
	Sindh	116.9	104.2	112.1	175.1	108.2	15.6%
	NWFP	133.6	105.9	126.1	158.9	98.2	7.9%
	Baluchistan	138.5	105.3	131.6	191.4	118.3	4.3%
Milk	Punjab	154.5	na	154.5	141.1	87.2	59.0%
	Sindh	182.8	na	182.8	162.4	100.3	21.5%
	NWFP	251.6	na	251.6	151.4	93.5	15.4%
	Baluchistan	431.6	na	431.6	191.9	118.6	4.1%

04-Feb-93