1-1-1979

A geographical analysis of cropland productivity in Bangladesh.

Borhan Uddin
University of Windsor

A GEOGRAPHICAL ANALYSIS OF CROPLAND PRODUCTIVITY IN BANGLADESH

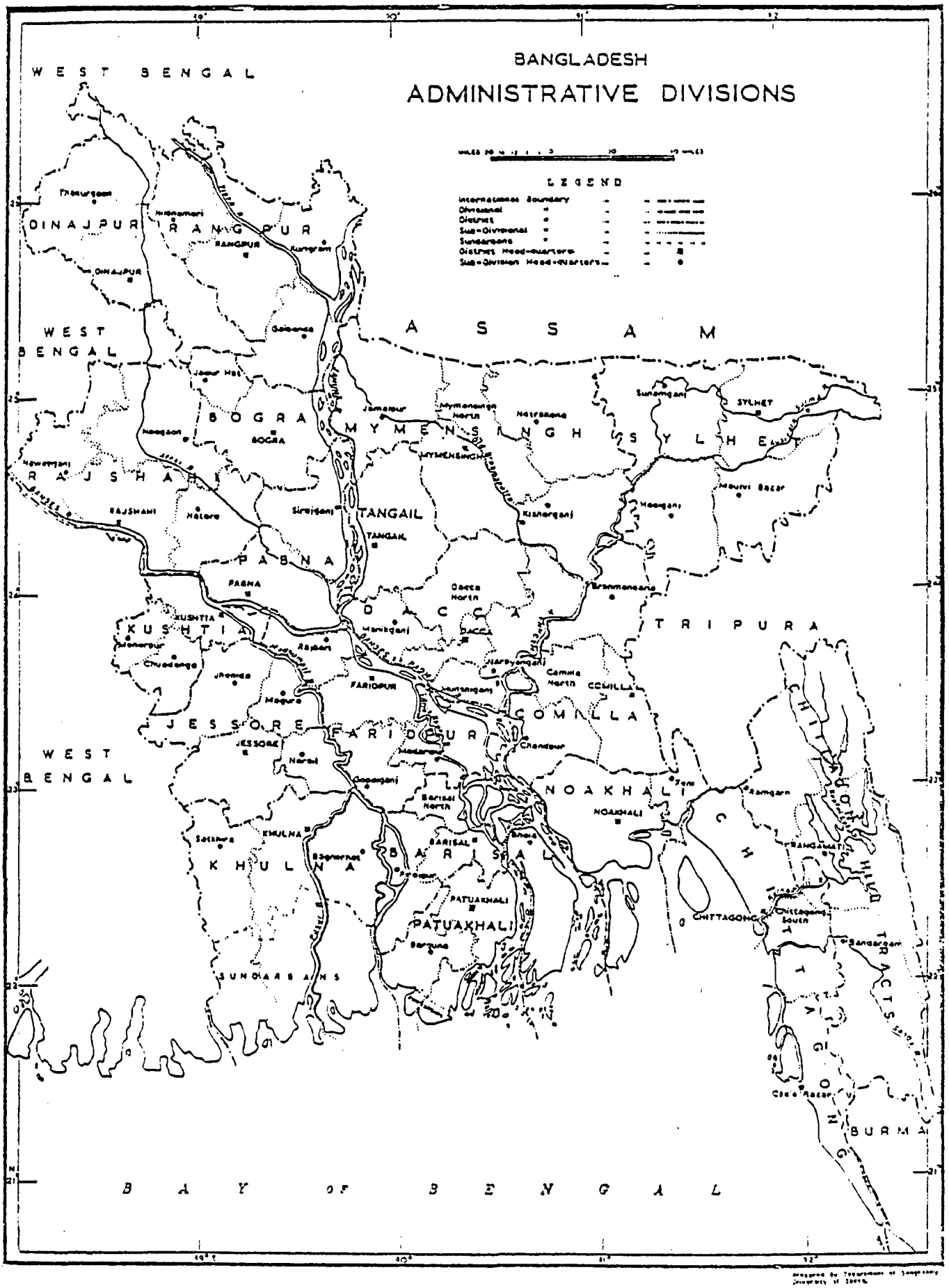
by

Borhan Uddin

A Thesis

Submitted to the Faculty of Graduate Studies
through the Department of Geography
in Partial Fulfillment of the
Requirements of the
Degree of Master of Arts at the University of Windsor

Department of Geography
University of Windsor
Windsor, Ontario, Canada
1979



ABSTRACT

The study presents a geographical analysis of cropland productivity in Bangladesh using thana-level data. It involves the interpretations of spatial patterns that emerged, and the evaluation and identification of the influence of cropping intensity and the relative acreage and yields of various crops on cropland productivity within the prevailing set of physical and socio-economic conditions.

The cropland productivity index is expressed in total value (Rupees) of production per acre of net cropland. The spatial patterns that emerge from the cropland productivity index are analysed using the trend surface mapping technique. The analysis of regional patterns clearly reveals the country's subsistence-oriented crop production, except for a few anomalies of high productivity associated with commercial orientation. Comparative analysis of the best fitted trend surface patterns of monsoon and premonsoon rainfall, the intensity of labour employed, and the distribution patterns of owner-operated farms with cropland productivity trend surface patterns reveal a very close areal association. This suggests a strong role of the availability of rainfall and labour on the structure of cropland productivity in

Bangladesh.

The analysis of the influence of crops and cropping intensity on the spatial variations of cropland productivity is accomplished using the stepwise regression procedure. The results show that among all the 23 independent variables, cropping intensity plays the most important role in explaining cropland productivity. Aman, aus and jute, the three rainfed monsoon crops, emerged significant in terms of their yields but their acreage provide a very low level of explanation. On the other hand, the high-yielding irrigated rice crops, IRRI boro and boro, potato, tobacco and sugar-cane are significant in terms of their acreage. Pulses acreage is significant negatively. Mustard and wheat neither by their acreage nor by their yields are of significant relationship.

Dedicated

To

My Parents

Dr. Wahidur Rahman (Late)
and
Mrs. Shaheda Rahman

and

Wife Dil Afroze and Daughter Piyanka

ACKNOWLEDGEMENTS

The author wishes to express his gratitude to the members of the dissertation committee for their comments, criticisms and directions in preparing this thesis. Special thanks are due to Dr. Ihor Stebelsky, the primary advisor, for his constant guidance, advice and encouragements throughout the studies. Thanks must also be given to Dr. Amrit Lall, the secondary advisor, for his helpful guidance and directions in preparing the thesis.

The author also wishes to express his thanks to Professor Frank C. Innes, the former Chairman, and Dr. Anthony Blackbourn, the present Chairman, Department of Geography for their assistance and encouragement during his studies at this department.

Special thanks must also be given to the Department of Geography, University of Dacca, Bangladesh, for supplying the necessary data and giving permission to continue further studies in abroad. In this regard author is grateful to Professor M. Aminul Islam, Associate Professors, Dr. Sajjadur Rasheed and Mr. Nazrul Islam, for their encouragement and help.

The author is also grateful to his friends, especially Mr. Mohdudul Haque, graduate student, University of Western Ontario, for his assistance in supplying some of the data and

literatures. Additional thanks are due to Mr. Ron Welch for his cartographic advice and assistance; and Mr. Rick Dumala for his assistance in preparing the computer programs.

Finally, author would like to express his thanks to his wife, Dil Afroze, for moral support and constant assistance.

CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

4.1 General:

The economy of Bangladesh is traditionally and overwhelmingly agricultural. Agriculture contributes about 58 percent of the gross national product and absorbs about 75 percent of the labour force (First Five Year Plan, 1973-78). Agriculture not only provides food and clothing to millions but also earns foreign exchange and provides raw materials for domestic industries.

Despite agricultural prominance, continuing rapid population growth at the rate of 3 percent per year has caused a growing shortage of food in Bangladesh. Since 1950, the country has become dependent on food grain imports, which grew from 0.5 million tons a year in the early 1960's to 1.5 million tons in 1969-70 (Bose, 1974). The increasing foodgrain imports have imposed a heavy burden on the national economy. Malnutritions, hunger and poverty among the rural population have been increasing daily. A survey conducted in 1974 revealed that 79.4 percent of the rural population lived below poverty level ('Nutrition', Working Paper III, 1977), and more than 40 percent suffered from malnutrition. Although a variety of crops are grown, Bangladesh is highly deficient in vitamin-rich

foods. In an investigation, Chen and Chaudhury (1975) found "a perceptible decline in per capita food production with a distinct downward trend in five year averages for per capita availability of food (including net imports). In addition to the quantitative declines in calorie and protein consumption, there is an evidence of a qualitative decline in protein consumption" (Table 1.1).

Agriculture in Bangladesh is crop-oriented. Other sectors contribute little to the food supply. Cattle are kept mainly for draft with meat and milk as mere by-products, and poultry are kept by small holders mainly as part of the subsistence economy. No land is devoted to stock feed production because of the critical need for food crops (Ahmad, 1976). Fish was one of the principal sources of protein but in the last two decades the per capita consumption of fish has declined considerably (Table 1.1). Thus, the main sources of protein and calories are now the food crops.

A variety of crops are grown in Bangladesh for subsistence and cash. All these crops are grown in different seasons and under different physical and socio-economic enviornments. Conditions of the physical environments, especially rainfall and elevation of land in relation to the flood level, are of vital significance to crop production and the agricultural economy of the country. These hydrological conditions determine the main agricultural land use and cropp-

Table 1.1

Per Capita Daily Availability and Consumption of various Foods and their Equivalents in Calories and Proteins in Bangladesh during 1960-65, 1965-70 and 1970-74.

	Mean Daily Availability (Grams)			Mean Daily Consumption Calories (Number)			Protein (Grams)		
Food	1960-65	1965-70	1970-74	1960-65	1965-70	1970-74	1960-65	1965-70	1970-74
Cereals	448	434	420	1550	1502	1453	34.6	33.7	32.4
(Percent wheat)	(5)	(6)	(10)	(5)	(6)	(10)	(8)	(10)	(18)
Pulses	11	11	10	38	38	36	1.8	1.8	1.7
Fish	34	33	31	29	28	26	4.4	4.1	3.9
Vegetables	28	32	23	12	15	10	0.5	0.6	0.4
Potatoes	16	28	28	14	23	23	0.2	0.4	0.4
Edible Oils	2	2	2	19	22	20	*	*	*
Others	-	-	-	53	52	50	1.9	1.9	1.8
Total	-	-	-	1715	1680	1618	43.4	42.5	40.6

Note: The amount of Calories and Proteins due to other foods not listed (meat, eggs, fruits, etc) was estimated by using data from the National Nutrition Survey 1962-64, The survey showed that these other foods contributed 3.1 percent of calorie and 4.4 percent of protein consumption. The estimates in this table maintained the percentages for all three time periods.

\- = not available

* = negligible

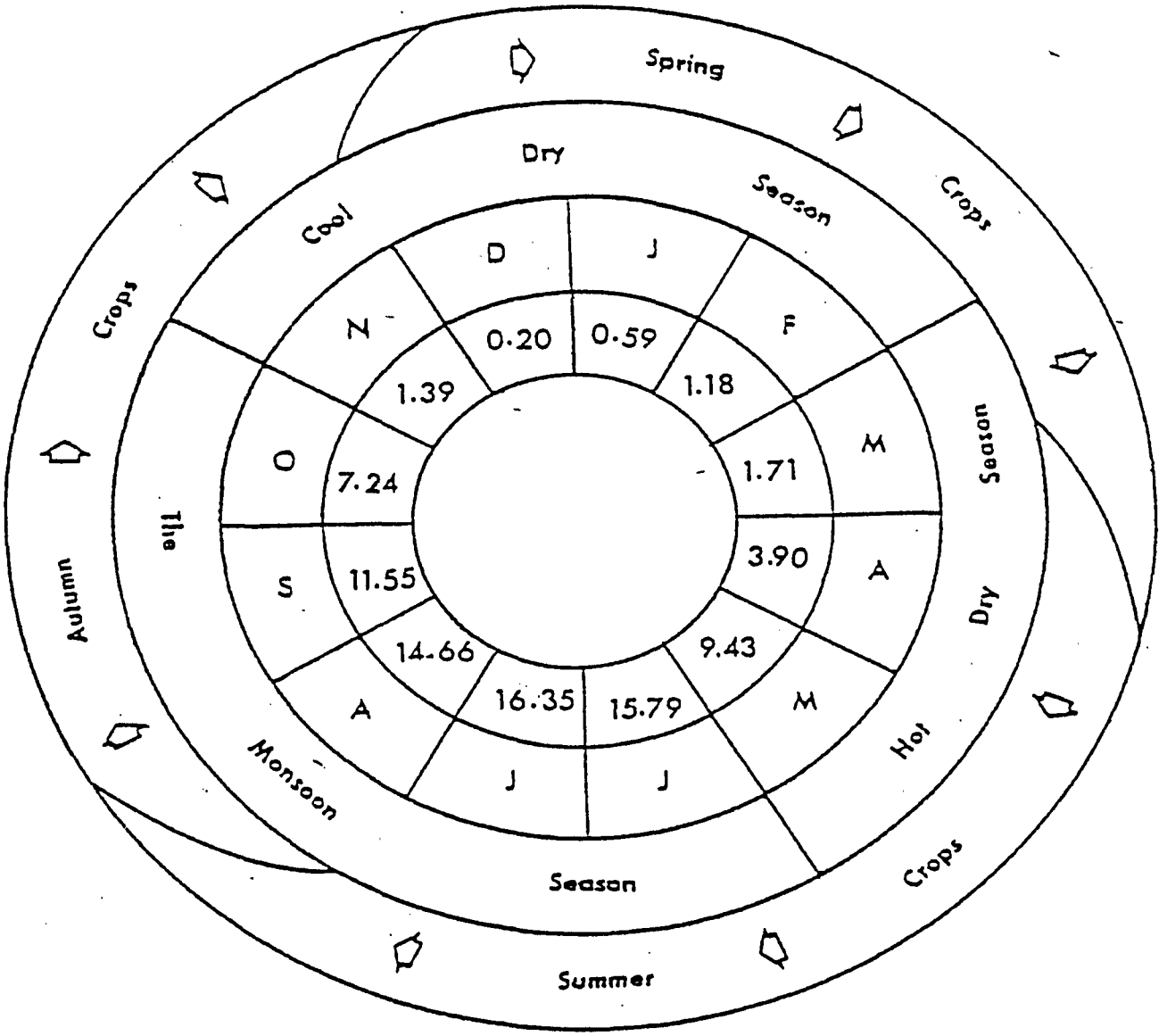
Source: Chen and Chaudhury. "Demographic Change and Food Production in Bangladesh, 1960-74". Population and Development Review, Vol. 1, No. 2, 1975.

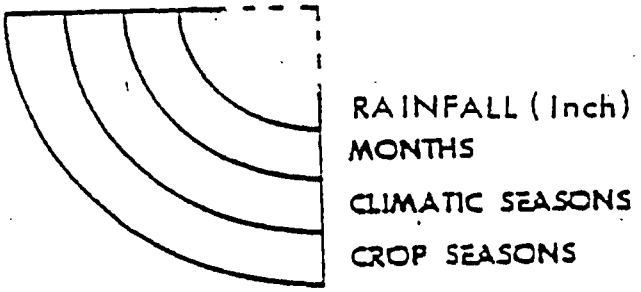
ing patterns in Bangladesh. There are three crop seasons corresponding to three broad climatic seasons in Bangladesh (Fig. 1.1). The crop seasons, however, do not have a sharp boundary between any two of the seasons, since the harvesting period of one crop overlaps the sowing period of the next crop.

a) The Rabi or spring crops of cool dry season are sown in November or December and harvested in March or April. This cool dry season is virtually rainless. Crop cultivation is limited to lands which retain moisture or are irrigated. Although 25 percent of the cultivated land is cropped at this time, a great variety of crops are grown both with or without irrigation. Boro rice, the main crop of the season, is generally transplanted on lowlands that retain water during this cool dry season. IRRI boro (IR-8), a high yielding variety of hybrid rice that was introduced in the mid-1960's, is successfully adapted to this season. This rice, however, requires an adequate supply of irrigation water and chemical fertilizers and diligent care in order to provide legendary yields of two to four times higher than the indigenous rice crops. Other dry crops like winter vegetables, potatoes, wheat, barley, oilseeds, pulses, tobacco, ground-nuts, etc. are also important crops of this season.

b) The Bhadai or summer crop season (March - April to July -August) begins with scattered rains in early summer

Fig. 1.1 The crop calendar of Bangladesh





Modified from: Ahmed, R. The Variability of Some Water Balance Parameters of the Premonsoon Season in Bangladesh, Unpublished Master's Thesis, University of Windsor, 1978.

(Nor'westers) and lasts throughout the first half of the heavy monsoon rainy season. The two main crops, aus rice and jute (fiber crop) are generally sown in the highlands, since excessive rainfall or flooding is harmful to young jute and aus plants. These two crops (one is vital for food and the other for cash) compete with each other for the use of the same land. Good or poor market prices of the preceeding season greatly determine the cultivators choice in the current sowing of these two crops (Ahmad, 1976). However, the population pressure and the need for food crops induce the farmers to grow more rice than jute.

c) The Hemantic/Aghani or autumn crop season (June - July to November - December) begins with heavy rainfall of monsoon and ends in the beginning of cool dry season. The main crop is the rainfed aman rice. There are two types of aman. The broadcast or floating aman is sown in March or April on low lands that are prone to flooding. Usually seeds of aus are also mixed in with aman to ensure harvest regardless of the flooding. Thus, while aus, fed by early rains, is harvested in late July or early August, the aman is left in the field to grow with increasing flood water until its harvest in late November. The other type, known as transplanted aman, is the finest variety of all rices. First, it is sown densely into fertilized nursary beds. Then the seedlings are trans-

planted into the field in July or August, and harvested in late November or December. The paddy-field, located on lands of low to medium elevation, provides rice with a regulated water level, and lends itself to multiple cropping. Aman is also adaptable to saline water which may be a limiting factor in coastal areas to other crops. Because of widespread flooding, 75 percent of all cultivated land in Bangladesh is suitable for aman, aus and jute during the monsoon season. Normal flooding provides water for the best growth of monsoon crops. Heavy floods, however, may reduce crop production as well as cause damage to property.

The longest growing annual crop, sugar-cane, spans several growing seasons. An upland crop, it is sown in February - March and harvested in the late autumn.

Most cultivated land in Bangladesh is subjected to annual flooding and drought. Aman, aus and jute are vulnerable to excessive floodings that accompanies cyclones during the monsoon season. Consequently their harvest and supply have fluctuated widely from year to year. By contrast boro or IRRI boro rice and other dry crops are vulnerable to drought or lack of irrigation water during the cool and hot dry seasons. It has been found that, except for the traditional aman-aus rice and jute, no other crops including those of the high yielding seed-fertilizer technology, are adapt-

able to the conditions of the monsoon season. In the dry season, however, a great variety of crops can be grown with the help of irrigation. Moreover, irrigation can intensify land use by means of multiple cropping, and by creating conditions amenable to the introduction of yield-raising inputs and farming practices (Bose, 1974).

The crops grown in Bangladesh display a great range in acreage. Rice, grown mainly for the farmer's own consumption, is by far the most important crop occupying 78 percent of the gross cropped area. Among the three different kinds of rice grown, aman and aus occupy about 45 and 25.5 percent of the gross cropped area, and boro and IRRI boro of high yielding hybrid occupy 5 and 2 percent respectively. After rice, the second most important crop is jute grown for cash which is essential to industry and commerce. Jute occupies 7.5 percent of the total cropped area. Other crops such as, potatoes, pulses (legumes), wheat, oilseeds, sugar-cane, tobacco, vegetables, etc. occupy less than 2 percent of the crop-land each, but are not less important from the stand point of yield, economic or caloric value.

Presently in most of the areas of Bangladesh, more than one crop is raised from the same plot of land in one year. Net cropped area or total cultivated land (including current fallow) in

Bangladesh was about 22.49 million acres in 1969-70, whereas it was about 22.33 million acres in the year 1950-51, It shows that there has not been any significant change in the net cropped area over the years in Bangladesh. However, gross cropped area has increased significantly from 26.24 million acres in 1950-51 and 27.39 million acres in 1961-62 to 32.84 million acres in 1969-70 (Table 1.2). This is because of the increase in cropping intensity during the mid-1960's when the 'new seed-fertilizer-irrigation-technology' was introduced. Cultivated land on the average, was cropped 1.31 times during 1961-62 but by 1969-70 the cropping intensity had increased to about 1.50. It is interesting that a close relationship has been found between the cropping intensity and population density (Technical Report no. 2, LBRD 1970). Areas of high and moderate population density appear to have higher cropping intensity than the low density areas. However, increased cropping intensity could make only a slight impact on the general trend of agricultural production in Bangladesh.

Past production trend of important crops shows a stagnant output during the 1950's (Fig. 1.2). Rice production in the 1950's increased at only 0.7 percent per annum compared with a population growth rate of 2.9 percent. This resulted in a steadily increasing foodgrain deficit. Performance, however, improved

Table 1.2 Land Utilization in Bangladesh

(million acres)

Item	1947-48	1949-50	1951-52	1958-59	1961-62	1963-64	1965-66	1969-70	1970-71
1. Total Geographical Area	35.28	35.28	35.28	35.28	35.28	35.28	35.28	35.28	35.28
2. Forest Area	2.98	2.98	3.15	5.46	5.47	5.47	5.40	5.54	5.50
3. Area not available for cultivation (including cultivable waste)	9.63	9.33	9.25	7.52	7.85	7.85	7.54	7.24	7.30
4. Current Fallow	2.60	2.23	1.55	1.77	1.00	0.86	0.73	0.73	1.12
5. Net Cropped Area	19.42	20.09	20.69	19.87	20.94	21.08	21.63	21.76	21.36
6. Total Cultivated Area (4 + 5)	22.02	22.32	22.24	21.65	21.94	21.94	22.33	22.49	22.48
7. Area Cropped more than once	5.86	5.56	6.08	5.36	6.45	7.11	7.94	9.74	9.01
8. Total Cropped Area (5 + 7)	25.29	25.65	26.77	25.23	27.39	28.19	29.54	32.48	31.53
9. Intensity of Cropping (8 as percent of 5)	130.2	127.6	129.3	126.9	130.8	133.7	136.8	150.0	147.1

Source: Ministry of Agriculture, Government of Bangladesh.

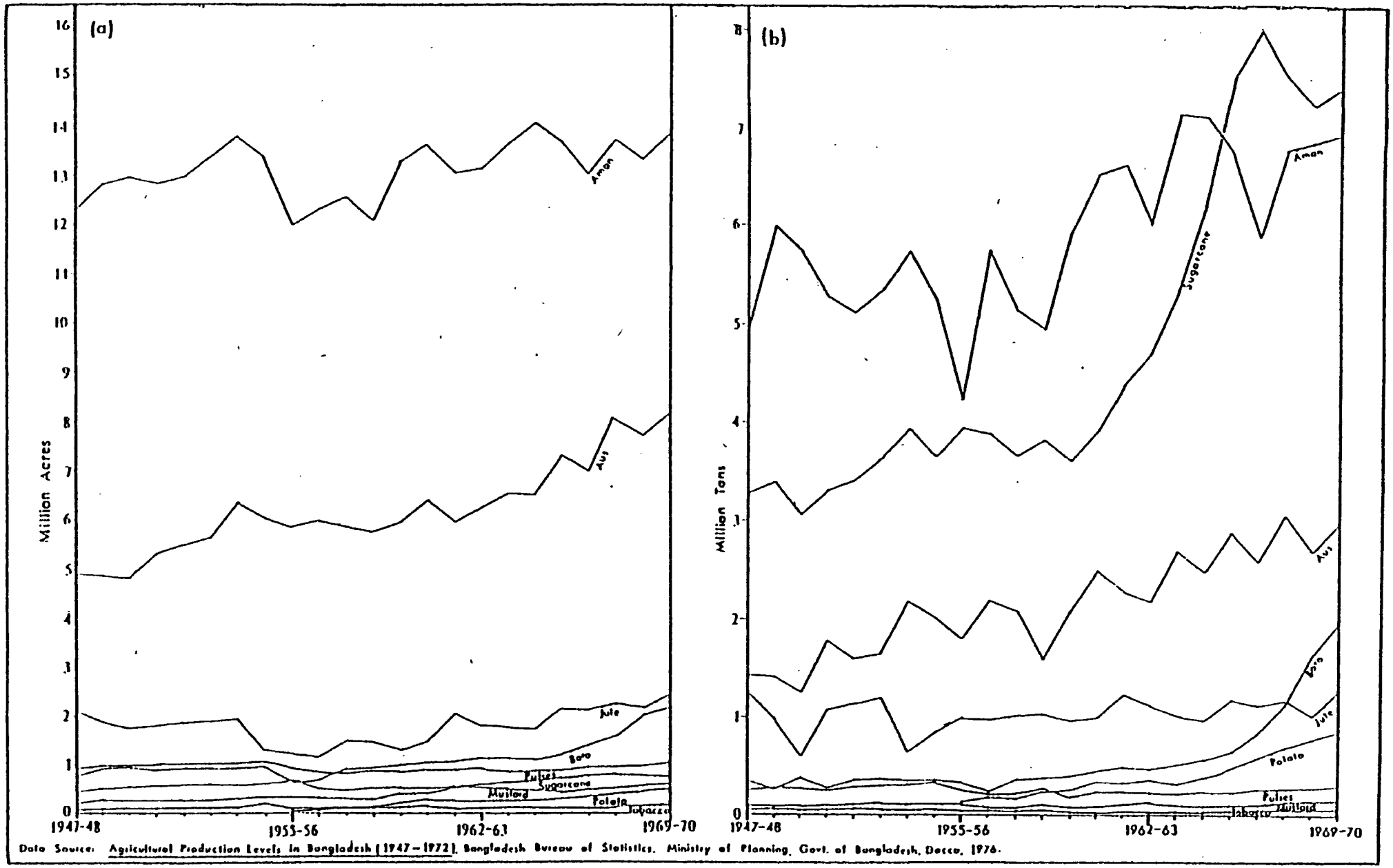


Fig. 1.2 Acreage (a) and Production (b) Trends of Different Crops for the Last 23 Years (1947-48 to 1969-70) in Bangladesh.

slightly in the 1960's when both rice production and aggregate agricultural output increased at about 2.5 percent per year. Among the three rice crops, the production of aman was unsatisfactory, aus showed a slight upward trend and boro (both local and IRRI boro) showed a spectacular increase from 0.42 million tons in 1959-60 to 1.80 million tons in 1969-70 (Bose, 1974).

Jute, the main cash crop of Bangladesh, accounts for about half the money income of the agricultural community and is the main foreign exchange earner for the country (Table 1.3). Jute trade provides a wide variety of employment and transport services. Jute industry alone provides employment for more than 200,000 workers (Ahmad, 1976). Production of jute however, is not impressive. It declined in the 1950's and then registered some increase in the 1960's. The latter, however, was associated with a large increase in acreage and a decline in yield.

The acreage and production of aman, aus and jute have fluctuated widely over the recent two decades (Fig. 1.2). For aman and aus, fluctuations occurred mainly because of their damage from floods and cyclones, whereas fluctuations in jute reflected the world jute markets, government policies toward jute cultivation and the competetion of jute with aus rice.

Potatoes and sugar-cane registered a significant increase as

Table 1.3 Foreign Exchange Earnings from Exports in Bangladesh.

In million Rupees

Item	1965-66	1966-67	1967-68	1968-69	1969-70
Fish	2.2	11.1	11.8	14.9	15.5
Tea	11.0	0.8	–	–	–
Hide and Skins (raw)	27.8	3.8	2.1	0.2	0.3
Jute (raw)	863.1	897.8	758.9	730.7	262.4
Jute Goods	565.3	626.3	605.5	655.9	768.3
Spices	4.9	5.5	4.1	2.2	3.1
Cotton, raw and waste	1.9	2.9	1.9	1.0	0.9
Leather manufactures and tanned hide and skins	24.8	51.8	43.1	75.2	60.0
Other Articles	–	68.1	52.4	59.8	52.8
Total	1574.1	1667.0	1479.8	1539.9	1662.8

– Not available

Source: Statistical Digest of Bangladesh, Bangladesh Bureau of Statistics, Govt. of Bangladesh, No. 8, 1972.

a result of both higher acreages and improved yields. Other crops, however, were more or less stagnant both in acreage and yields. In general, the performance of agriculture was unsatisfactory. The growth rate for the decade of the 1960's was only 2.5 percent per year falling considerably behind the population increase (3% per year) of the period. In order to meet the increasing demand of the country, the growth of agricultural output should increase at the rate of 5 percent per year (Bose, 1974).

Clearly, rapid population growth must be curtailed, but in the immediate future the country needs rapid agricultural development to increase its food supply at a faster rate than population growth. Indeed, the government of Bangladesh has given highest priority to agricultural development. At present many Bangladeshi and international experts are helping the government in evolving a comprehensive agricultural development strategy and in formulating specific programs and projects for making the strategy operational.

1.2 The Problem:

In a predominantly agricultural country like Bangladesh where field-crops constitute more than 90 percent of agricultural production, the knowledge of crops in terms of their productivity is very important. The cropping pattern in Bangladesh is overwhelmingly dominated by rice, which occupies about 80 percent of the cropped land. This is causing a growing concern among experts at present since such a

monoculture of rice is creating severe nutritional and production problems. Experts have long advised that Bangladesh should abandon its rice monoculture. René Dumont suggested that it was wrong to concentrate exclusively on rice because rice cultivation provided less employment and nutrition per cubic meter of water, the scarce input. More attention should be given to vegetables as China has done (Bose, 1974). It was suggested in the Technical Report No. 1 (IBRD, 1970) that crop diversification would provide the country with nutritious foods and farmers with greater economic security by reducing the present dependence on rice as a major food crop and jute as the major export crop with an uncertain future market. Thus experts urged to quicken the search for other crops valuable both for the people and the economy of the country (Rahim and Islam, 1974; Bose, 1974). They believe that where other resources and inputs are scarce, the possible and desirable way to increase food production both quantitatively and qualitatively is through crop diversification. However, before allowing such a diversification in the present cropping pattern, it is essential to have a wise choice of crops adaptable to the present physical and socio-economic conditions and effective in economic development. In selecting the crops, it is necessary to examine the present cropping patterns in terms of their aggregate and in-

dividual contributions to land productivity under the present set of physical and socio-economic conditions.

Moreover, in modern development planning philosophy the distribution of economic justice and opportunities must be spatially balanced. In Bangladesh, this philosophy has been officially recognized (First Five Year Plan, 1973-78). Since agriculture is the main economic activity, the distribution of economic justice and the expansion of economic opportunities require the knowledge of current agricultural trends in each of the areal units used for planning.

The Government of Bangladesh has been increasingly using the "Thana" administrative region as the basic development planning unit.[1] It is therefore, essential that all contributions and needs of each thana are known. The planners must know what every thana is contributing to the national economy in terms of agricultural

---

1. "Thana" is the fifth ranking administrative district/Police Station in Bangladesh. The hierarchy of administrative districts is as follow:

1. Country	4. Sub-Division - 62
2. Division - 4	5. Thana - 411
3. Districts - 19	6. Union - 4055
	7. Village or Mouza - 64,493

production. Without knowing the present distribution of crops (acreage, yield, cropping intensity and production), it is not possible to grasp the spatial variations in the problems of Bangladesh agriculture. Spatial variations in cropland productivity would be of particular interest in Bangladesh, where available land for expanding cultivation is limited, and the only way to meet the increasing population pressure is to improve the productivity of crops and land.

1.3 Objectives and Scope of the Study:

In order to examine and evaluate the crops, a composite index of cropland productivity will be calculated for each thana in Bangladesh. This index would represent the aggregate performance of various factors such as the kinds of crops grown, the share of the cropland that each crop occupies, the yields per acre of each crop and the cropping intensity (i.e. the number of crops grown from the same plot of land in one year). Land productivity may be measured in several ways such as composite crop yields per unit land, caloric value per unit land area, or monetary value per unit land area (Goodson, 1938). Composite crop yields in natural units such as weight or bulk is useless because the quality and quantity of the products are very different. On the other hand, caloric value also is deficient in measuring certain crops that are

not meant for food consumption, such as fiber crops (jute), tobacco, or rubber. Since we can not overlook the importance of jute and tobacco in the economy of Bangladesh, it is preferable to use monetary value in expressing the cropland productivity index in this study.

Geographers are primarily interested in spatial patterns that may reveal causal factors. However, simple cartographic delimitation of regions of high or low productivity would obscure transitions from one type to another (Tarrant, 1969). In this study the gradients of changing productivity within a distribution patterns are essential for comparative analysis. When regional patterns appear as orderly gradients rather than as chance variations, they may suggest certain causes or processes (Mullar, 1973).

Orderly spatial variations of the productivity index may suggest the role of various factors such as physical (i.e. rainfall and temperature, soils, land levels in relation to flooding, etc), socio-economic (i.e., size of farms, tenure classes, capital inputs, labour inputs, density of population, proximity to market, literacy levels, etc.), technological and organizational (i.e., application of fertilizers and pesticides, irrigation, mechanization, cooperative systems, Government policies, etc.) Unfortunately, data for these factors are not available at the thana level. However, this study may offer some

explanation of productivity levels in relation to cropping intensity, acreages and yields under different crops, all of which are available at the thana level. In fact, the acreage and yield of various crops and the cropping intensity are the three major components of the productivity index. Thus, the share of cropland that each crop occupies, the physical yields of various crops and the cropping intensity should have a direct bearing on the productivity index.

Under the present set of physical and socio-economic conditions, the cropping intensity and the different crops that are grown in Bangladesh vary in acreage and yields from area to area. Some crops, by virtue of their large area or by virtue of their exceptional yields, may generate high or low values in the productivity index. Since, many areas of Bangladesh can support more than one crop gorwn on the same plot of land in one year the cropping intensity should have a direct bearing on cropland productivity. Essentially the contribution of the crops and cropping intensity to cropland productivity must be evaluated in order to plan for the future and to discover the best uses of land for stable and optimum returns.

Thus, the main objectives of the study are:

1. To compute the composite cropland productivity index for each thana in Bangladesh,

2. to describe and analyse the spatial patterns and regional trends that would emerge from the productivity index, and

3. to analyse the relationships between cropland productivity and cropping intensity and the acreage and yields of different crops, identifying the crops that are responsible for high or low values in the productivity index.

Spatial analysis of this kind has long been felt necessary by the planners for a country like Bangladesh. Such study has a great empirical value, for it would provide for the first time a detailed analysis of crops and their influence on cropland productivity by thana. The study would help the planners in evaluating the role of crops by their acreage, yields and intensity in the spatial patterns of economic output from agriculture. Analysis of spatial patterns would help differentiate areas of high and low productivity so that necessary actions for different areas would be taken. This study would provide some basic information needed for planning any changes in the cropping patterns.

CHAPTER 2

REVIEW OF LITERATURE

2.1 Measurement of Agricultural Productivity:-

The notion of agricultural productivity is generally considered as the total agricultural output per unit of input. The use of this concept, in methods and criteria, has differed from author to author, area to area and from time to time, depending on the ultimate purpose. At least four approaches to the measurement of agricultural productivity may be recognized: (1) output per unit area; (2) output per unit of labour applied, i.e. per man-hour; (3) output in relation to input, i.e. input-output ratio and profit derived from farming, and (4) output expressed in terms of grain equivalents per head of population (Bhatia, 1965). For (2) and (3) data are not readily available in many parts of the world especially in Bangladesh. Output per unit area is the most commonly used measurement. In order to compute total agricultural output some common denominator must be employed for each commodity such as bulk, weight, food value or monetary value. Thus, depending on the purpose of the investigation, agricultural land productivity may be measured in terms of - (a) composite crop yields, (b) caloric value per unit land area, or (c) monetary value per unit land area

(Goodson, 1938).

2.2 Output Per Unit Area:-

In the late 1920's and 1930's, geographers used production and land productivity measurements to define agricultural regions and regions of farming systems (Studensky, 1927; Baker, 1926-32; Brinkmann, 1930; Whittlesey, 1936; Busch, 1936; Goodson, 1938). These important contributions to agricultural geography, however, lacked statistical sophistication.

Kendall (1939), a well known statistician, measured crop productivity per unit area by taking 48 counties of England for selected years and applied four coefficients. The 'productivity coefficient' was measured on the basis of factor analysis technique. In measuring the 'ranking coefficient' the 48 counties were first ranked in the order of yields of the ten crops and then the arithmetic mean of the rank numbers were obtained. The third and fourth coefficients are the 'monetary value' and the 'energy value'. The coefficients were obtained by expressing the yields in terms of money value and energy content (caloric and protein value).

The ranking coefficient method of Kendall was also adopted by L. D. Stamp in his book Land For Tomorrow (1940). Later, in his Our Developing World (1960) he applied the technique to measure the productivity of 20 countries on the basis of per acre

yields of nine selected crops. The countries were placed in order of output per acre for each crop. The ranks occupied by each country relative to the selected crops were then averaged and from these averages the ranking coefficients of crop productivity of each country was obtained. Similar method was also applied by M. Shafi (1960) and M.K. Elahi (1965). Elahi however, modified the method by including the ranks of districts according to the cropping intensity. The ranking coefficient method on the basis of average yields may be biased in case of the areas of insignificant acreages where certain crops have higher yields per acre than those areas which occupy substantial acreages with poor yield per acre. G.Y. Enyedi (1964) however, suggested a formula for determining an index of productivity coefficient:

$$(y/Y_n) \ : \ (t/T_n)$$

where y is the total yield of the respective crop in the unit area, Y_n is the total yield of the crop at the national scale, t is the total crop area of the district and T_n is the total crop area at the national scale.

One of the drawbacks of this formula is that there are certain cases where the results are influenced by the size of the area under a particular crop when the yield of that crop in the district

is the same as or less than the national yield. In such a case, computation according to formula would reveal a coefficient higher than the national average for that crop. To overcome this difficulty, Shafi (1972) has made an attempt to modify the formula. In the modified formula the yields of all the crops in the district were added and divided by the total area of all the crops in that district. Thus the result was examined in relation to the total yield of the crops at the national level. Shafi's formula may be represented as:

$$\Sigma n(\ y/t) \ : \ \Sigma n(\ y/T)$$

S.S. Bhatia (1967) applied a new measure in defining "agricultural efficiency" (synonymous to cropland productivity) in Uttar Pradesh, India. He first calculated a "yield efficiency index" for each areal unit, where the average yields of various crops in the areal unit are expressed as percentage of the corresponding average yields of various crops for the whole region. He expressed it as:

$$I_{ya} = \frac{Y_c}{Y_r} 100$$

where I_{ya} is the yield index of crop a, Y_c is the yield of crop a in the areal unit, and Y_r is the yield of crop a in the entire region.

Then the yield efficiency index of each crop is multiplied by the percentage of the cropped area that each crop occupies, and finally divided by the total percentage of cropped area that all the crops considered occupy to get the "agricultural efficiency" of the areal unit relative to the whole region. The formula is as follows:

$$E_i = \frac{I_{ya} \cdot C_a + I_{yb} \cdot C_b \ldots\ldots\ldots\ldots I_{yn} \cdot C_n}{C_a + C_b \ldots\ldots\ldots C_n}$$

where E_i is the agricultural efficiency index, I_{ya}, I_{yb}, $\ldots\ldots\ldots I_{yn}$ are the yield indexes of various crops, and C_a, $C_b \ldots\ldots\ldots C_n$ are percentages of cropland under different crops.

I. Stebelsky (1964) and A. Dutt, et al (1969) calculated agricultural land productivity index by taking the gross total output of all agricultural commodities in monetary value divided by the total agricultural lands devoted to them.

4.3 Grain Equivalents:

Output expressed in grain equivalents was used forr the first time by J.L. Buck (1937) in his study of Chinese agriculture. According to him in a subsistence agricultural country like China productivity and volume of production expressed in terms of money were not meaningful. Taking all foodgrains to be equivalent in food values and basing his unit on one Kilogram of whatever kind

of grain was predominant in the locality, he converted all other products to grain equivalents on the basis of the amount of the most commonly consumed grain of the locality that the products would buy.

Professor de Vries, as quoted in 'The Economies of Subsistence Agriculture' (Clark and Hashwell, 1964), modified Buck's method of obtaining grain equivalents by expressing the output of selected Asian countries in terms of 'milled rice equivalents' per head of population. Where Buck had considered all grains as equal, de Vries converted various kinds of grain into rice equivalents according to the local market price of each grain. Clark and Hashwell (1964) however, made a further refinement, expressing the output from agriculture in terms of Kilograms of wheat equivalent per person. They employed a scale based on the FAO weighting system for constructing the international index numbers of agricultural production. The FAO weighting system is however, based on regional wheat relative price weights (FAO, 1960).

Professor Kostrowicki (1964, 1966, 1970, 1973, 1974) used conventional grain units to measure agricultural productivity in his studies of agricultural typology, which according to him are not subjected to any change in time and space as opposed to monetary value. He also did not consider the caloric value because he

wanted to include non-food crops as well (such as fiber crops, tobacco, etc.). He calculated the productivity index by taking the gross total output of all crops in grain units, animals, and their by-products divided by the total area devoted to them. In his report on World Agricultural Typology (1973, 1974), productivity of agriculture was expressed with two indices - (a) land productivity measured in gross agricultural/crop and animal/production in grain units per one hectare of agricultural land, and (b) 'labour productivity' measured in gross agricultural production in grain units per person economically active in agriculture. However, in the study of either a country or a region, he recommended the use of monetary value to keep the comparability in time and to make comparisons in space possible, and also recommended the use of fixed prices rather than current prices.

2.4 Measurement of Cropping Intensity:

Cropping intensity is directly related to the measurement of cropland productivity. The most commonly used method in measuring cropping intensity is the ratio of gross cropped area to net cropped area (Ginsburg, 1963; Ahmad, 1968; Laut, 1968; Sengupta, 1970; Bangladesh Statistics, 1974; Jabbar, 1977). However, a precise measure of agricultural intensity is the ratio of

the quantity of inputs to the land. But data on the quantity of inputs used in farming are not readily available. J. D. Stryker measured intensity of land use by the cost in terms of travel time between the fields and the farmer's house of residence (1976). He states that this relationship between cropping intensity and intra-farm travel is evident in areas where land is abundant. But his model appears unsuitable for areas where there is acute scarcity of agricultural land, or where intra-farm distances are minimal. Anyway, application of this model appears difficult because the type of information required for its computation is only available through rigorous and careful field work.

Recently, E. Dayal (1978) developed a new method of measuring cropping intensity. According to him, the traditional method (ratio of gross cropped area to net cropped area) is misleading for it does not take into account the duration of crops in the field, where different crops have different periods of maturity. In the traditional method, areas under long-duration crops become deflated and do not show up well in the intensity patterns. Others also recognized the conceptual peculiarities of the traditional method and the importance of crop duration, but they have not made any attempt to adjust it (Mellor, 1968; Myrdal,1968; Brookfield and Hart, 1971; Rao, 1972).

In his new method Dayal calculated the index as the ratio of the aggregate of crop areas under various crops, each multiplied by the duration of the crop in the field, to the net sown area. The formula is thus, as follows:

$$I_c = \frac{\sum_{i=1}^{n} A_{ci} \cdot d_i}{Q}$$

Where I_c is the cropping intensity index, A_{ci} is the area under crop i, d_i is the duration of crop i in the field, and Q is the net sown area.

However, the new method seems to be difficult to apply in case of Bangladesh since different varieties of the same crop are grown in different ecological conditions and have different duration periods in the field. For example, aman, the main rice crop, has two duration periods in the field. Broadcast aman is sown in March - April in low-lying deeply flooded areas, sometimes together with aus rice. Aus is harvested in July - August leaving the aman to grow until its harvest in November. Another common type of aman is transplanted in July - August and harvested at the end of November or early December. Thus, these two types of aman have two different duration periods in the field, one for nine months and the other for four months. The new method of intensity measurement

cannot be used in this study since aman is identified in agricultural statistics of Bangladesh as a single crop.

2.5 Review of Bangladesh Literature:

In Bangladesh very few studies have been carried out on agricultural land productivity. Economists and agronomists have done some research on productivity at the micro-level. Zaman (1973), Hussain (1974) and Jabbar (1977) in their studies of relative efficiency of farm-sizes and tenure classes found that the smaller the farm size, the higher the efficiency of land use. They also found that the owner-operated farms were relatively more productive than the share cropped and tenant farms. In all of the above studies, land productivity was measured according to the gross value of crops, animals and by-products produced per farm or per acre of land, and each commodity was valued at a constant price.

In a study that used thana statistics, Morrison (1972) found that the most successful farming (in terms of productivity) was related to small farms operated by owner cultivators. He used data of 37 sample thanas distributed throughout the selected 19 agro-geographic regions which he derived from H. Rashid's (1967) 122 agricultural regions of Bangladesh. His measurement of productivity was based on the gross cultivated area as percentage of the net

cultivated area and the percentage of jute in relation to the net cropped area. Areas with 5 percent or more jute together with areas of high cropping intensity were regarded as the regions of high agricultural productivity.

2.6 Computer Mapping and Analysis of Spatial Variations:

Traditional cartographic procedures in delimiting the regions of agricultural phenomena generally obscure the transitions from one type to another as well as the true character of agricultural distribution (Tarrant, 1969). Recent development of trend surface analysis is a promising computer mapping technique which can solve such regional boundary problems (Morgan and Munton, 1971). It can separate overall trends in areally distributed data from local exception. This is a very useful method not only for mapping, but also a tool for explaining spatial trends. The use of this technique was first applied in geology (Krumbein, 1959; Grant, 1961). In geography the use of this method dates from mid-1960's (Toblar, 1964; Chorley and Haggett, 1965), and physical geographers rather than human geographers have so far been the major users (King, 1969; Peterson and Robinson 1969; Manderville & Rodda, 1970; Tarrant, 1970; Robinson, Peterson & Anderson, 1971; Bassett and Chorley, 1971; Unwin, 1973). This is because physical geog-

raphers deal mostly with point-valued data, where discontinuity is unlikely, whereas human geographers deal with area-valued data that are more prone to discontinuity. If area valued data are to be used for trend surface mapping the shapes and sizes of areal units should be more or less similar and small in relation to the total area mapped, so that better reference points could be obtained (Nordbeck, 1962). Moreover, the distribution of reference points should be more or less evenly spaced.

Trend surface analysis was first used in agricultural geography by Tarrant (1969). He used 158 Rural Districts as data points to "determine the more important underlying trends in some characteristics of Irish farming to emphasize, not the regional divisions, but the overall unity in the progression between extreme types." He examined only the surfaces calculated from the expansion of linear, quadratic and cubic polynomial functions of the form. In another study, Muller (1973) used trend surface analysis to test the validity of Von Thünen's model as an organizational construct and as an analytical tool in macro-geographical pattern of American agriculture. In his study, he used 1376 counties as data points which resulted in a good pattern to infer that the macro-Thunian distance relationship has strongly shaped the American agricultural development.

2.7 Multifactor Analysis:

Agriculture itself is a very complex, heterogeneous phenomenon, in which various aspects and characteristics are interrelated or interconnected. The production patterns in agriculture are functions of many factors. In order to manipulate a wide range of variables in agricultural research geographers have increasingly turned to advanced mathematical techniques. Factor analysis or principal component analysis were used by Kendall (1939), and Hagood (1941) in geographic research. Geographers, however, have used these methods first during the mid-1960's. Henshall and King (1966) used factor analysis to classify peasant agriculture in Barbados on the basis of crop-livestock combinations. Henshall (1966) used this technique to identify the relationships between various structures of agriculture in Barbados and recognized new agricultural regions.

A more common method used to analyse areal association is the regression analysis. Robinson and Bryson (1957) used this technique to identify the relationship in Nebraska between rural farm population and average annual precipitation. Maunder (1966) has studied the total agricultural production of New Zealand, where he used a multiple regression model to assess the association be-

tween twenty three agricultural and fifteen climatic variables. Clark (1967) studied the use of residuals from regression for the dairy cattle-pig rearing relationship.

Where a large number of variables are considered, a stepwise multiple regression analysis may be used. In the stepwise analysis, each variable is added to the equation in descending order so that the highest partial correlation of the variable in equation is considered first, and so on. Robinson, et al (1961) used this technique in their study of rural farm densities in the Great Plains of America.

The selection of techniques and methods for various stages in the study however, not only depends on the discussed technical literature but also on the actual situation of agriculture in Bangladesh as well as the purpose of investigation. The forthcomming methodology chapter will discuss it in details.

CHAPTER 3

METHODOLOGY

3.1 Measurement of Productivity:

The selection of a technique for measuring productivity depends, in most cases, on the structure of agriculture in a particular country and the purpose of the investigation. In this study the output per unit area approach in terms of monetary value has been used to measure cropland productivity. Since in Bangladesh more than one crop is raised from a single plot of land, cropping intensity must be considered in calculating the cropland productivity index. The cropping intensity index was calculated by dividing the gross cropped area by net cropped area. This is the most common method used in measuring cropping intensity in Bangladesh (First Five Year Plan, 1973-78; Ministry of Agriculture, 1974; Rashid, 1967)

To compute the index of cropland productivity, the gross production of each crop for each thana's cropped acreage was calculated from the yield and sown area data. The monetary value of each crop based on average market prices was used. The values for all crops were then added up to give the total value of production for each thana and then that value was divided by the total acre-

age of all crops in a thana. Finally, the result was multiplied by the cropping intensity index of the thana to give the value of production per acre of net cropland - that is, the index of cropland productivity.

The procedure of measuring the productivity index can be specified by the following formula:

$$P_x = \left(\frac{\sum_{i=1}^{n} A_i \cdot Y_i \cdot V_i}{\sum_{i=1}^{n} A_i} \right) CI_t$$

where,

P_x = Cropland Productivity Index

A_i = Acreage under the ith crop

Y_i = Yields per acre of the ith crop

V_i = Value of the ith crop

CI_t = Cropping Intensity Index of the t_{th} thana.

3.2 Study Units and the Variables:

In order to calculate the cropland productivity index and to analyse the patterns and spatial variations of the index value, the thana has been adopted as the basic areal unit. In terms of hierarchy the thana is the fifth ranking administrative district in Bangladesh. More statistical data are now being collected by thana,

since the Government of Bangladesh began to use it as the basic development planning unit. There are 411 thanas and two metropolitan areas, Dacca and Chittagong. On the average these thanas vary from 60-250 square miles in area (Islam, 1965). All the 411 thanas except the two urban centres have been included in this study. Such a small unit would give more accurate range of variations and lend itself better to trend surface analysis.

In accordance with the objectives of the study, eleven most important field crops were selected. Among the various crops that are grown widely all over Bangladesh, these eleven crops cover about 92 percent of the total cropped area (Table. 3.1). These 11 crops include 4 rice crops (aman, aus, boro and IRRI boro) and wheat which constitute 99 percent of all the creals grown. Pulses (include masur, khesari, gram and mash kalai), rape and mustard (grown mixed), and sugar-cane are important for protein and caloric value. Potato is a staple vegetable. Jute and tobacco are important cash crops. The range of variations in acreage among these crops is very great depending on the physical and socio-economic conditions. Rice crops occupy 78 percent of the total cropped area of which aman and aus are more or less evenly distributed all over Bangladesh. By contrast, boro, IRRI boro, jute and the remaining crops are highly localized. Although crops other

Table 3.1

Acreage, Percentage Occupency, Yields, Prices and Percentage of Production by Value of the selected 11 Crops in Bangladesh (1969-70).

Crop	Gross cropped area in '000 acres	% of total gross cropped area	Acre yields in Maund	Average market price in Rups.	% of production by value
*Aman Rice (local)	14,812.0	45.10	12.7	39.16	45.23
Aus Rice (local)	8,419.0	25.64	9.4	39.16	19.02
Boro Rice (local)	1,603.6	4.88	17.9	39.16	6.90
IRRI Boro (HYV Hybrid)	579.0	1.76	40.0	39.16	5.63
Wheat	269.0	0.90	9.5	23.00	0.36
Jute	2,465.0	7.50	14.1	30.91	6.60
Sugar-cane	410.0	1.25	489.9	3.00	3.70
Rape & Mustard	538.0	2.00	6.8	51.35	1.15
Tobacco	113.0	0.34	9.8	128.90	0.88
Potato	211.0	0.64	110.0	23.67	3.37
Pulses (legumes)	553.0	1.70	8.6	23.91	0.70
Total	29,974.1	91.71			93.52

* Local Aman, Aus and Boro are the traditional varieties of rice, whereas IRRI is the High Yielding Variety of hybrid rice.

Source: Agricultural Production Levels in Bangladesh, Bureau of Statistics, Ministry of Planning, Govt. of Bangladesh, 1976, and partly computed.

than rice and jute occupy much smaller acreages, they are very important to the farmers and to the country because of their higher physical yields or greater monetary value (Table 3.1). These eleven crops represent about 94 percent of the total crop production, by value.

Data on the cropped acreage and the physical yields per acre of these eleven crops were collected from the Office of Agricultural Statistics, Govt. of Bangladesh. As the agricultural statistics at the thana level are not readily available in published form, the study is restricted to the 1969-70 period. In fact, this was the only normal year free from all sorts of natural or man made catastrophes for a decade or more. Although the data for total and net cropped area for the 1969-70 period were not available at the thana level, it was possible to secure 1972-73 total and net cropped area statistics at the thana level. Since the degree of variations from year to year is very small (generally 1-5 per cent), it was decided to adjust 1972-73 thana statistics to the 1969-70 levels using the changes in net cropped area observed for each district.

The market prices for the selected crops were collected from the "Wholesale Price Series of Important Farm Products in East Pakistan" (presently Bangladesh) published by the Directorate of Agricultural Marketing, Government of East Pakistan. However,

prices for agricultural crops vary over time and in space. In fact, local market prices in Bangladesh vary by about 25-40 percent over time and by about 10-20 percent in space. In order to gage cropland productivity, an average price for each crop had to be computed for uniform application in all thanas. Thus monthly prices (shown in Appendix B), for the 1969-70 period were averaged for the year. The monetary value of the crops in the index was expressed in 'Rupees' (Rs. 4.76 = $1.00 U.S.[1]) and the physical yields of crops in 'Maund' (one maund = 82.242 lbs) per acre.

3.3 Computation of the Cropland Productivity Index:

In order to meet the first objective of the study, a computer program was developed to calculate the cropland productivity index for each thana in Bangladesh. Using the formula specified above, a program was designed to compute and print out not only the cropland productivity index, but also a number of other variables, such as the percentage of the area in each thana occupied by each of the selected eleven crops, the percentages of yield of the eleven crops for each thana relative to the national average, the production by value of individual crops and their total value per thana (Appendix A).

---

1. According to the 1969 Government rate of U.S. dollar equivalent.

However, the computed productivity index was used later in trend surface analysis and as the dependent variable in a stepwise regression model to measure the effect of acreage, yield and cropping intensity.

3.4 Trend Surface Analysis:

The second objective of the study was to analyse the spatial patterns of the productivity index. Simple cartographic representation of the patterns generally obscures the underlying trends of the distribution of a phenomenon. A special mapping technique, the trend surface mapping, (a) improves isarithmic mapping, (b) allows for precise description and comparison of map patterns, (c) enhances comparative areal analysis, and (d) facilitates process-response hypothesis testing (Chorley and Haggett, 1965).

Trend surface is a statistical procedure of contour mapping which estimates parameters for an equation representing a surface using least-squares criterion to explain variations in given data values (Z-values). The surface is fitted to the data values in such a way that the sum of squared deviations between the given values at data points and the height (value) of computed surface at those data points is minimized. However, trend surface does not fit the data points perfectly, so there are residual values (differences be-

tween the interpolated surface and the trend surface) which indicate random fluctuations or error of measurement not predicted by the fitted surface. This forms an assumed error, local components or residuals, which are defined as a set of apparent non-systematic fluctuations that are superposed in the large-scale patterns, but which may be systematically related to a spatial process.

The statistical equation derived from the trend surface explains variations in given data values (Z-value) distributed either regularly or irregularly in X-Y space. The equation describing the trend surface can be linear, in which case the surface is a plane; quadratic (in squared term), in which case the surface is a paraboloid; cubic (having a cubed as well as squared and linear terms), giving an additional point of inflection; and so on, up to the sixth degree for an equation with sixth order terms and lower order terms plus a constant, with the highest terms taken to the sixth power. The higher the order of the surface, the more the residuals will be minimized and the more computation will be required. Higher-order surfaces will reflect the variation in Z-values more accurately, but lower-order surfaces also may be quite useful in isolating important local trends from those that exist over a large area.

Trend surface analysis is considered as a process of spatial filtering. The order of the surface determines the upper limit of

variability, or frequency, of the input data which pass through the filter. Localized variations or anomalies or noises are blocked by the filter when a lower order is used, and are increasingly transmitted as the order of the surface increases. However, Unwin (1975) cautioned that there were difficulties with the practical use of higher order trend surfaces in geographic research. According to him, "it is difficult to imagine any a priori geographical theory that might predict surfaces of higher order than quadratic. Alternatively, and having fitted such surfaces, it is equally difficult to come up with any a posteriori theory to account for them so that they tend to be used solely as descriptive devices." Moreover, without a large number of very evenly spaced control points, and without a careful computer programming higher order trend surface analysis should not be attempted. However, Muller (1973) successfully tested the hypothesized macro-Thünian distance influence in American agricultural patterns using higher order trend surface analysis.

To make inferences about the data in trend surface analysis, a statistical significance test is required to identify or assess the best fitted surface or goodness-of-fit of the surface. These are four types of significance tests (Unwin, 1975):

(1) Does the total trend surface provide a fit significantly

different from zero?

(2) Does a trend surface order n+1 give a significant improvement over one of order n?

(3) Is a single specified trend parameter significantly different from zero? and

(4) Where, in the mapped area, is the fitted trend surface most reliable as an estimator of the population trend and where should it be treated with caution?

The second type of significance test is most commonly used in geographic research. This test is used to assess which order of the trend surface, applied to the same data points, seems to give the best result. The F-test is used to measure the significance of the trend surfaces.

$$F = \frac{\%\text{ of explanation given by the surface (\% RSS)}/df_1}{(1-\%\text{ RSS})/df_2}$$

df_1 = Degrees of freedom associated with the surface, equal to the number of constants in the trend equation less one for the base term.

df_2 = Degrees of freedom associated with the residuals. This is given by the total degrees of freedom in the data less df_1, those associated with the trend, i.e. df_2 = No. of observations - 1 - df_1.

To test the significance of the next higher order, the following

procedure is to be followed:

$$F = \frac{\text{Extra \% of RSS given by this surface}/df_3 \text{ the previous surface}}{(1 - \text{\% of RSS accounted for this surface})/df_4}$$

df_3 = No. of constants added to the previous order to make the present order equation.

df_4 = No. of observations - 1 - df_1 (the number of constants in the equation)

Trend surfaces were drawn to show trends and residuals in the spatial distribution of cropland productivity index in Bangladesh. The use of this with area-value data was justified in the sense that the areal units (thanas) were small and the large number (411) of control points (considered as the centre of the area) were approximately evenly spaced (Fig. 3.1). Although attempts were made to compute surfaces of higher orders up to the sixth term, this study examined only those surfaces derived from linear, quadratic and cubic polynomial functions. These surfaces have been used in the study, (1) to identify the patterns and levels of productivity, (2) to observe significant changes in the direction of successive trend surfaces, and (3) using the best-fit surface, to explain the spatial trends of cropland productivity by the degree to which it corresponds to the areal variations of mean annual rainfall, pre-monsoon rainfall, density of agricultural labour force and owner-operated farms in Bangladesh. This was done by visual

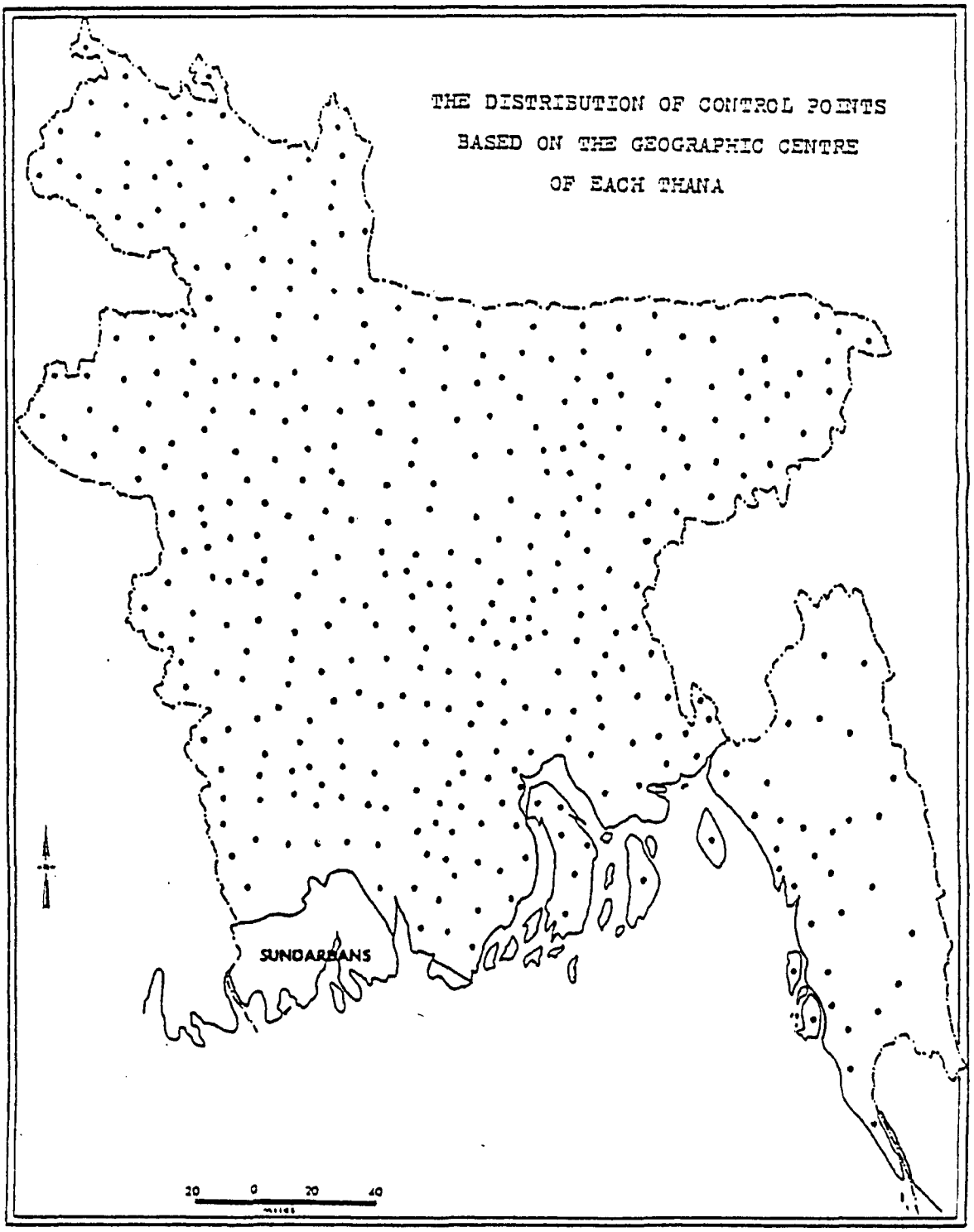


Fig. 3.1

comparison of maps. Fourthly, using residual maps, an attempt was made to suggest an explanation for the local variations in productivity. An F-test was applied to find the significance of the respective surface at the 99% level.

3.5 Stepwise Multiple Regression:

The third objective of the study was to analyse the effects of acreage and yields of different crops and the cropping intensity on cropland productivity. It was assumed that under a prevailing set of physical, socio-economic, technological and organizational conditions, the acreage, and yields of different crops and cropping intensity (as the three main components of the productivity index) should have some effects on the variations of cropland productivity in Bangladesh. In order to measure their relative effects, a stepwise multiple regression model was employed.

The stepwise multiple regression procedure was designed in such a way that it begins with a bivariate equation and proceeds by adding one variable at a time until a complete equation is attained for all the variables used. The order in which the variables are entered into the regression equation is not arbitrary but depends on their contribution to the explanation of the remaining variance in the dependent variable (Taylor, 1977). Thus, the first equation

(bivariate) begins with the independent variable that has the highest correlation with the dependent variable. Then the second variable is added to the one that gives the highest partial correlation coefficient with the dependent variable when the independent variable is allowed for. This process is repeated by selecting among the remaining independent variables the one with the highest partial correlation coefficient when the independent variables already considered are allowed for.

A stepwise regression analysis was prepared using package programs from the Statistical Analysis System (SAS) and the Bio-Medical Data Processing (BMDP) mannuals. This approach is suitable for indentifying the crops that are responsible for high or low values in the productivity index either because of their acreage or yields. Moreover, it allows one to assess the relationship that cropping intensity has to the land productivity of Bangladesh.

In addition to VAR_1 = Cropland Productivity Index, the dependent variable, the following set of independent variables were chosen for the analysis:

VAR_2 = Acreage of Aus rice as % of the total of 11 crops in a thana

VAR_3 = Acreage of Boro rice as % of the total of 11 crops in a thana

VAR_4 = Acreage of IRRI Boro rice as % of the total of 11 crops in a thana

VAR_5 = Acreage of Aman rice as % of the total of 11 crops in a thana.

VAR_6 = Acreage of Wheat as % of the total of 11 crops in a thana.

VAR_7 = Acreage of Potato as % of the total of 11 crops in a thana

VAR_8 = Acreage of Pulses as % of the total of 11 crops in a thana

VAR_9 = Acreage of Mustard as % of the total of 11 crops in a thana

VAR_{10} = Acreage of Jute as % of the total of 11 crops in a thana

VAR_{11} = Acreage of Sugar-cane as % of the total of 11 crops in a thana

VAR_{12} = Acreage of Tobacco as % of the total of 11 crops in a thana

VAR_{13} = Yields of Aus rice in a thana as % of national average

VAR_{14} = Yields of Boro rice in a thana as % of national average

VAR_{15} = Yields of IRRI Boro rice in a thana as % of national average

VAR_{16} = Yields of Aman rice in a thana as % of national average

VAR_{17} = Yields of Wheat in a thana as % of national average

VAR_{18} = Yields of Potato in a thana as % of national average

VAR_{19} = Yields of Pulses in a thana as % of national average

VAR_{20} = Yields of Mustard in a thana as % of national average

VAR_{21} = Yields of Jute in a thana as % of national average

VAR_{22} = Yields of Sugar-cane in a thana as % of national average

VAR_{23} = Yields of Tobacco in a thana as % of national average

VAR_{24} = Cropping Intensity Index for the thana.

In a parametric statistical test of this kind the variables in the regression equation should have a normal distribution. For the goodness-of-fit to the normal curve the Kolmogorov-Smirnov (KSLTEST) test was used. All 411 thanas were considered in this test. It has been found that even with such a large sample the distribution of some data variables, particularly acreages (except VAR_2), were found to be non-normal because of their high localization. However, before using the regression model these variables were transformed to a new scale to achieve the normality of the data wherever necessary.

Another condition for a parametric statistical test is that the observations must be independent and display a spatially random pattern. In this study to test the randomness of the productivity index (the dependent variable), Moran's spatial autocorrelation test for a Pattern in K-color maps (Moran, 1948) was employed, and a slight positive spatial autocorrelation among the areal units was established. However, the degree of relationship was insigni-

ficant (r_a = 13%), and it was concluded that the spatial pattern of productivity index was random. Consequently the variable was subjected to a stepwise regression and trend surface analysis.

The strength of the relationship between the variables are tested using the F-test. The level of productivity or significance level was specified at α = 0.05/95%.

CHAPTER 4

ANALYSIS OF CROPLAND PRODUCTIVITY PATTERN

4.1 The Spatial Pattern of Cropland Productivity:

Cropland productivity values for each thana (Appendix A) were plotted in a choropleth map to show their distribution over Bangladesh (Fig. 4.1). The values were also compiled by district, and the mean as well as the highest and the lowest thana values in the district were compiled (Table 4.1). To provide a basis for comparison, the national mean cropland productivity value was calculated (Rs. 808.92 per acre).

In general, Bangladesh may be divided into cropland productivity areas of two categories - those, whose values are above the national average, and those whose values fall below the national average, whereas the range of values in the first category is great, it is small in the second.

4.1.1 Areas of High Cropland Productivity:

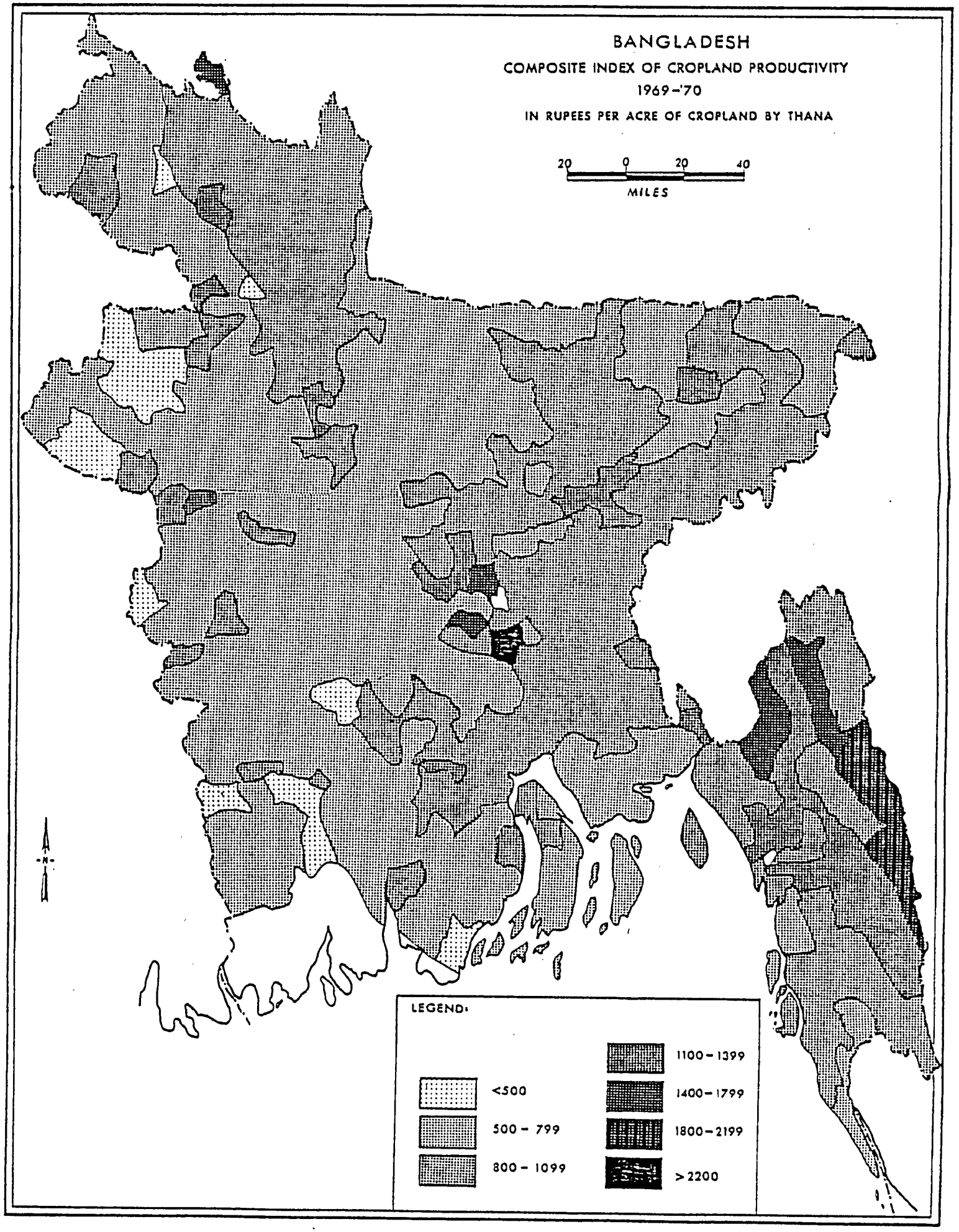
Areas of high cropland productivity comprise most of the eastern districts of Chittagong Hill Tracts, Chittagong, Comilla, Sylhet and Kishoregonj, the north-western districts of Rangpur and Bogra, the southern district of Barisal, and the central district of

Table 4.1

Cropland Productivity by Districts

District	Rank	Mean Value	Minimum Value	Maximum Value	Range
Dacca	2	1003.14	496.77	3583.04	3086.27
Kishoregonj	6	907.36	625.22	1333.08	707.86
Mymenshingh	13	690.41	579.28	848.85	269.57
Tangail	15	655.68	544.73	805.82	261.09
Faridpur	12	740.27	496.53	952.59	456.06
Chittagong	2	998.65	550.72	1369.17	818.45
Chittagong-Hill Tracts	1	1251.47	786.90	2008.69	1221.79
Noakhali	10	775.38	596.16	1142.05	545.89
Comilla	4	978.77	804.32	1283.25	478.93
Sylhet	7	857.35	594.76	1264.45	669.69
Rajshahi	18	623.20	382.45	1109.35	726.90
Dinajpur	14	670.01	471.70	858.86	387.16
Rangpur	5	933.73	731.02	1593.29	862.27
Bogra	8	808.92	524.42	1127.77	603.35
Pabna	11	758.31	586.80	939.13	352.33
Khulna	16	631.65	457.83	829.38	371.55
Barisal	9	806.65	546.75	1119.22	572.47
Patuakhali	19	618.95	435.38	858.10	422.72
Jessore	17	628.05	488.69	963.96	475.27
Kushtia	20	612.46	466.45	802.73	336.28
Bangladesh		808.92	382.45	3583.04	3200.59

Fig. 4.1



Dacca (Fig. 4.1 and Table 4.1). The highest values were recorded near the capital city, Dacca (Tangibari, Munshigonj, Tejgaon, Savar and Sirajdikhan). However, the presence of some lower than average values in the Dacca district have reduced its mean to second highest in Bangladesh. The Chittagong Hill Tracts District has the highest mean value, only Nakhoyongchari thana of this district has an index value below the national average. Chittagong district has the third highest mean value but three of its thanas (Teknaaf, Kutubdia, and Banskhali) have cropland productivity values below the national average. Comilla, boasting the fourth highest mean value, is the only district in Bangladesh where no thana is found to be below the national average. Although Sylhet district has a high mean value and ranks seventh, it has many thanas with low cropland productivity. Kishoregonj agricultural district has shown a pretty high average values whereas, the adjacant Mymenshingh has a low average value. Rangpur and Bogra of the north-western part of the country are also found to have high average values. Rawmari of Rangpur and a few other thanas of Bogra district, however, have values below the national average. In the south, Barisal has an index value just above the national average.

4.1.ii Areas of Low Cropland Productivity:

The areas of low cropland productivity are concentrated in the western part of the country. Indices of less than 500 are common in the districts of Rajshahi, Khulna, and Dinajpur (Nawabgonj, Godagari, Porsha, Niamatpur, Manda and Mahadebpur thanas of Rajshahi, Dacope, Dumuria and Satkhira thanas of Khulna, and Ghoraghat and Khanshama thanas of Dinajpur). In addition, the Meherpur thana of Kushtia, Lohagara of Jessore, Alfadanga of Faridpur, Khepupara of Patuakhali and Saturia of Dacca are found to be very low productivity thanas. The lowest index value recorded is at Nawabgonj of Rajshahi district (Table 4.1). Index value ranging from 500-800 (second level in the map) are most common in the western, central and southern districts. Noakhali, Patuakhali, Faridpur and Mymenshingh in addition to those already mentioned above, belong mostly to this level. However, small isolated pockets of high productivity values, found in all of the above districts, suggest the influence of nearby urban centres.

The spatial patterns of cropland productivity, based on a choropleth map of 411 thanas, have revealed many variations of local origin. The large number of cases precludes individual analysis of discrete areas, and requires the use of a generalized

spatial pattern for more effective explanation in terms of certain causes or processes (Chorley and Haggett, 1965). Trend surface mapping is a suitable method of spatial filtering whereby one can measure directly how much of the information conveyed by a map is "singal" (i.e. a response to the physical and socio-economic influences) and how much of it is due to "noise" or local random variation (Muller, 1973). Therefore, a trend surface analysis of the spatial patterns of cropland productivity in Bangladesh will follow.

4.2 Trend Surface Analysis:

Polynomial trend surfaces up to the sixth order were fitted to the 411 productivity index values. The results (Tables 4.2 and 4.3) give a complete analysis of variance and goodness-of-fit for the trend surfaces. For the first order linear surface the F-observed is 51.301 with df = 2,409 which is highly significant at the 99.99% level. Variation in observed values (i.e. % reduction in sum of squares) explained by the surface is 20.11%. The addition of three quadratic components over the linear surface (F-ratio 8.865), is also significant at the 99.9% level . By adding another four cubic components the surface was further improved giving an F-value of 12.186 which is also highly significant

Table 4.2 Analysis of Variance of the Trend Surfaces of Agricultural Productivity in Bangladesh

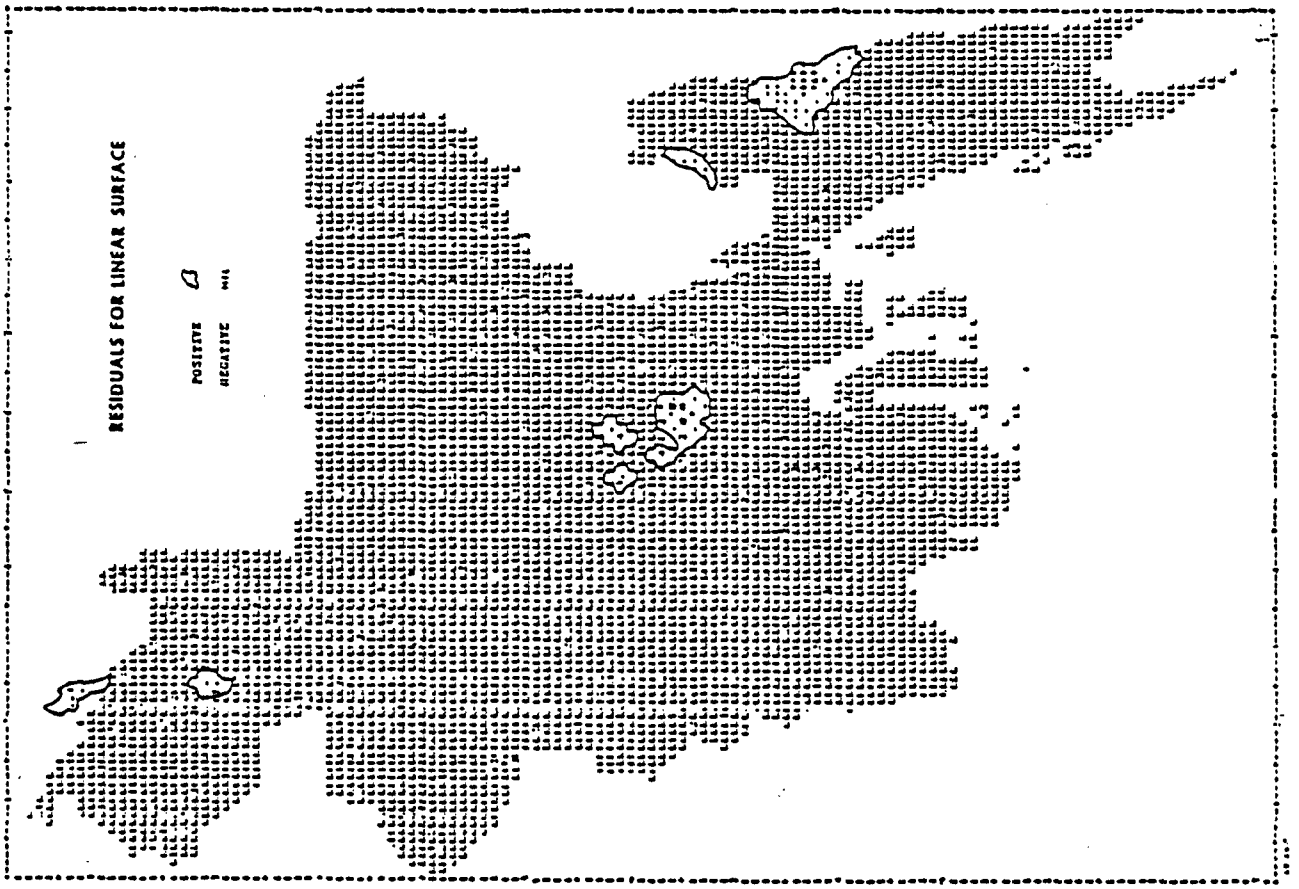
Source of Variation Total, 411 data points df=410	Degrees of Freedom	% of variation explained or % of reduction in sum of squares (RSS)	Standard Deviation	F-Observed	F-critical value from the Table (Lindley and Miller, 1962)	
					$\alpha = 0.01$	$\alpha = 0.05$
Due to Linear surface with 3 constants	2	20.11				
Due to residuals over Linear surface	408	79.89	217.63	51.301	4.61	3.00
Due to Quadratic components	3	4.92				
Residuals from Quadratic surface	405	74.97	210.83	8.865	3.78	2.60
Added Cubic components	4	8.14				
Residuals from Cubic surface	401	66.83	199.06	12.186	3,32	2,37
Added Quartic components	5	1.25				
Residuals from Quartic components	396	65.58	197.19	1.894	3.02	2.21
Added Quintic components	6	1.87				
Residuals from Qunitic surface	390	63.71	194.35	2.4	2.80	2.10
Added Sextic components	7	0.73				
Residuals from Sextic surface	383	62.98	193.23	0.8	2.64	2.01

Table 4.3 Goodness-of-fit for Trend Surfaces

Surface	% RSS obtained/R^2	Percent Added in RSS/R^2	Coefficient of Correlation in%	Statistical Significance
Linear	20.11	–	44.85	Significant at $\alpha = 0.01$
Quadratic	25.03	4.92%	50.03	Significant at $\alpha = 0.01$
Cubic	33.17	8.14%	57.59	Significant at $\alpha = 0.01$
Quartic	34.42	1.25%	58.67	Not Significant
Quintic	36.29	1.87%	60.24	Significant at $\alpha = 0.05$
Sextic	37.02	0.73%	60.85	Not Significant

at the 99.9% level and better than the second order surface. Further addition of quartic, quintic and sextic components did not improve the fit as much as the first three surfaces. The quintic surface with an F-value of 2.4 is significant only at the 95% level but not at the 99.9% level. The other two however, are not significant. The meaningful improvement in the first three orders of the trend surfaces suggests that the generated patterns may be comparable to certain causes or processes. The most dramatic improvement of coefficient of determination (R^2) from the quadratic to the cubic surface underscores the importance of the spatial patterns of the third order cubic trend surface. Thus, it can be seen from the tables and maps that by decreasing the level of generalization from linear to cubic trend surface, there is a concomitant increase in the goodness-of-fit of the data. Thus the cubic trend surface was found to be the best fitting surface for cropland productivity in Bangladesh.

Computer maps for all the six orders of trend surfaces with their residuals (Fig. 4.2 through Fig. 4.7) reveal the differences. The linear trend surface map shows a highly generalized pattern wherein the whole country is divided into two parts. The eastern part represents a high productivity region with a value level ranging from 800-1100, which is just above the national average.



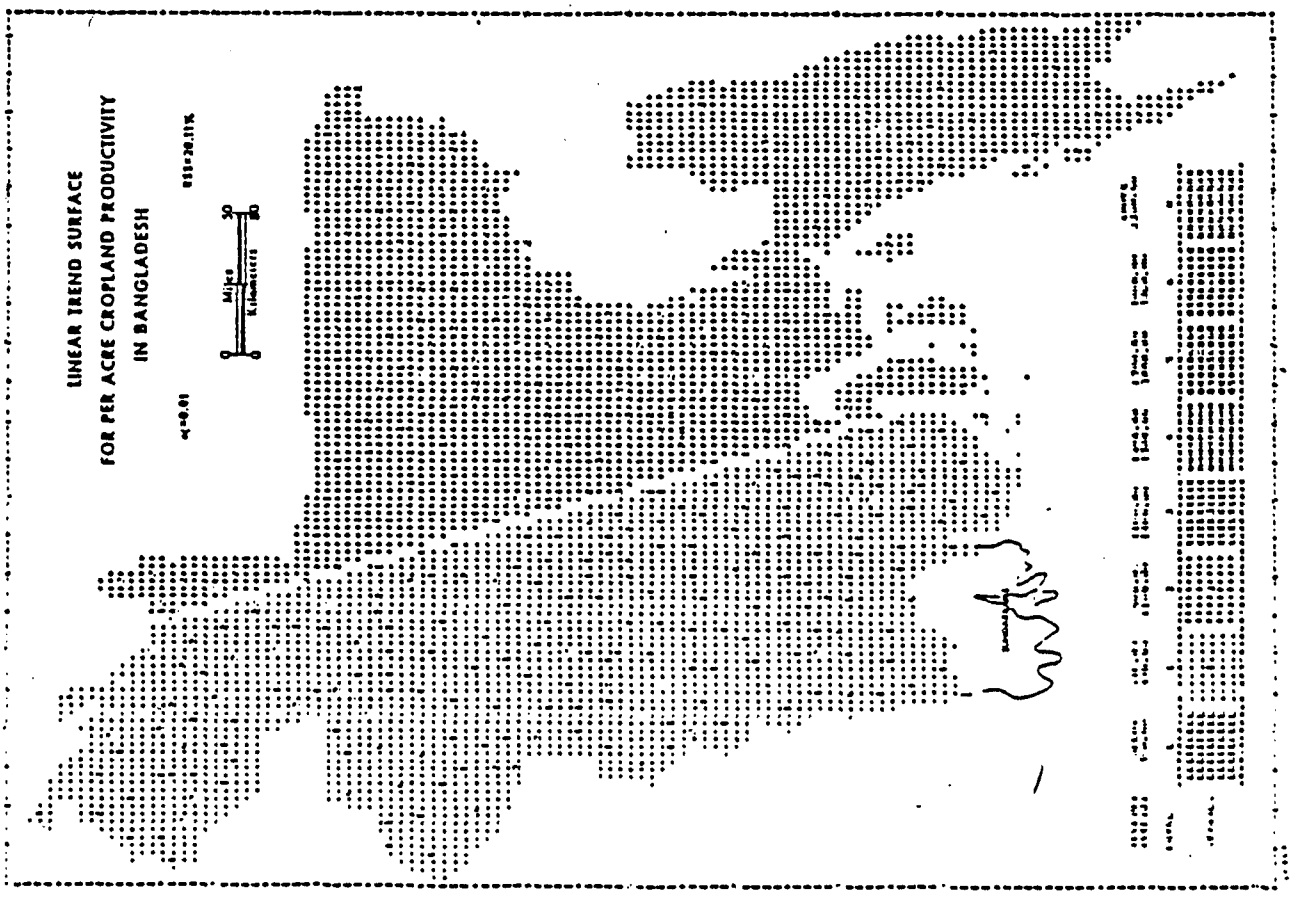
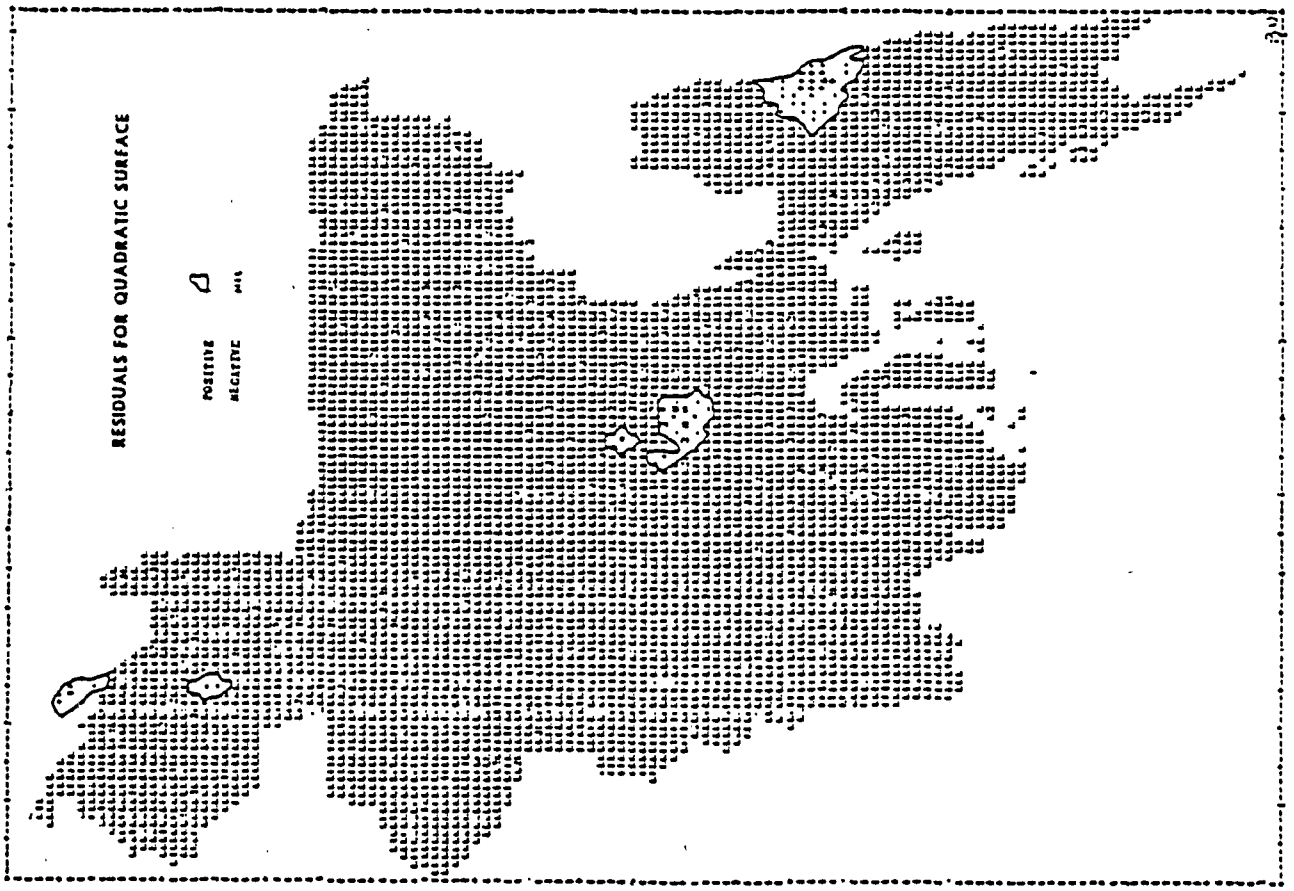


Fig. 4.2



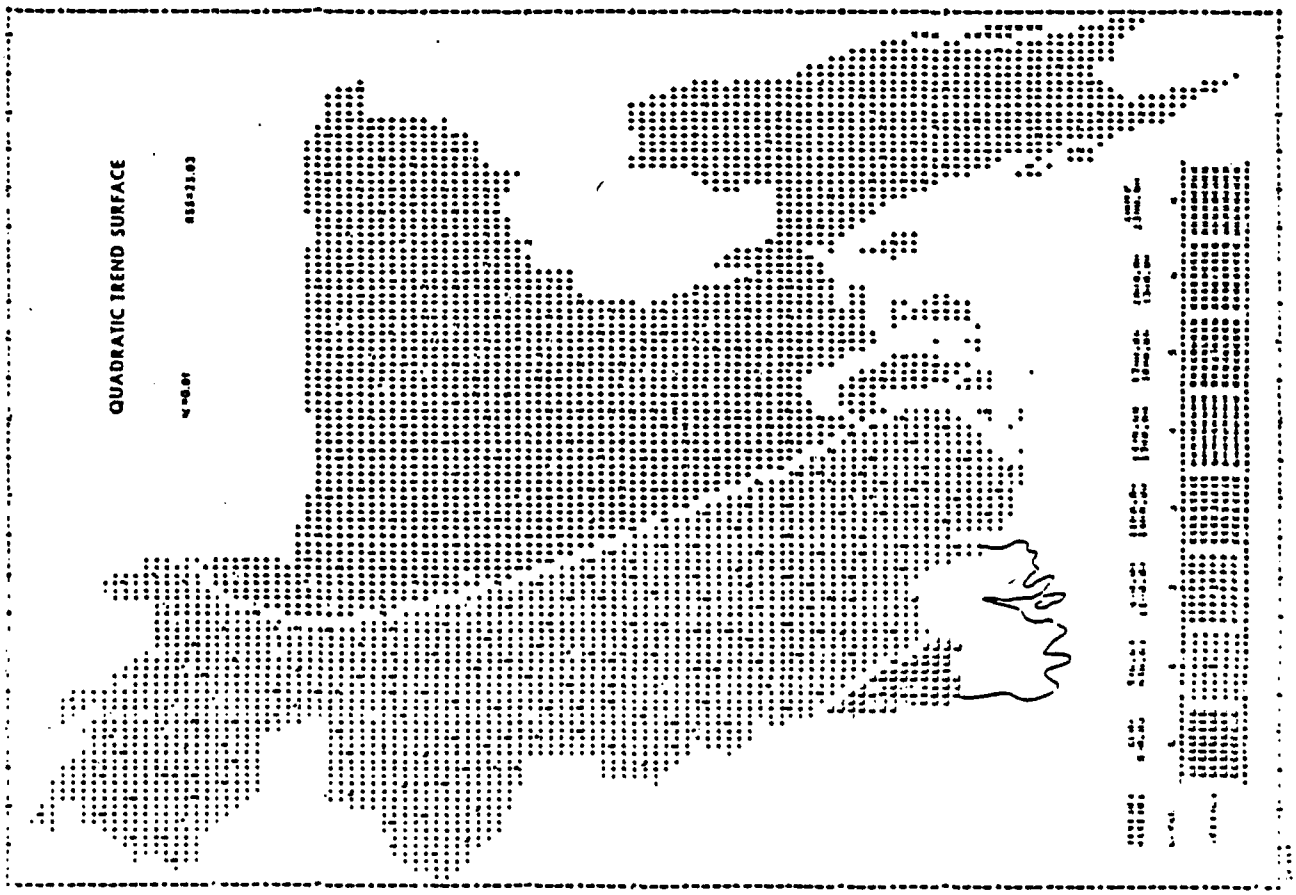
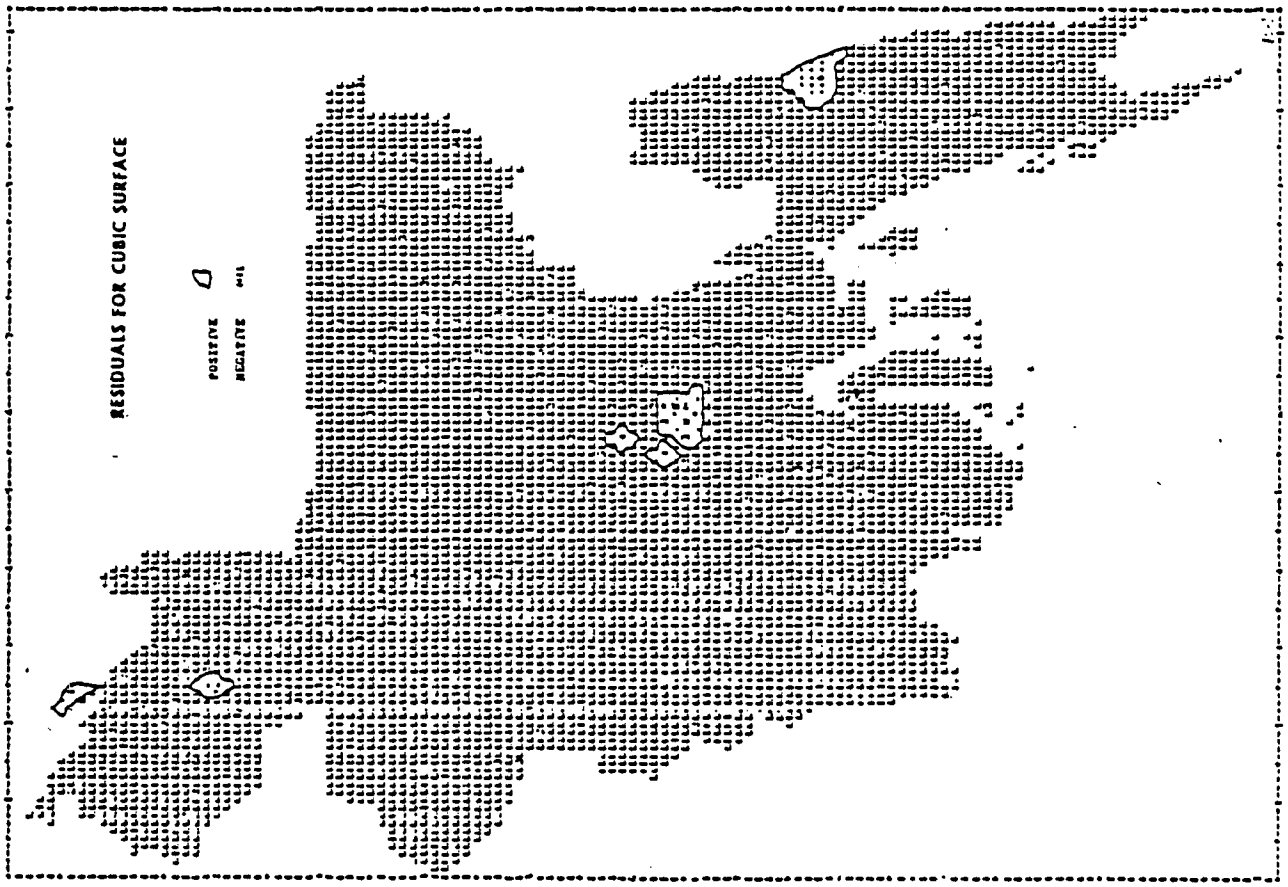


Fig. 4.3



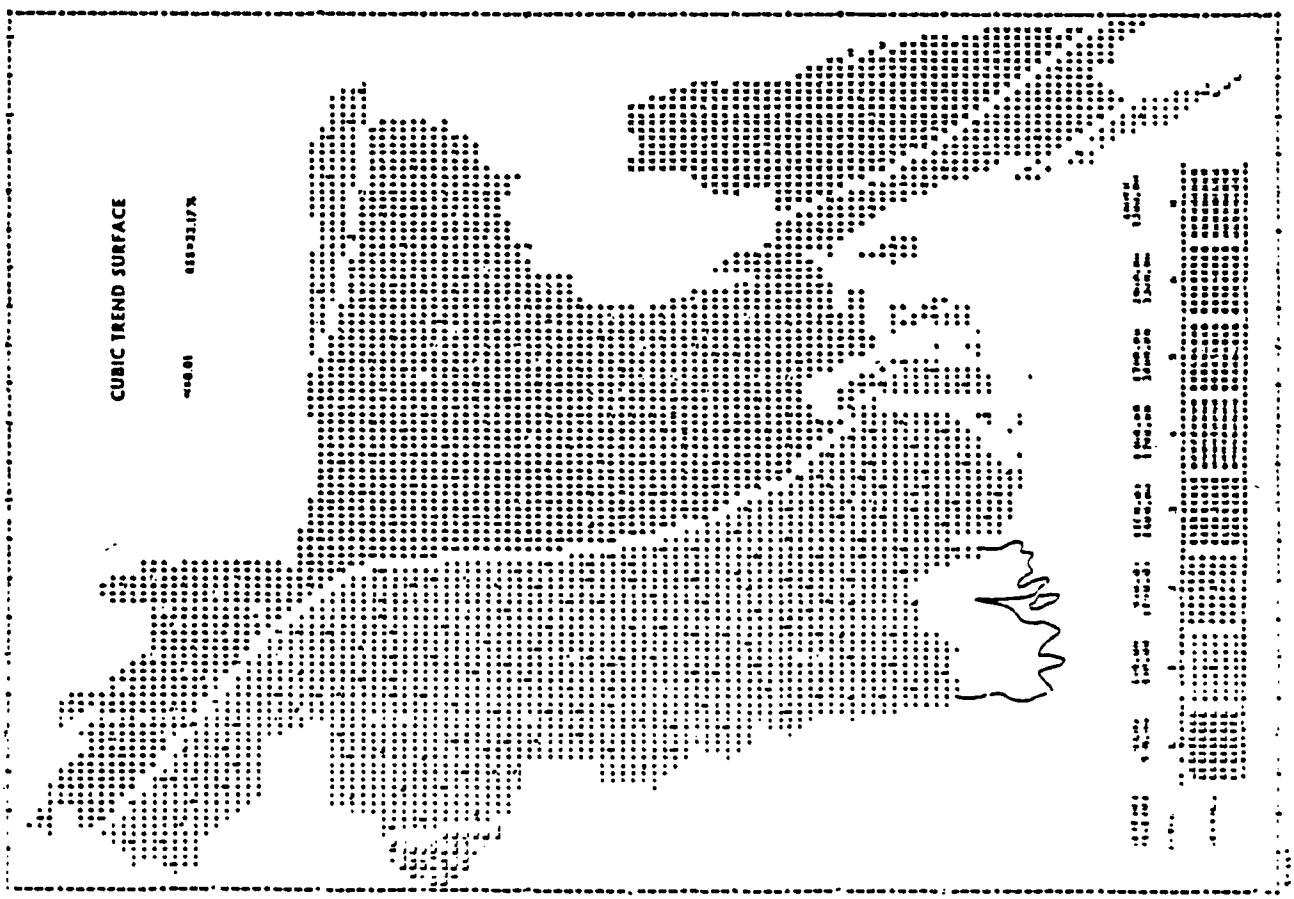
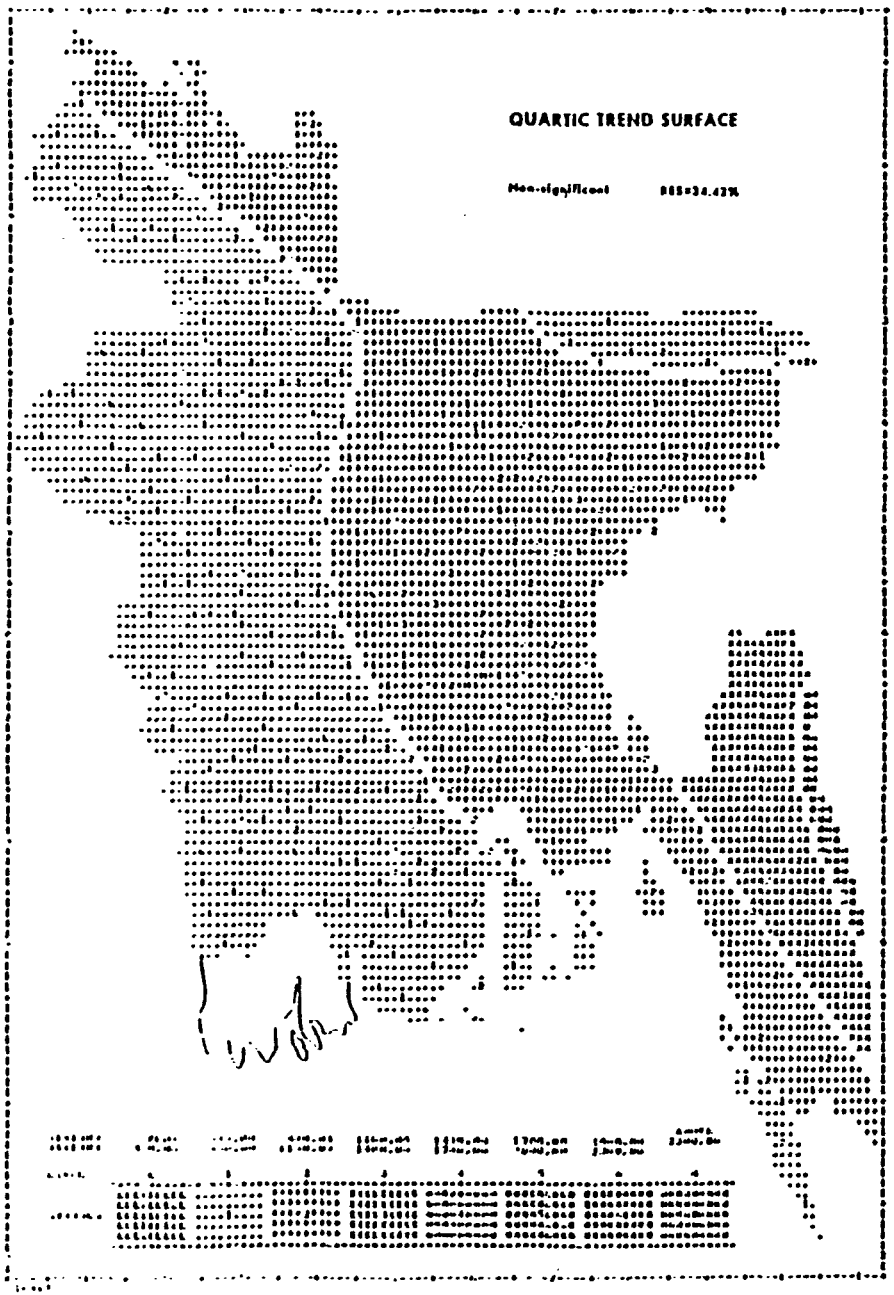


Fig. 4.4



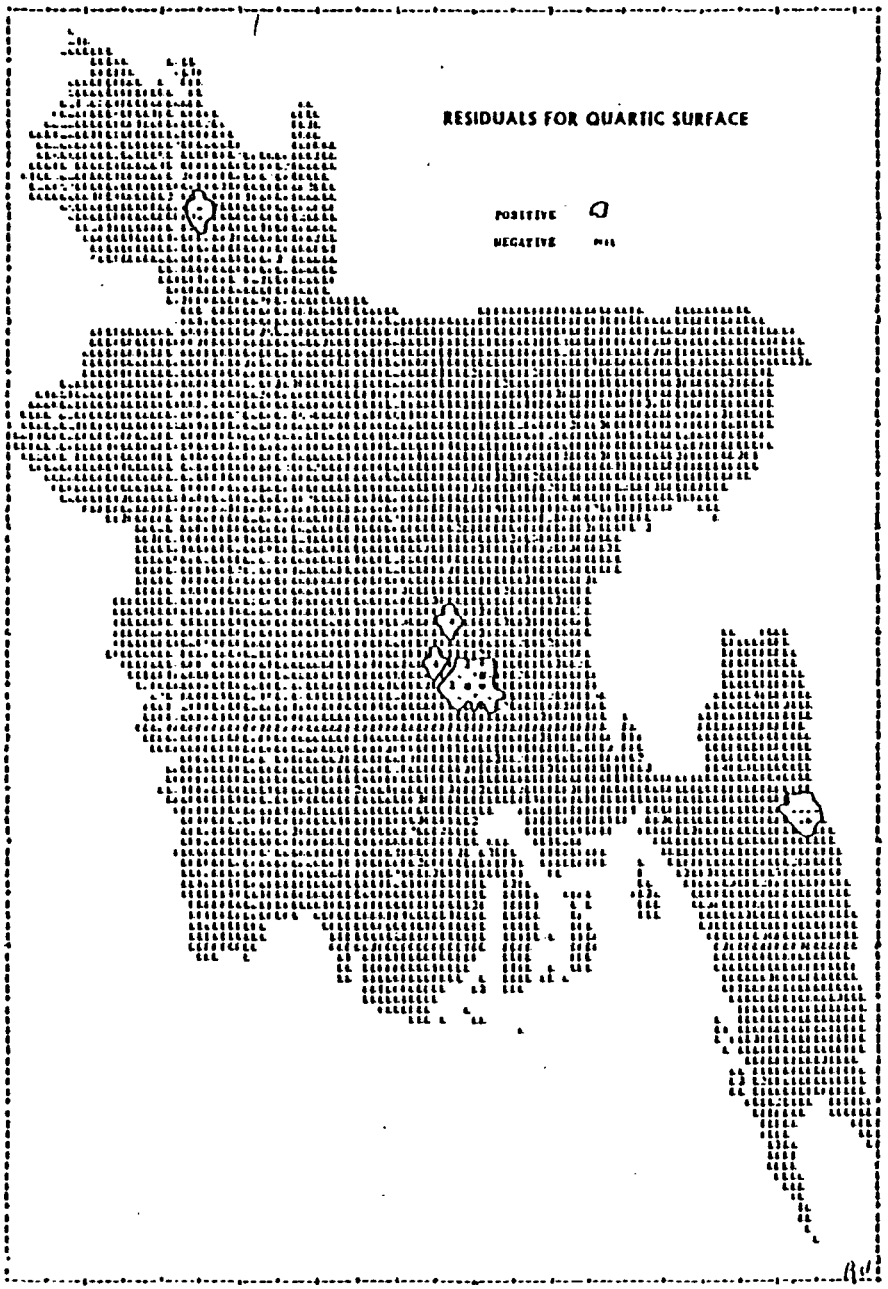
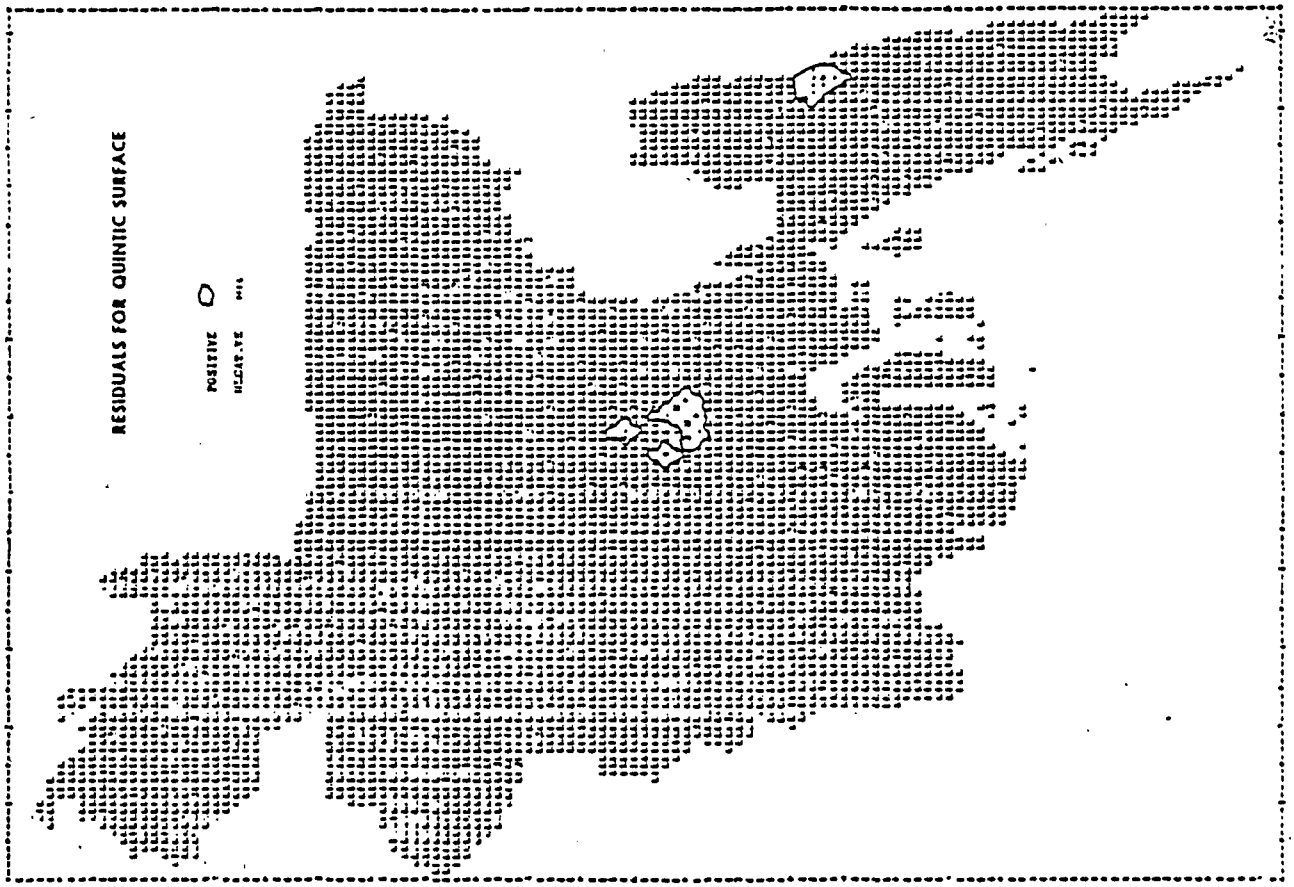


Fig. 4.5



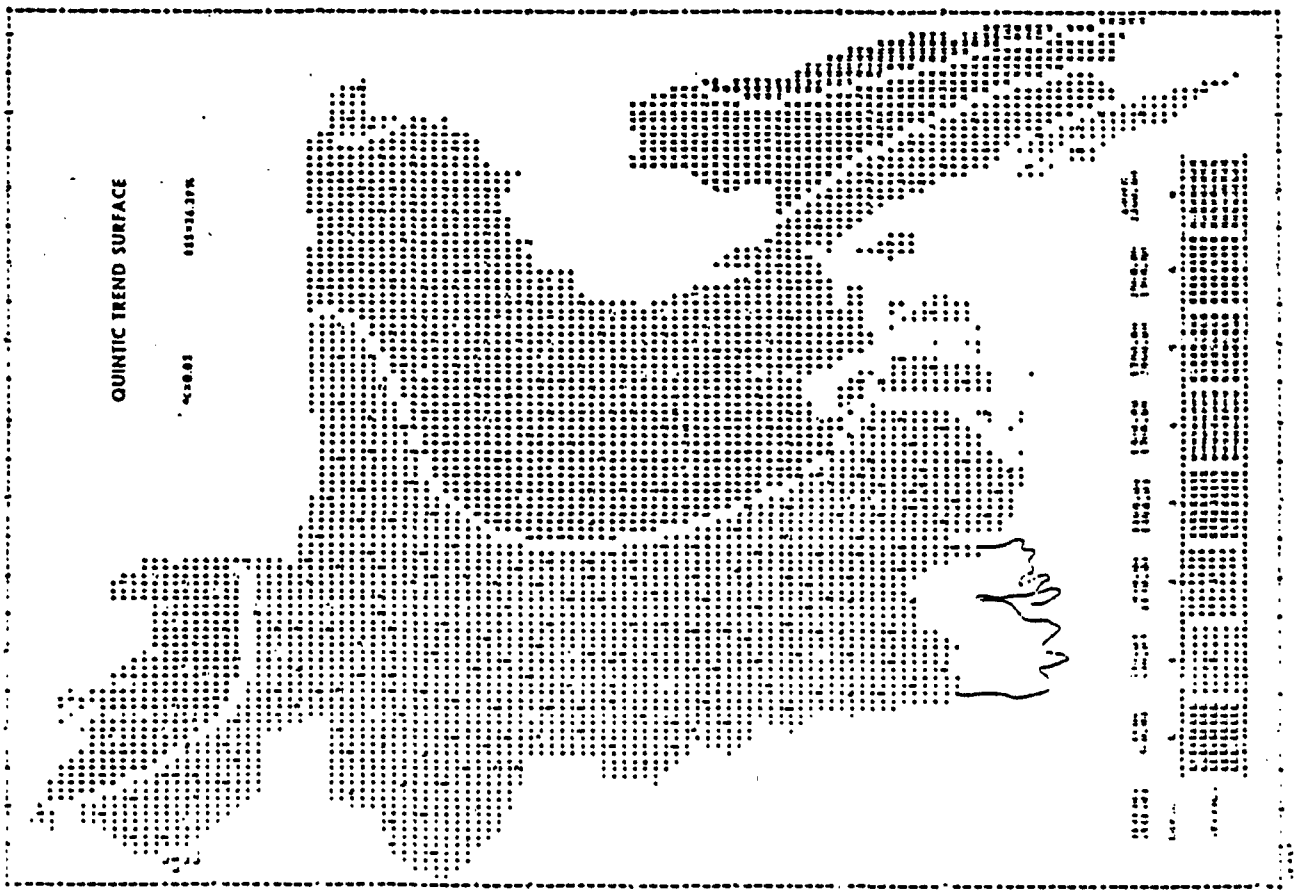
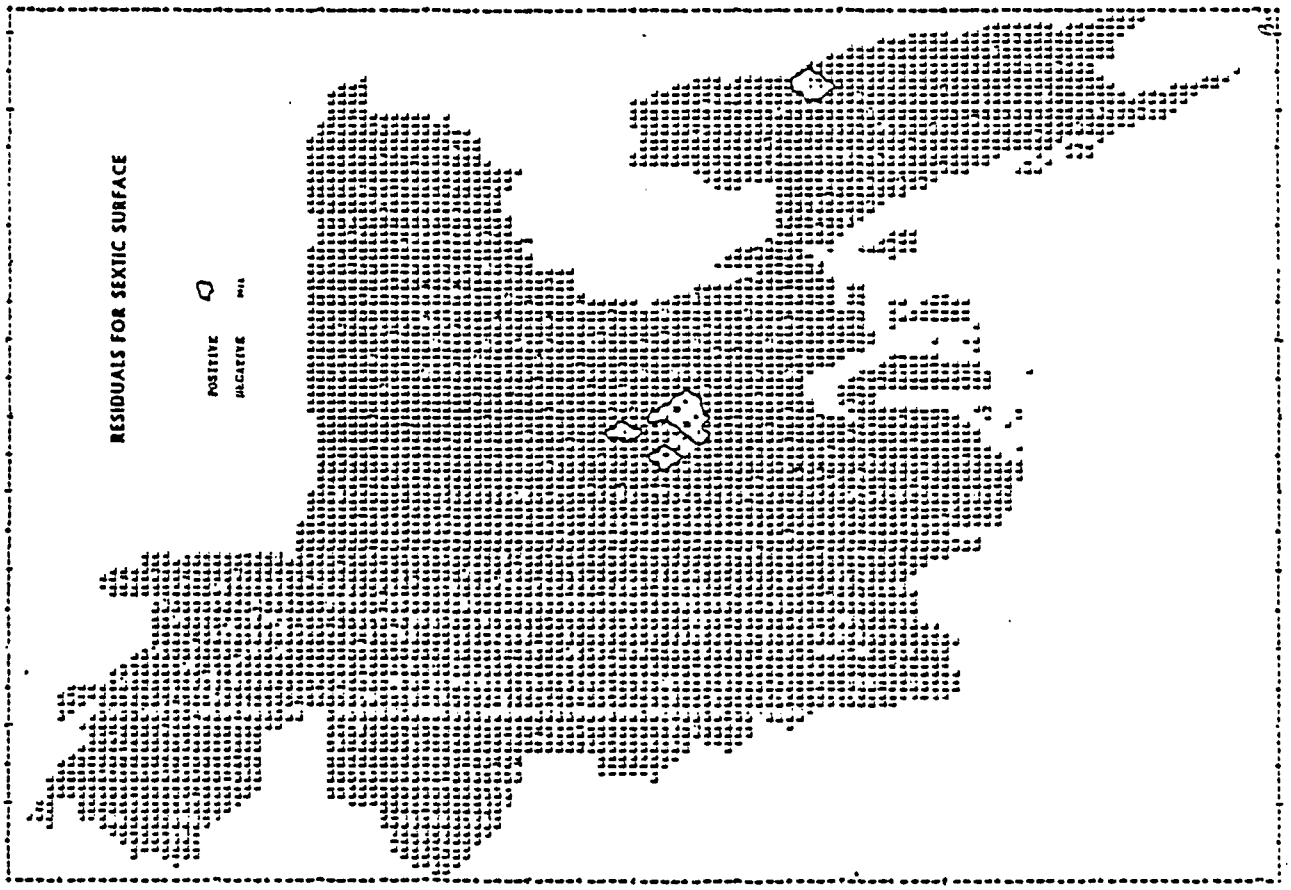


Fig. 4.6



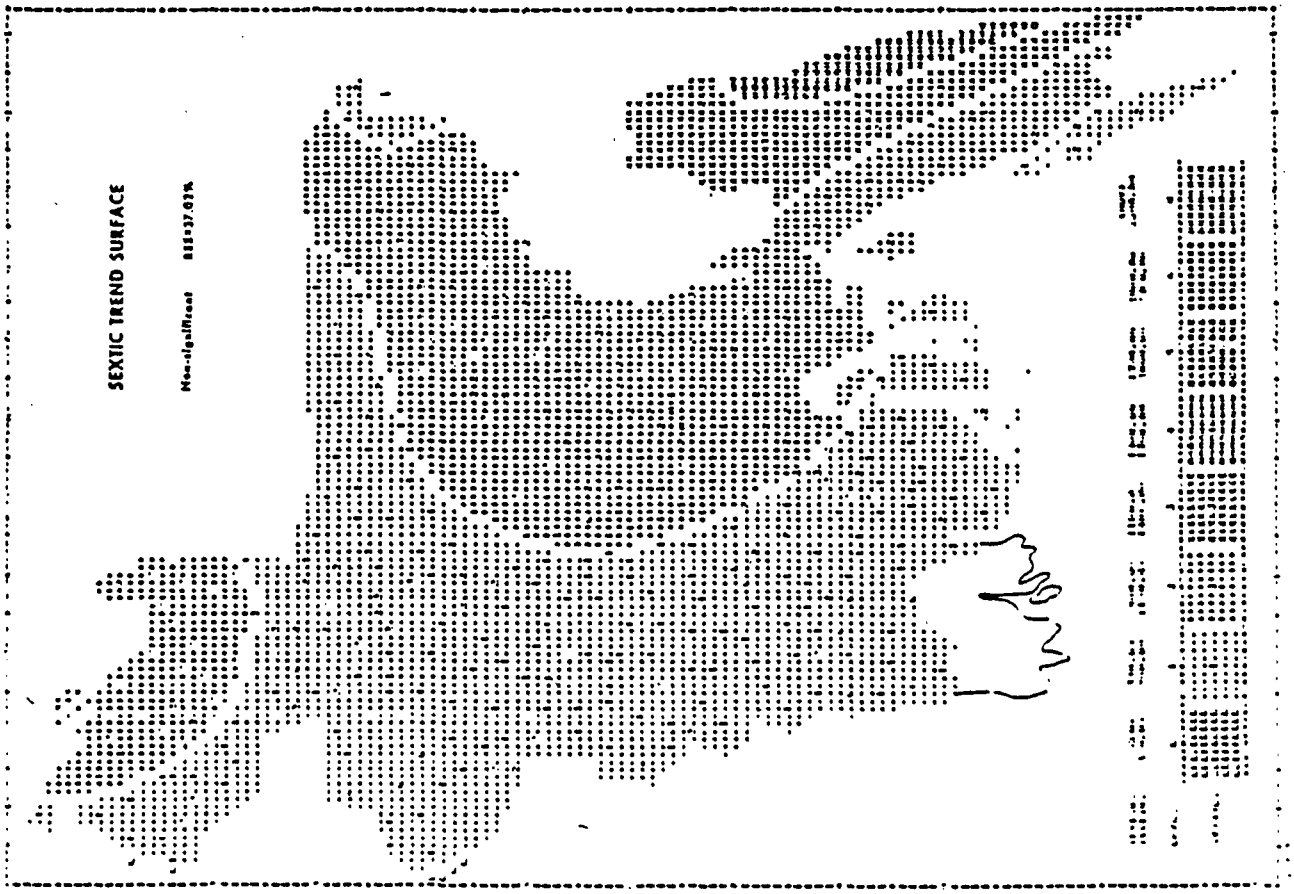


Fig. 4.7

The western part is the low productivity region with a value level ranging from 500-800, which is just below the national average. The quadratic trend surface map (Fig. 4.3) is somewhat more complex as it includes two more regions: one of very low values in the south-west corner and another of very high values in the south-east corner of the country. The cubic trend surface map also showed four categories of values, but it has improved the regional pattern of cropland productivity to the best possible levels of explanation. The last three higher order trend surface maps (Figs. 4,5, 4.6 and 4.7) further improved the fit, but the patterns have less statistical significance. These surfaces may be useful for describing the gradient in the cropland productivity patterns.

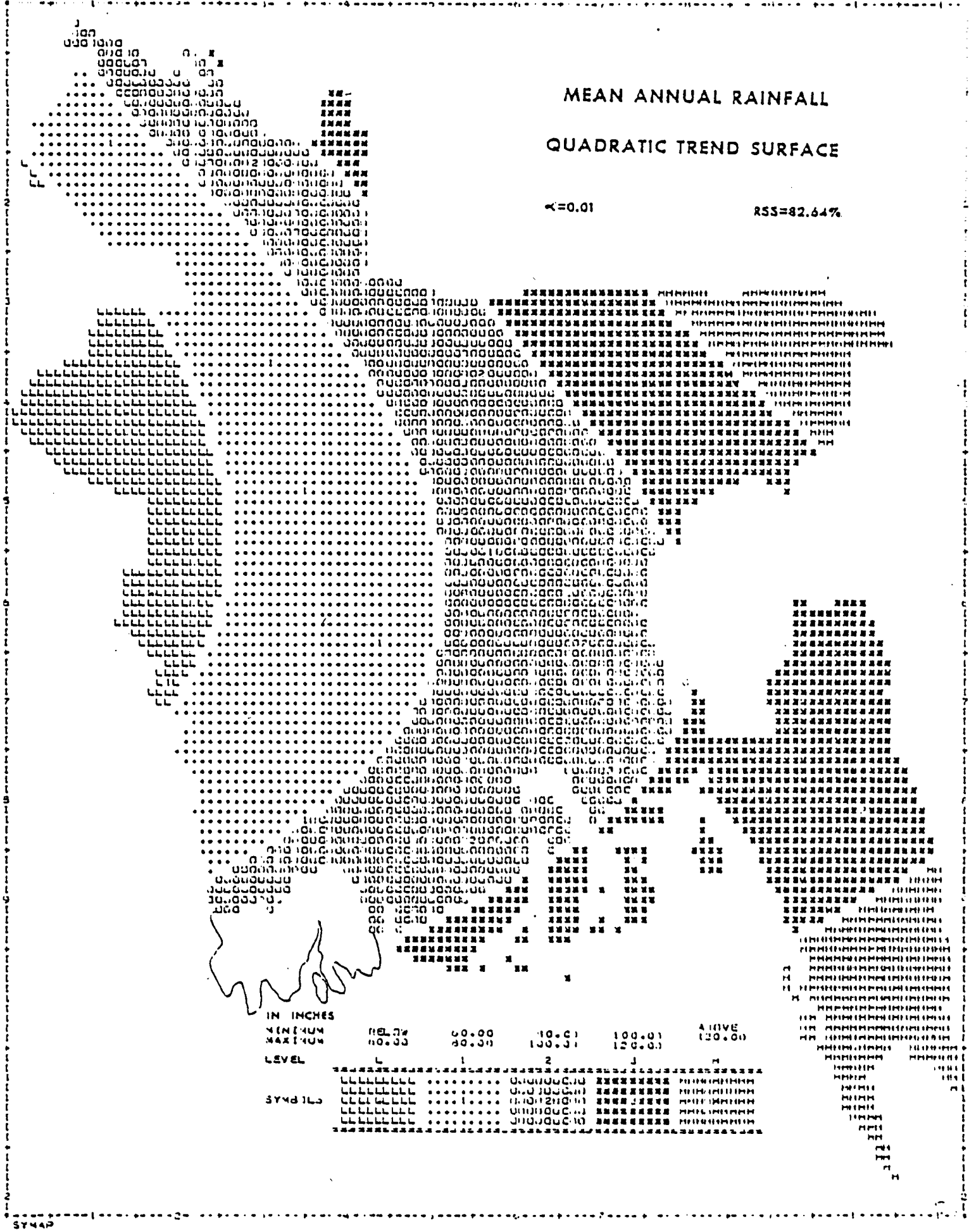
4.2.i Comparative Analysis:

Spatial trends of cropland productivity as determined by the cubic surface can be related to certain causes or processes.

a) First of all the patterns are comparable to the distribution of rainfall in Bangladesh. The performance of traditional crop production in Bangladesh profoundly depends on weather conditions, particularly rainfall. A second order trend surface map (quadratic) was drawn using the district-wise mean annual rainfall data for Bangladesh collected from the Directorate of Agriculture, Govt. of Bangladesh (Fig. 4.8). Another map of pre-monsoon

mean rainfall in Bangladesh, drawn by Ahmed (1978), is also presented here (Fig. 4.9). The regional patterns of rainfall in both maps are found to have a close relationship with the distribution of cropland productivity in Bangladesh. It shows that areas with higher rainfall have higher productivity, and vice-versa. However, a few areas of very high rainfall show a negative relationship between cropland productivity and rainfall. This may arise for other reasons. The foothill areas of northern Sylhet and Mymenshingh is susceptible to soil erosion, and hence lower yields. The southern coastal regions of Barisal, Patuakhali, Khulna, and Noakhali because of salinity in the soils crops can seldom grow well in the winter-dry period. The southernmost hill strip of Chittagong and Chittagong Hill Tracts districts is also a poor soil area affected by salinity in dry season.

b) Socio-economic factors also have a powerful influence on cropland productivity in Bangladesh. One of these factors is the density of agricultural labour force, for which a cubic trend surface map was prepared using the district agricultural labour force data (Fig. 4.10) The regional trends that showed up in this surface seem to have a very close positive relationship with the trend in cropland productivity, even closer than those of mean rainfall. Owner-operated farms also have higher productivity than



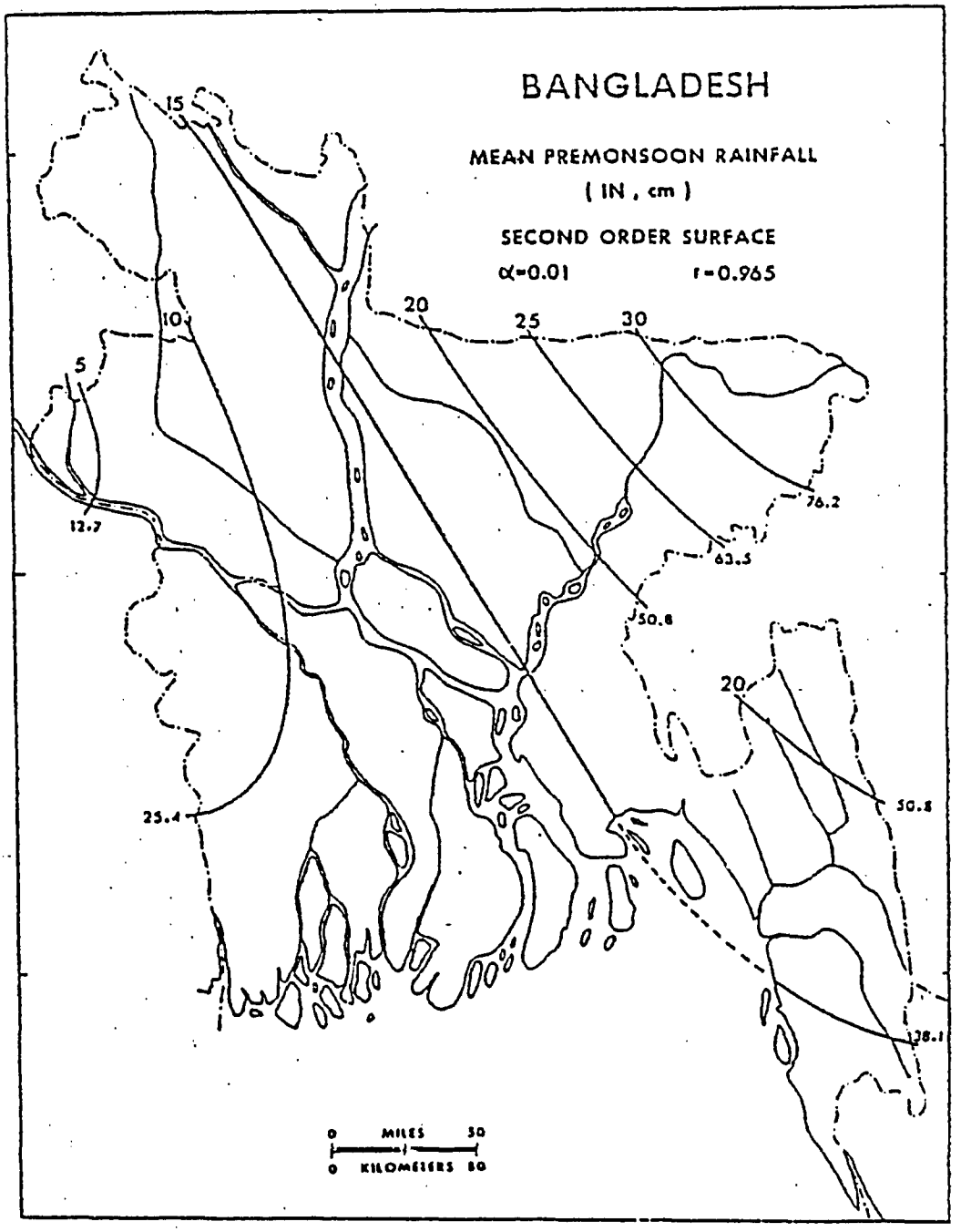
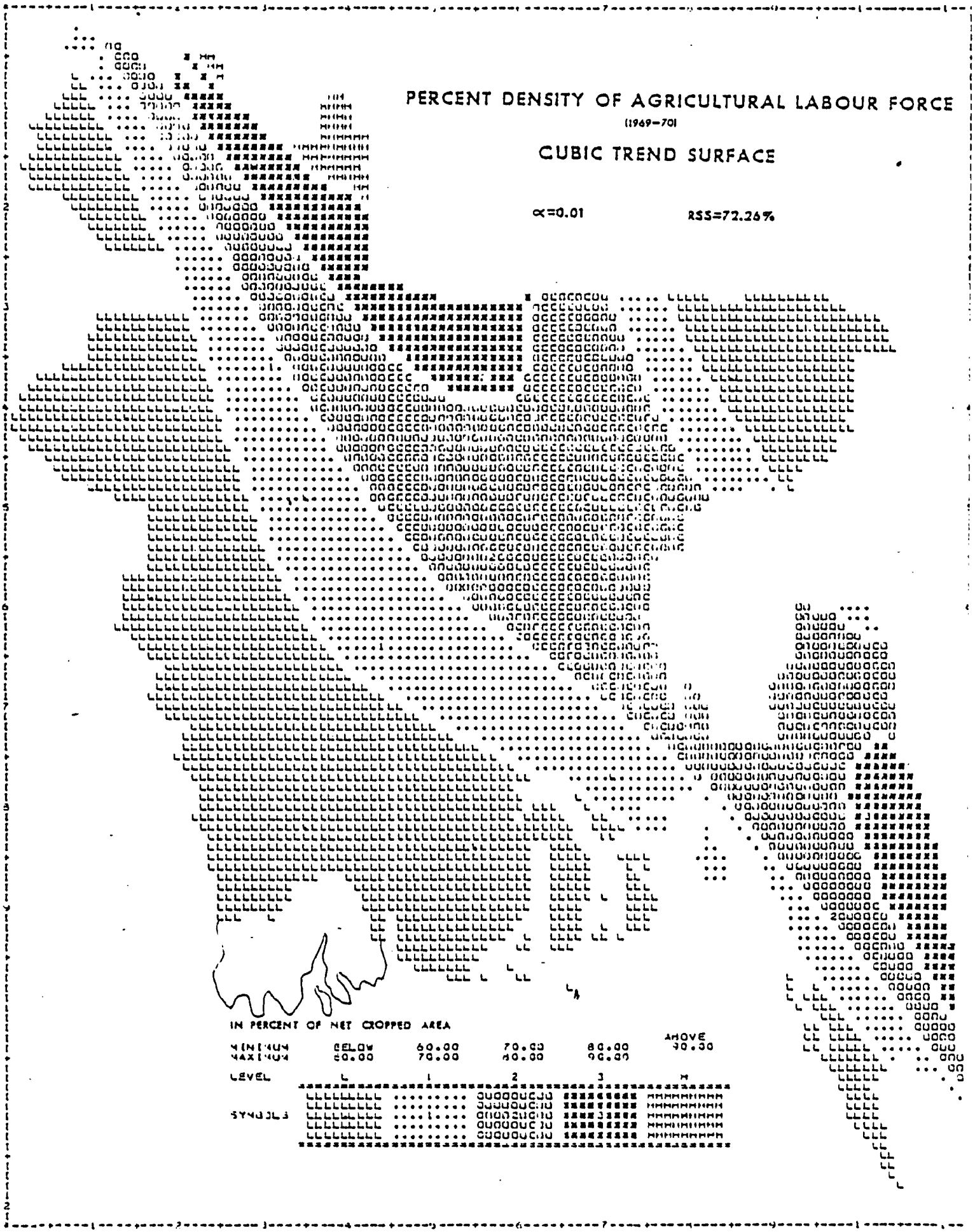


Fig. 4.9

Fig. 4.10



the tenant or share-cropper-operated farms (Jabbar, 1977, Hossain, 1974; Zaman, 1973). A first order trend surface map was prepared to show the percentage distribution of owner-operated farms. Again, the comparison of this map with the cubic surface map of cropland productivity indicated a positive areal association (Fig. 4.11).

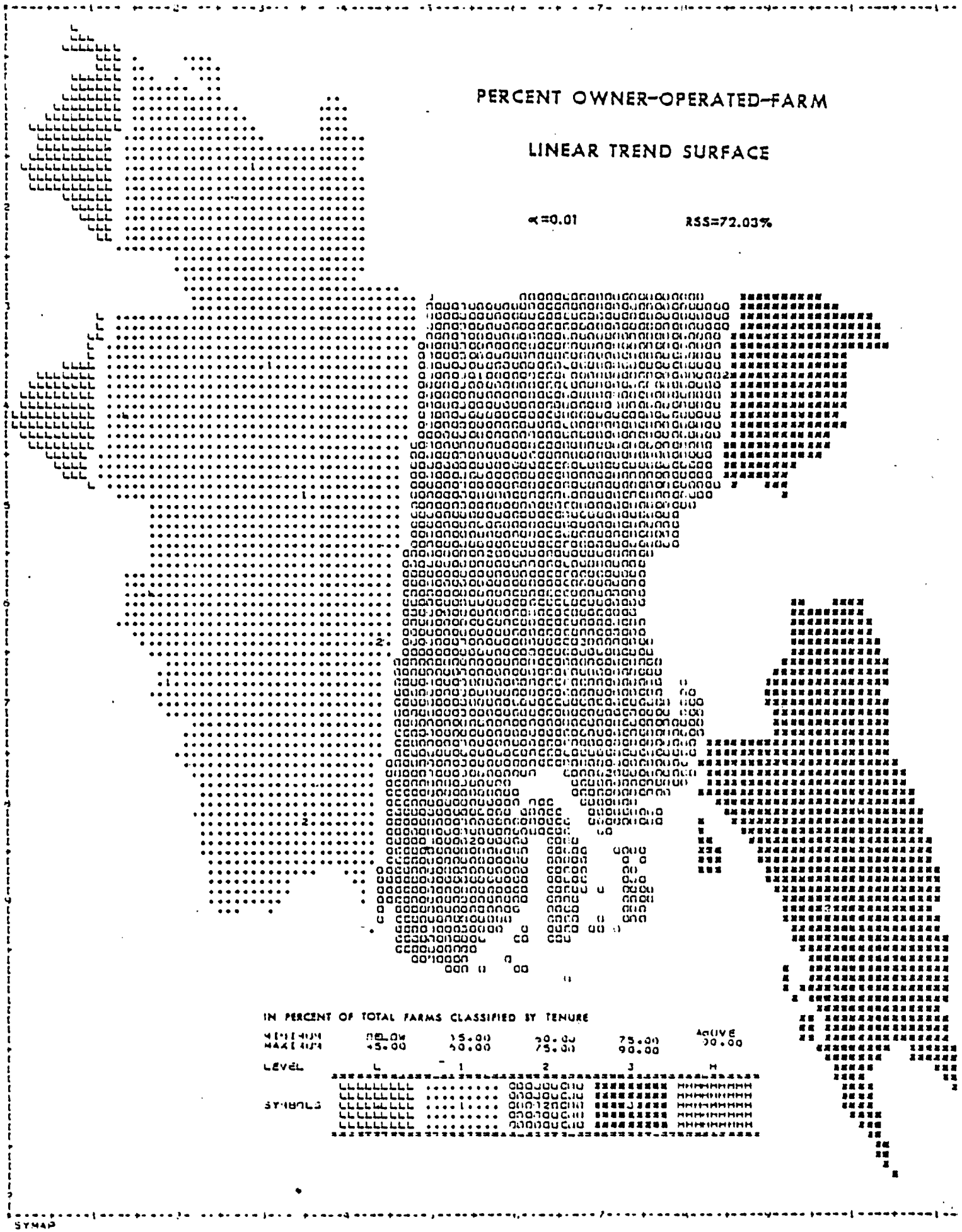
4.2.ii Analysis of Residuals:

The comparative areal analysis discussed above provides some explanation only to the broad nonrandom systematic macro patterns of cropland productivity in Bangladesh. There are some unsystematic local random variations that can be extricated from the observed cropland productivity patterns by mapping residual values obtained from the trend surfaces.

The residual maps for all the six orders that were printed by the computer are provided with their respective trend surface maps. The residual maps portray the entire country as a low flat plain except for a few sporadic peaks. The "flat plain" represents a uniform pattern of rather low productivity throughout Bangladesh, reflecting its predominant subsistence agriculture. The "peaks" found in Dacca, Chittagong Hill Tracts and Rangpur districts exceed two standard deviations, and appeared in all the residual maps.

Regression from the linear trend surface identified twelve

Fig. 4.11



thanas with significant positive values (Tongibari, Munshiganj, Narayanganj, Fatulla, Sirajdikhan, Tejgaon and Singair of Dacca; Ramgarh, Langadu, and Baghaichhari of Chittagong Hill Tracts, and Patgram and Badarganj of Rangpur districts). As the trend surface was made more complex, the residuals were gradually reduced in number and size, so that the cubic trend surface identified nine thanas with high values.

Examination of the redisuals suggests a different crop production pattern in these anomalous areas than the rest of the country. The two anomalies of Rangpur correspond to exceptional specialization in the growing of tobacco. This specialization employed on the basis of favourable physical conditions, the economic pull generated by the location of cigarette factories in the nearby town, and the social factor - a sense of commerce that developed among the farmers which led them to adopt a diversified cropping pattern rather than retain the monoculture of rice so common to other areas.

The commercial attitude is even more common among the farmers of Munshiganj, Tongibari and Sirajdikhan thanas of Dacca. This area is historically famous for growing vegetables and hosticultural commodities to supply the nearby capital cities. Now the area has also become famous for its potato growing. More than

half of the potato supply of Bangladesh comes from this area. The proximity of the largest urban centre, suitable land and soils, better use of inputs such as irrigation, fertilizers, storage facilities and above all the age-old socio-cultural background of the farmers helped it to become the most productive agricultural area of Bangladesh. The positive residuals of Fatulla, Narayanganj, Tejgaon, Savar, Singair are associated with higher cropping intensity, better irrigation and fertilization, relatively higher percentages of cropped area under high yielding variety of IRRI boro and boro rice, and above all their promiximity to Dacca, the metropolis of Bangladesh.

The residuals of Baghaichhari and Langadu of Chittagong Hill Tracts district may be explained by their higher percentages of cropped area under IRRI boro and boro, the two high yielding varieties of irrigated rice. The area is uniquely suited to the production of these crops because of the abundance of irrigation water supplied from the nearby Kaptai Lake.

The analysis of trend surface maps suggests that Bangladesh agriculture is still predominantly of a subsistence nature. Its cropland productivity patterns are shaped primarily by the distribution of rainfall and employment of farm labour. However, a few exceptional areas revealed a strong commercial orientation, particularly in the growing of crops of the cool-dry season that need

irrigation and absorb more labour.

However, the systematic and non-systematic spatial patterns of cropland productivity can be explained not only by the external physico-socio-cultural factors but also by individual crops in terms of their acreage and yield as well by cropping intensity. The forthcoming chapter will examine the relative importance of these variables that contributed to the variations of cropland productivity in Bangladesh.

CHAPTER 5

ROLE OF CROPS IN CROPLAND PRODUCTIVITY: A STEPWISE REGRESSION ANALYSIS:

According to the final objective of the study, this chapter will examine the role of cropping intensity and the relative contribution of various crops in terms of their acreage under each crop and their yields on the spatial variability of cropland productivity in Bangladesh. Within the prevailing set of physical, socio-economic, technological and organizational conditions the acreage and yields of various crops as well as the intensity of cropping should have a direct influence on the spatial variability of the cropland porductivity index. In order to measure the influence a stepwise regression procedure was employed. The regression model had a total of 24 variables, of which VAR_1, the dependent variable, was the cropland productivity index, VAR_2 - VAR_{12} were the percentage of acreage under the selected eleven crops, VAR_{13} - VAR_{23} were the yields of these crops, expressed as percentages of the national average for each of the selected crops, and VAR_{24} was the cropping intensity index.

The results of the stepwise regression analysis are illustrated in Table 5.2. A correlation matrix Table (5.1) also

TABLE 5-1 CORRELATION MATRIX

		VAR1 1	VAR2 2	VAR3 3	VAR4 4	VAR5 5	VAR6 6	VAR7 7	VAR8 8	VAR9 9	VAR10 10
VAR1	1	1.0000									
VAR2	2	0.0367	1.0000								
VAR3	3	0.2272	-0.3543	1.0000							
VAR4	4	0.4130	-0.2209	0.3485	1.0000						
VAR5	5	-0.2853	-0.5243	-0.3811	-0.1955	1.0000					
VAR6	6	-0.1374	0.1209	-0.1572	-0.1237	-0.3265	1.0000				
VAR7	7	0.3721	-0.0906	-0.0282	0.0105	-0.0351	-0.0416	1.0000			
VAR8	8	-0.2255	0.2038	-0.1940	-0.1597	-0.3808	0.6637	-0.0791	1.0000		
VAR9	9	-0.0523	-0.0099	0.0081	-0.0329	-0.2955	0.2215	0.0134	0.2578	1.0000	
VAR10	10	0.0240	0.0753	-0.0961	-0.1056	-0.4123	0.2711	0.0755	0.2641	0.2823	1.0000
VAR11	11	0.0324	0.1949	-0.1530	-0.1340	-0.2295	0.3138	0.0185	0.3301	0.0466	0.0176
VAR12	12	0.1764	-0.0248	-0.0253	-0.0258	-0.0520	-0.0326	-0.0135	-0.0463	0.0126	-0.0409
VAR13	13	0.4251	0.0437	0.0454	0.1680	0.0040	-0.0850	0.0002	-0.1807	-0.0008	-0.1525
VAR14	14	0.2794	0.1601	0.1994	0.1286	-0.3673	-0.0038	0.0063	-0.0155	0.1113	0.2098
VAR15	15	0.1752	0.0750	0.0974	0.1153	-0.2213	-0.0113	0.0389	-0.0041	0.1114	0.2185
VAR16	16	0.5173	0.0456	0.1176	0.3094	-0.1406	-0.0432	0.0238	-0.0774	-0.0057	-0.0153
VAR17	17	-0.1135	0.0588	-0.2979	-0.1645	0.0012	0.2132	0.0852	0.2365	0.0998	0.2437
VAR18	18	0.3302	0.0095	-0.0386	0.1420	0.0584	-0.1663	0.2559	-0.1421	-0.1325	-0.1229
VAR19	19	0.0950	-0.0867	0.0387	-0.0519	-0.0179	-0.0402	0.1096	-0.0349	0.0533	0.2048
VAR20	20	0.1359	0.0227	0.0420	-0.1335	-0.0709	-0.0614	-0.0012	-0.0520	0.0758	0.0596
VAR21	21	-0.0080	0.0055	0.0064	-0.2367	-0.0969	0.1838	-0.0104	0.0909	0.0082	0.1830
VAR22	22	-0.1176	0.3056	-0.4984	-0.1077	-0.0160	0.2177	-0.0418	0.3311	0.0296	0.1230
VAR23	23	-0.0505	0.0039	-0.0419	-0.1347	-0.0044	0.0887	-0.0438	0.1232	-0.0173	0.0200
VAR24	24	0.5857	0.3683	-0.1678	-0.0253	-0.2783	0.0483	0.0612	0.0566	0.0518	0.2826

		VAR11 11	VAR12 12	VAR13 13	VAR14 14	VAR15 15	VAR16 16	VAR17 17	VAR18 18	VAR19 19	VAR20 20
VAR11	11	1.0000									
VAR12	12	-0.0150	1.0000								
VAR13	13	-0.0836	-0.0103	1.0000							
VAR14	14	-0.0379	0.1022	0.0600	1.0000						
VAR15	15	-0.1213	0.0353	0.0664	0.3109	1.0000					
VAR16	16	-0.1351	0.0045	0.5254	0.2115	0.1576	1.0000				
VAR17	17	0.1872	0.0026	-0.0945	-0.0734	0.0109	-0.2505	1.0000			
VAR18	18	-0.0434	0.0570	0.2689	0.0403	-0.0691	0.3934	-0.1816	1.0000		
VAR19	19	0.0044	0.0844	-0.0917	0.2424	0.0727	-0.0065	0.1637	0.0464	1.0000	
VAR20	20	0.0116	0.1101	0.1149	0.1948	0.0229	-0.0431	0.1632	-0.0206	0.2302	1.0000
VAR21	21	0.0495	0.0018	-0.0477	0.0748	0.0808	-0.2079	0.3123	-0.1950	0.1009	0.2674
VAR22	22	0.1993	0.0142	-0.1088	-0.0846	-0.0684	-0.0941	0.3188	0.0456	-0.0310	-0.0251
VAR23	23	0.0409	0.1502	-0.0388	0.1436	-0.0916	-0.1048	0.0740	0.0278	0.2338	0.3273
VAR24	24	-0.0151	0.0726	0.0115	0.2032	0.1037	0.0222	0.0997	-0.0378	0.1334	0.1664

		VAR21 21	VAR22 22	VAR23 23	VAR24 24
VAR21	21	1.0000			
VAR22	22	-0.1585	1.0000		
VAR23	23	0.1653	0.1004	1.0000	
VAR24	24	0.1400	0.1519	0.0200	1.0000

Table 5.2 Summary Table of Stepwise Regression for Cropland Productivity (VAR_1) in Bangladesh.

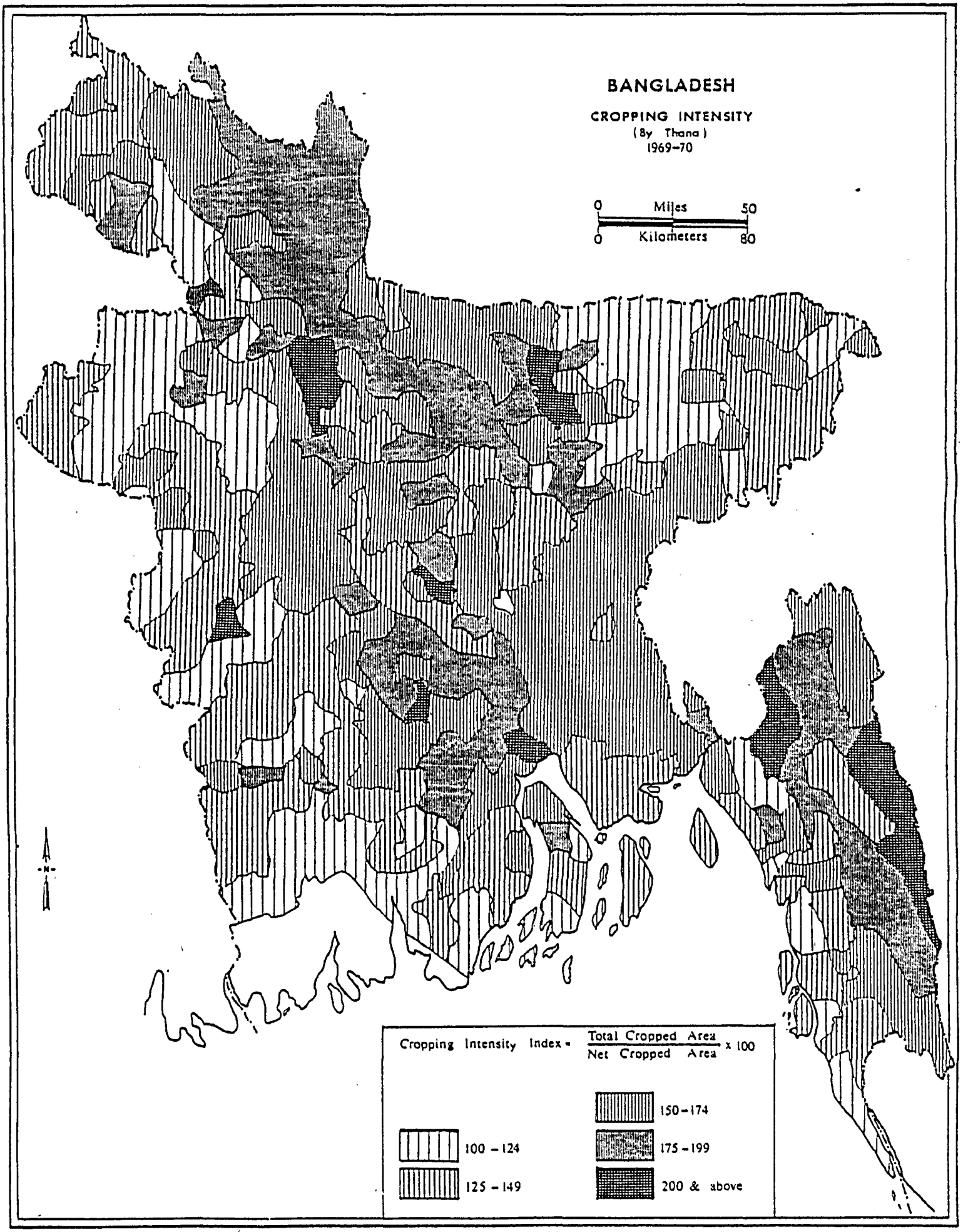
Step No.	Variable entered the Equation	Partial Correlation Coefficient	Partial Regression Coefficient	Multiple R	Multiple R^2	Increased in R^2	F-Value	Prob > F
	Y-Intercept		4.514					
1	VAR_{24}-Cropping Intensity	58.57%	0.6769	58.57%	34.31%	34.31%	2087.22	0.0001
2	VAR_{16}-Aman Yield	62.22%	0.0049	77.30%	59.75%	25.44%	360.01	0.0001
3	VAR_7 -Potato Acreage	51.35%	0.0409	83.88%	70.36%	10.61%	527.24	0.0001
4	VAR_4 -IRRI Boro Acreage	52.22%	0.0160	88.57%	78.44%	8.09%	266.76	0.0001
5	VAR_3 -Boro Acreage	41.81%	0.0069	90.67%	82.21%	3.76%	157.05	0.0001
6	VAR_{13}-Aus Yield	44.48%	0.0020	92.59%	85.73%	3.52%	151.85	0.0001
7	VAR_{11}-Sugar-cane Acreage	42.07%	0.0234	93.94%	88.25%	2.52%	308.82	0.0001
8	VAR_8 -Pulses Acreage	-45.01%	-0.0062	95.20%	90.63%	2.38%	18.79	0.0001
9	VAR_{12}-Tobacco Acreage	47.06%	0.0182	96.28%	92.70%	2.08%	148.33	0.0001
10	VAR_5 -Aman Acreage	31.98%	0.0028	96.67%	93.45%	0.75%	34.73	0.0001
11	VAR_{18}-Potato Yield	20.95%	0.0005	96.82%	93.74%	0.28%	21.66	0.0001
12	VAR_{21}-Jute Yield	15.13%	0.0003	96.89%	93.88%	0.15%	9.58	0.0021
13	VAR_{15}-IRRI Boro Yield	13.45%	0.0003	96.95%	93.99%	0.12%	8.77	0.0033
14	VAR_2 -Aus Acreage	12.02%	0.0013	96.99%	94.08%	0.08%	5.79	0.0166

is presented here to show intercorrelations between the variables within the model. The summary Table (5.2) of stepwise regression shows that out of 23 independent variables, 13 have emerged as significantly important at the 99% level and one was significant at the 95% level. The first nine variables, in order of importance, cropping intensity, aman yield, potato acreage, IRRI boro acreage, boro acreage, aus yield, sugar-cane acreage, pulses acreage and tobacco acreage are responsible for 92.70% of the variation in cropland productivity. Out of these nine variables, the first four explain almost 78.45% of the variation in cropland productivity. Out of the 14 significant variables, the last 5 are responsible for only 1.38% of variation in productivity. The relationship between the spatial variability of cropland productivity and the independent variables are expressed in the following regression equation:

$$\begin{aligned}\text{Log } Y_{VAR_1} = {} & 4.514 + 0.6769(VAR_{24}) + 0.0049(VAR_{16}) + \\ & 0.0409\ (VAR_7) + 0.0160\ (VAR_4) + 0.0069\ (VAR_3) + \\ & 0.0020\ (VAR_{13}) + 0.0234\ (VAR_{11}) - 0.0062\ (VAR_8) + \\ & 0.0182\ (VAR_{12}) + 0.0028\ (VAR_5) + 0.0005\ (VAR_{18}) + \\ & 0.0003\ (VAR_{21}) + 0.0003\ (VAR_{15}) + 0.0013\ (VAR_2).\end{aligned}$$

Cropping intensity is the most important independent variable. It explains 34.31% of the total vairation in cropland productivity. The positive regression coefficient (0.6769) with the

Fig. 5.1



highest F-value of 2087.22 reflects its importance in increasing productivity of cropland. Spatial distribution of cropping intensity index (Fig. 5.1) reveals that, except for a few areas the patterns are closely associated with the patterns of productivity. The few areas with low cropping intensity that have a relatively high cropland productivity may be explained by their high percentage of acreage under the high yielding boro and IRRI boro (such as the Sylhet-Kishoregonj Haor (depression) area).

The second most significant variable (VAR_{16}) added to the equation is the percentage yield of aman rice. Aman is the main rice crop, grown widely in Bangladesh. The yield of this crop explains 25.44% of the variation in cropland productivity, whereas the percentage of acreage in aman (VAR_5) although significant, provides a very low level of explanation (0.75%). The correlation matrix (Table 5.1) shows a moderate negative relationship between the acreage of aman and cropland productivity. This results because the large acreage associated with aman combined with its relatively low yields, make aman a relatively low value per acre crop (Fig. 5.2 and 5.3). However, by taking into account the effects of the variation of boro acreage, cropping intensity, aman yield, potato acreage and IRRI boro acreage, the negative association between cropland productivity and aman acreage has disappeared.

Fig. 5.2

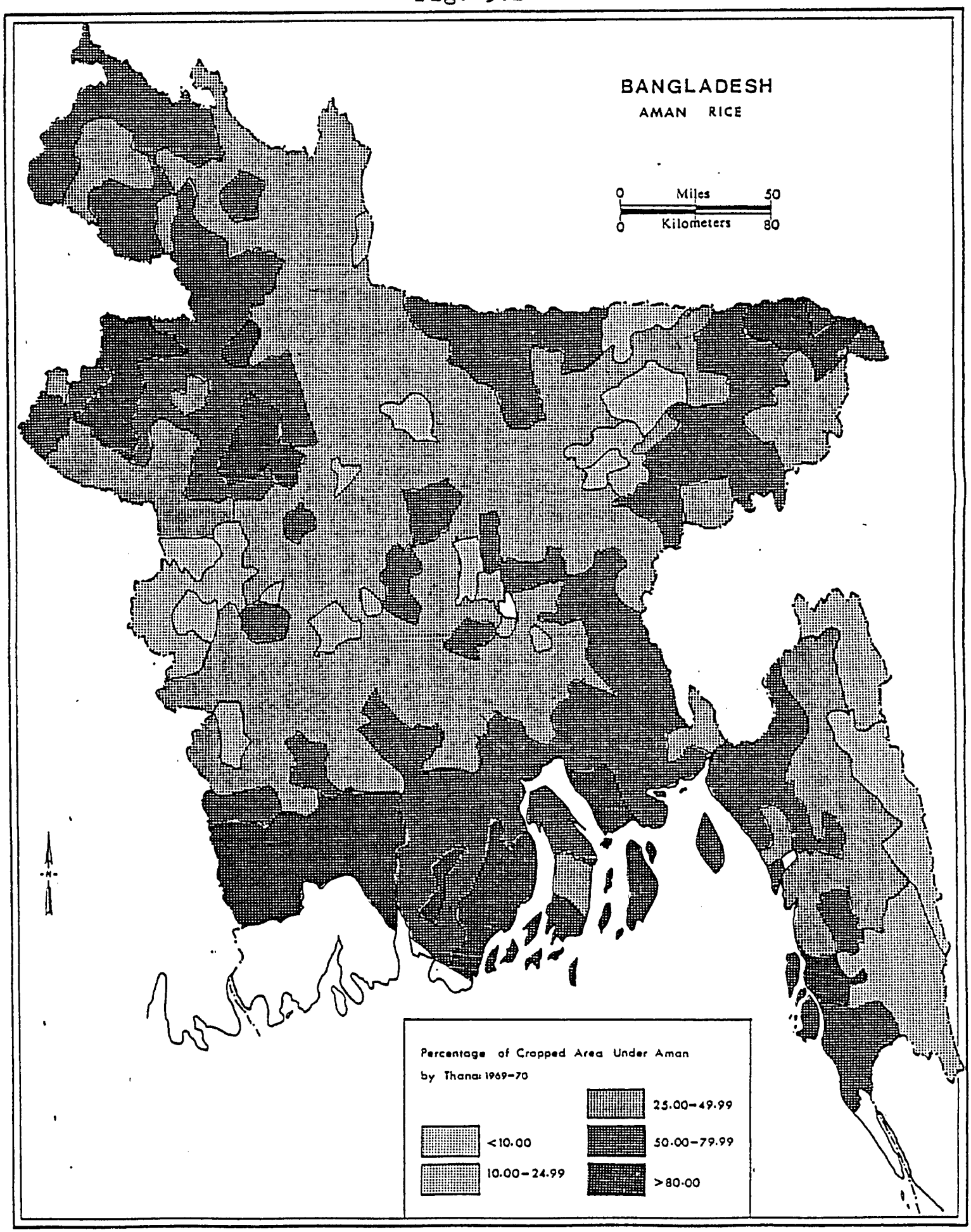
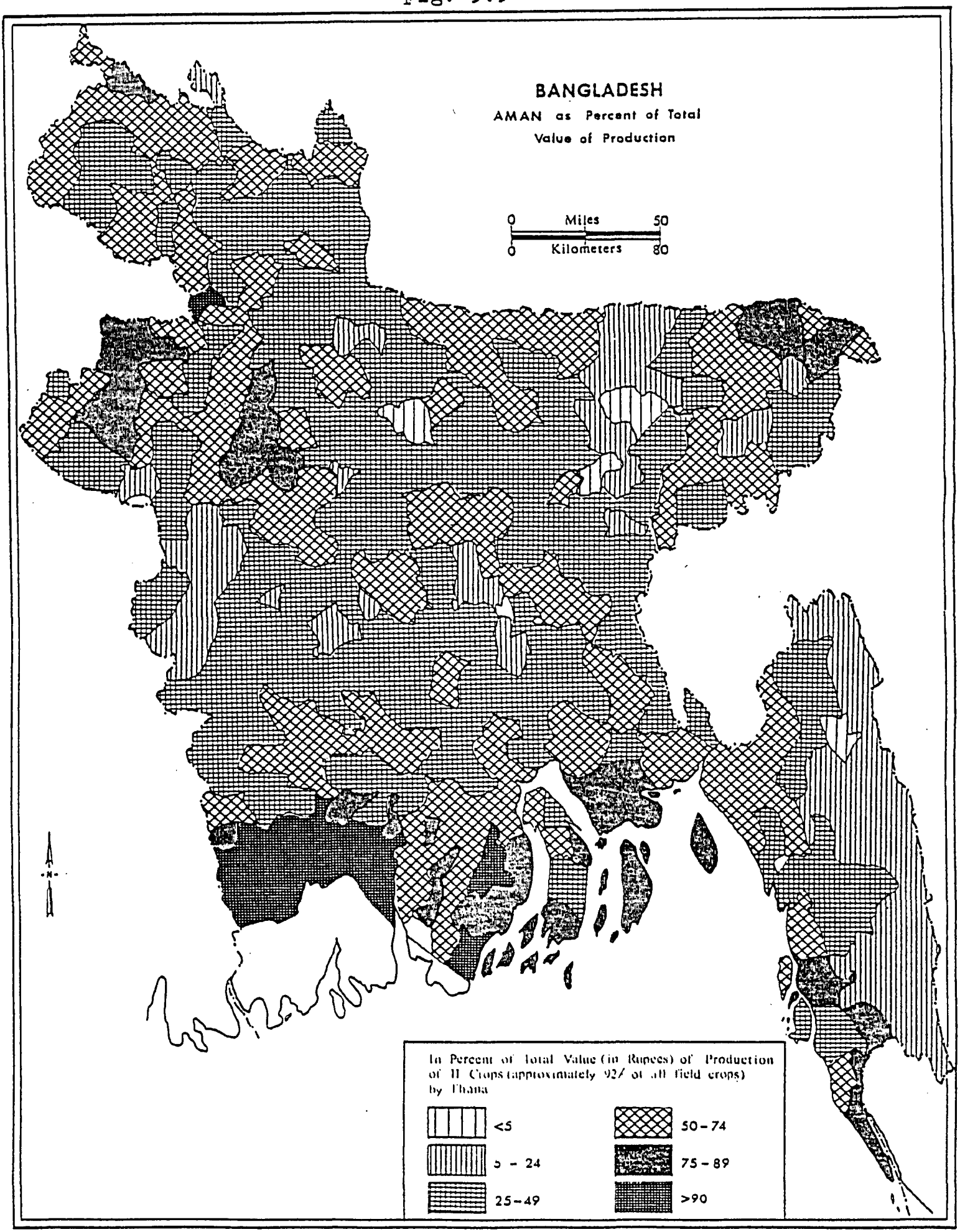


Fig. 5.3



This may be explained with the observed pattern of correlations: all the above variables have a negative association with aman acreage. When the correlations of these variables with aman acreage were removed by polynomial stepwise regression, the negative correlation between aman acreage and cropland productivity was lost ($R_{15 \cdot 2416743} = 0.3198$)

Potato acreage has emerged as the third most significant variable which explains about 10.61% of the spatial variation in cropland productivity. The yield of potato (VAR_{18}) also was significant, with an explanation of 0.28%. The total acreage under potato is relatively low, but it is grown in all the districts of Bangladesh (Fig. 5.4). The use of high yielding varieties of seeds, application of chemical fertilizers and irrigation made it possible to increase potato yields considerably in recent years. The present level of production by value (Fig. 5.5) exceeds the level of acreage under potato.

The fourth important variable (VAR_4) is the acreage of IRRI boro which explains about 8.09% of the spatial variation in cropland productivity. Its yields also appeared to be significant although with a low explanation of 0.12%. This is a high yielding variety of hybrid rice which requires the optimum combination of three important inputs - irrigation, fertilizers and pesticides. If

Fig. 5.4

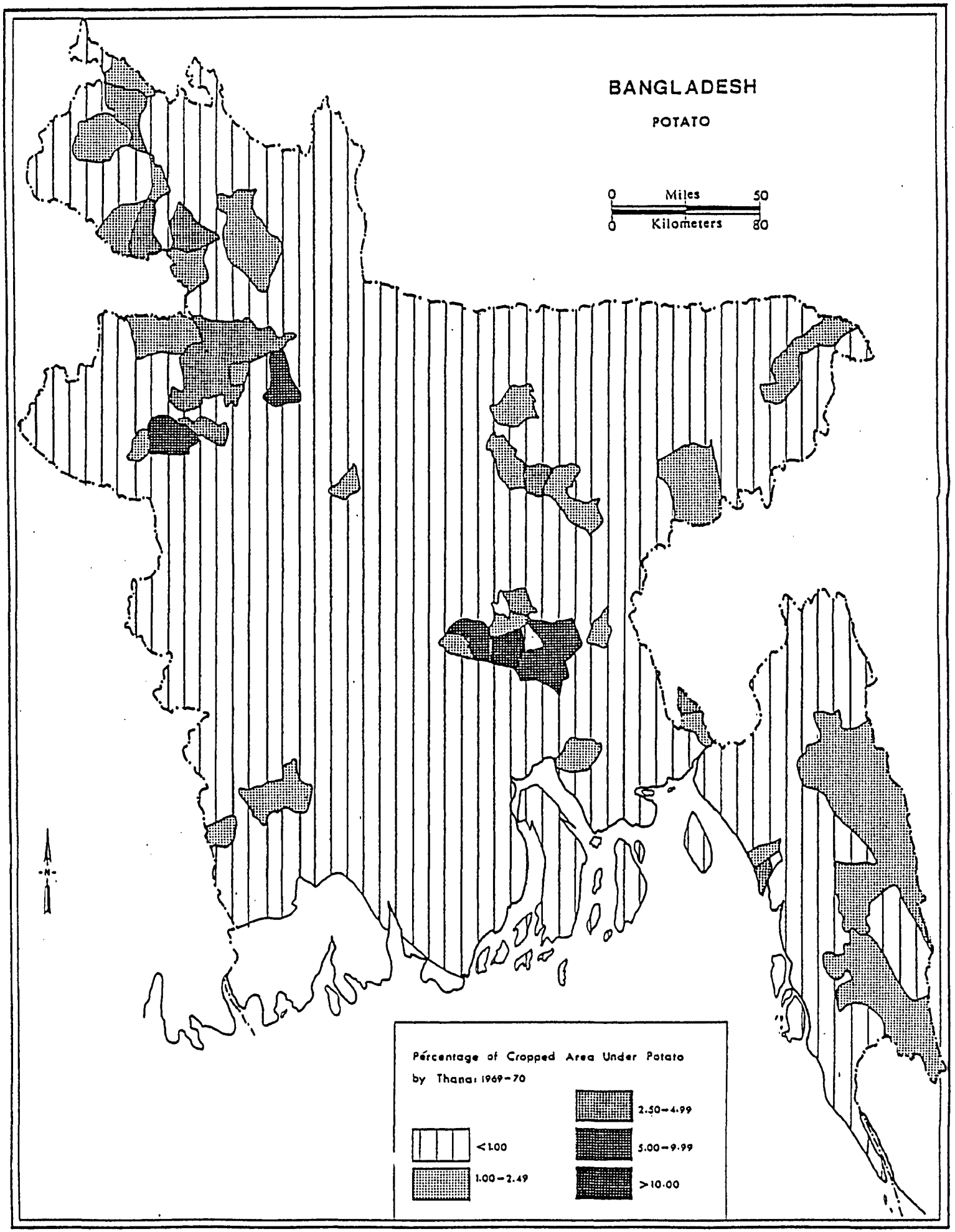
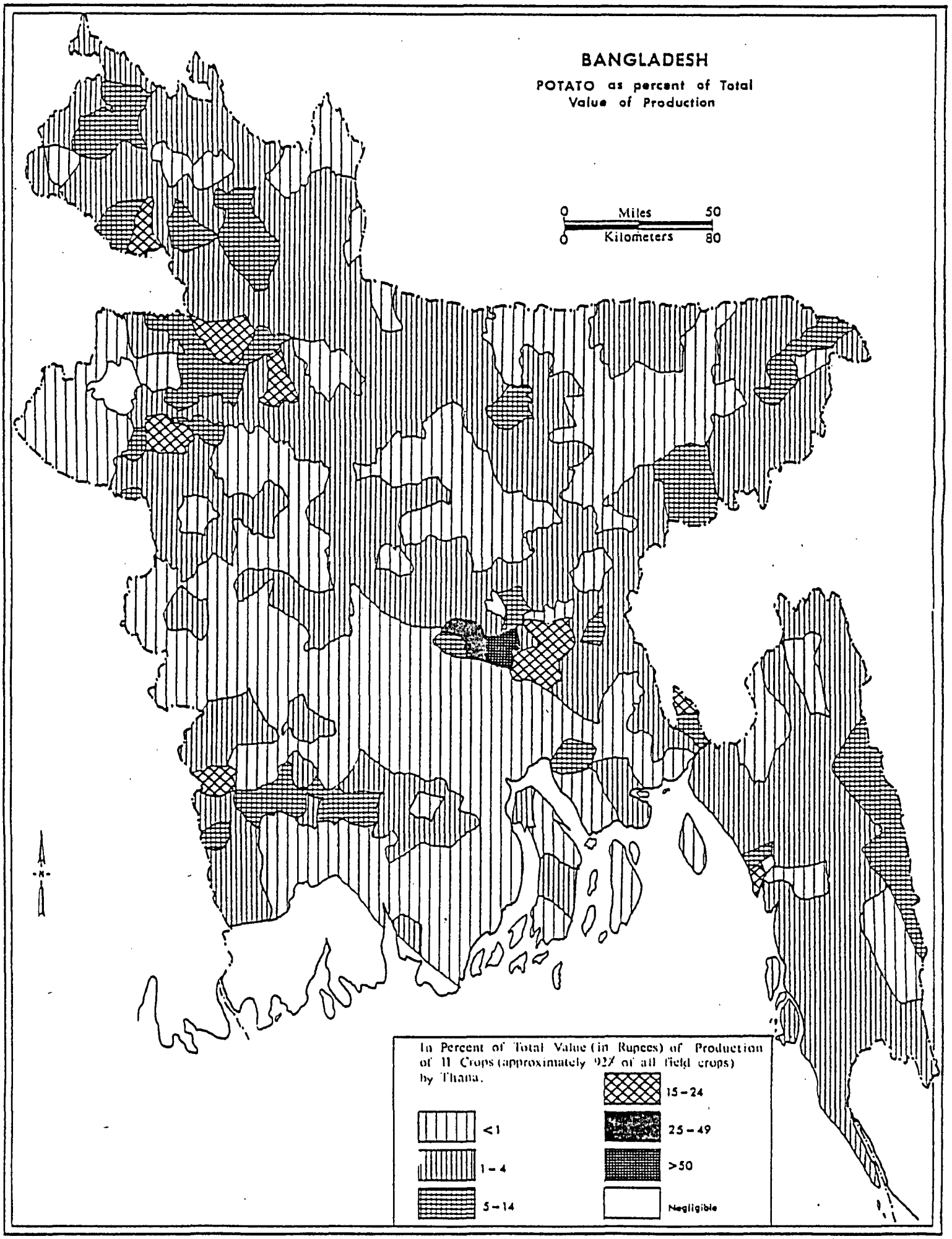


Fig. 5.5



all three inputs are available, the IRRI boro provides two to four times the yield of indigenous rice. High concentration of this rice in the eastern part of the country is due to the availability of irrigation water (Fig. 5.6 and 5.7).

Boro acreage was the fifth ranking significant variable, explaining 3.76% of the spatial variation in cropland productivity. Boro is closely associated with IRRI boro (Table 5.1), for both crops are grown in similar physical and technological conditions. This indigenous rice gives the highest yield per unit area among all other traditional rices. Since its yield depends mostly on the availability of water and most of the western districts can't provide it adequately, the concentration of boro is also high in the eastern part of the country (Figs. 5.8 and 5.9).

The next important variable that has emerged as significant is the aus yield (VAR_{13}). It explains about 3.52% of the spatial variation in cropland productivity. Its acreage (VAR_2) has come out as the last significant (α = 95%) variable, explaining only 0.08% of the spatial variation in cropland productivity. After aman, aus is the second most important rice crop grown in Bangladesh (Figs. 5.10 and 5.11), but the yield of this rice is the lowest.

The sugar-cane acreage has appeared as the seventh

Fig. 5.6

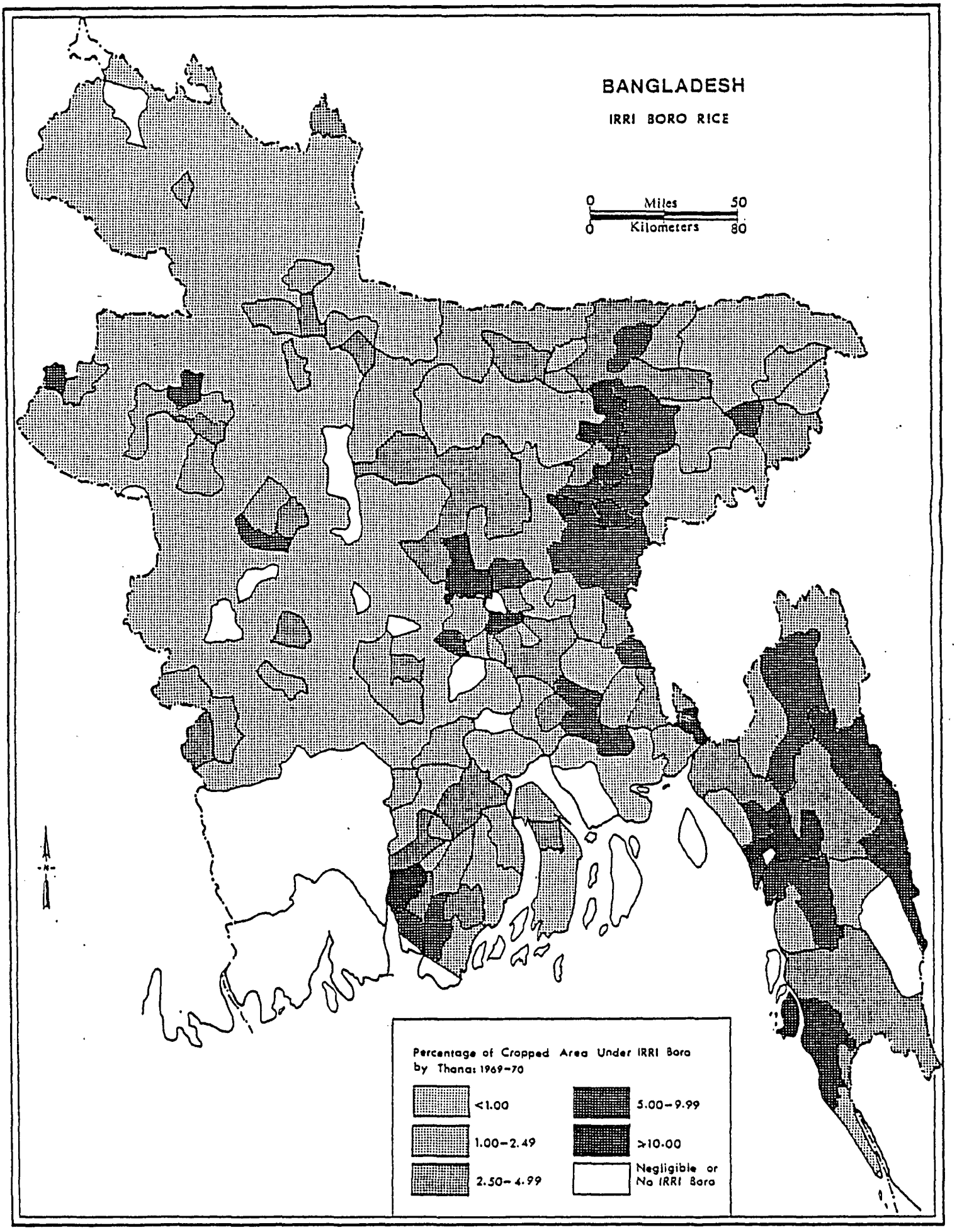


Fig. 5.7

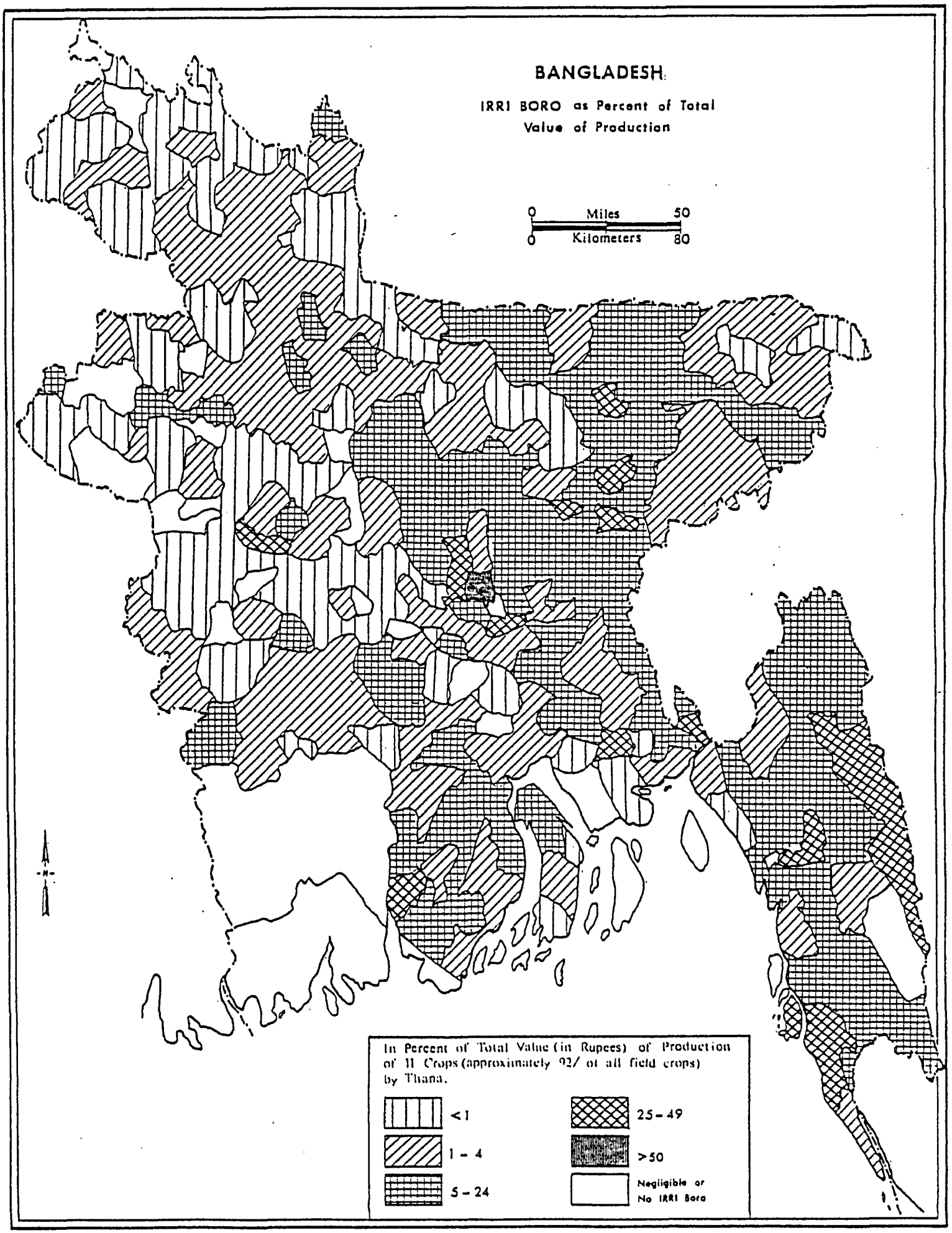


Fig. 5.8

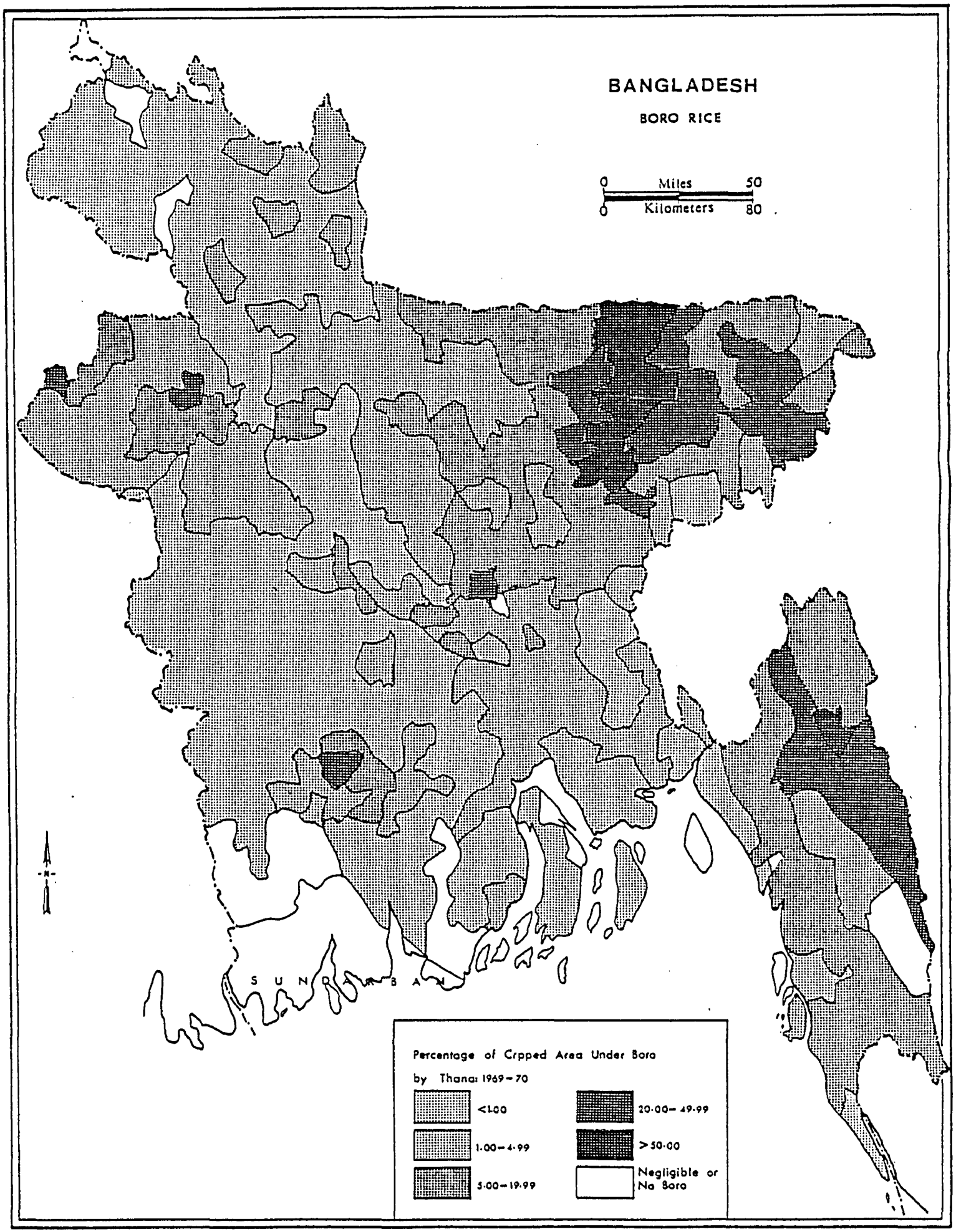


Fig. 5.9

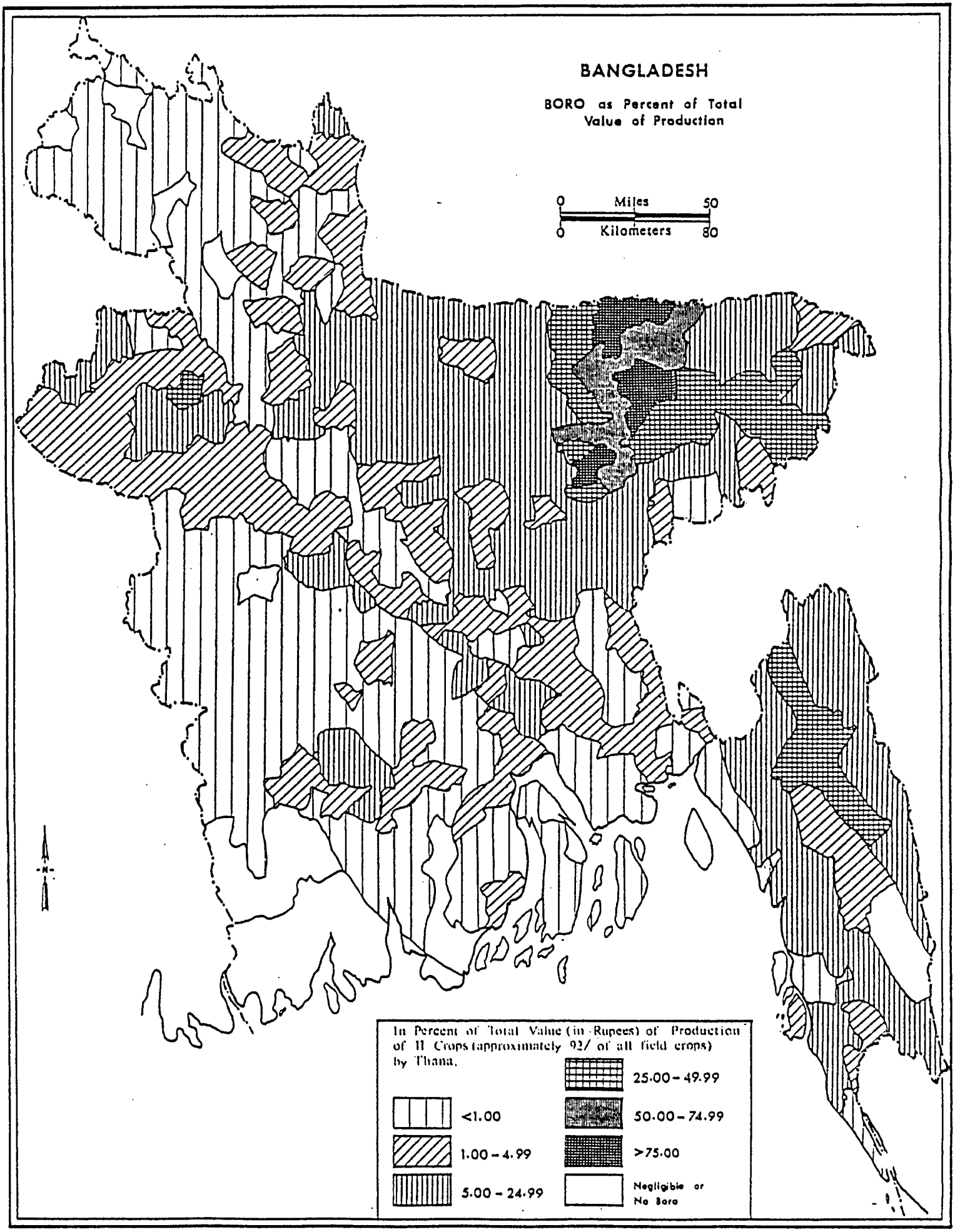


Fig. 5.10

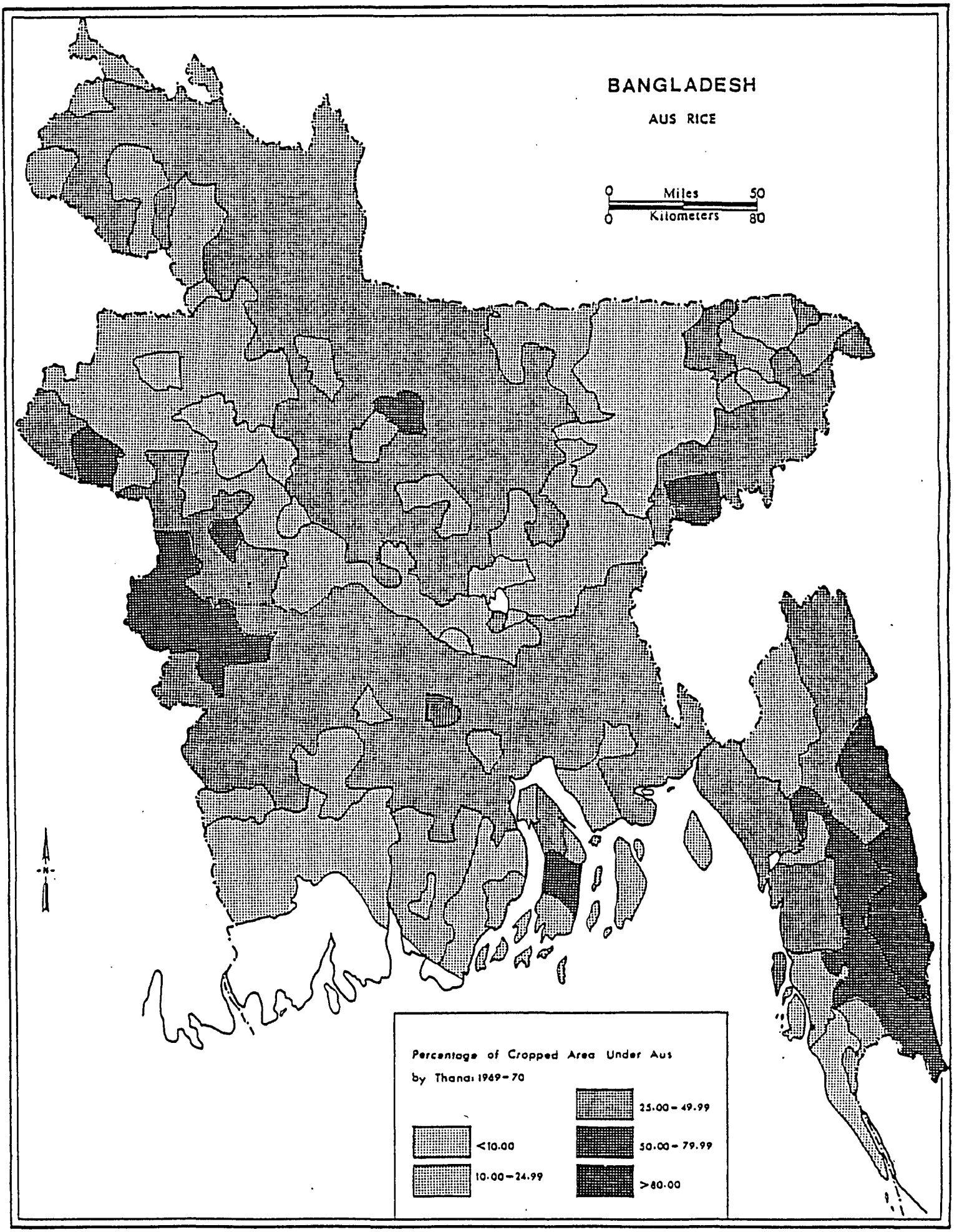
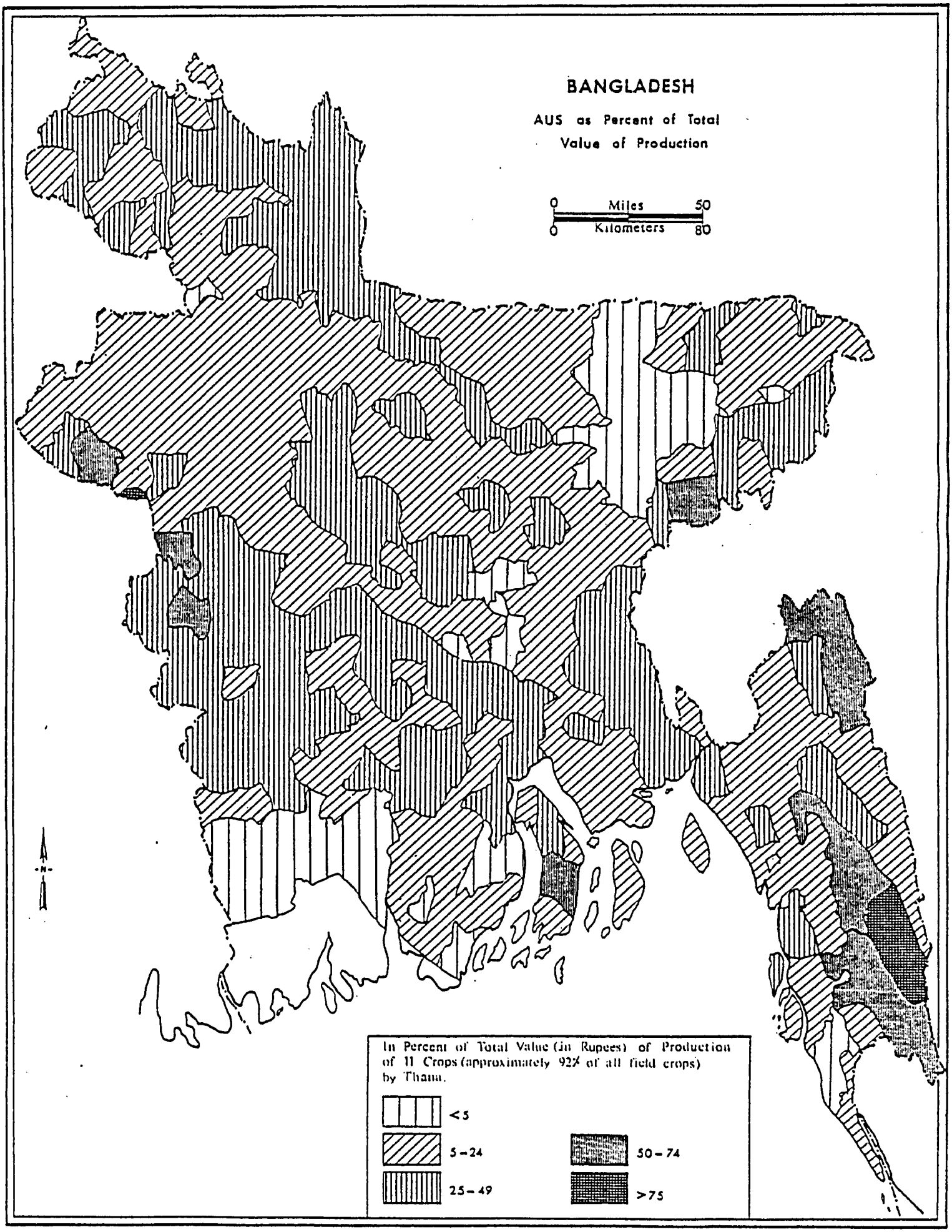


Fig. 5.11



ranking significant variable which explains about 2.52% of the spatial variation in cropland productivity. The yield of sugar-cane (VAR_{22}) has a low negative influence in productivity which however, did not come out as significant. The concentration of sugar-cane acreage is mostly in Dinajpur, Rajshahi and Kushtia districts. The thanas of high cropland productivity in these districts show a close association only with the higher sugar-cane acreage.

The eighth ranking variable is the acreage under pulses. This is the only significant variable that is negatively regressed with cropland productivity. It explains about 2.38% of the spatial variation in cropland productivity. Pulses of various kinds are mostly concentrated in the western districts of Jessore, Kushtia and Rajshahi, Central districts of Faridpur, Tangail, Mymenshingh, Pabna and Bogra. Yields of these crops are very low due to poor cultivation practices and lack of moisture in the soils. The yield of pulses (VAR_{19}) has no significant influence on productivity.

Acreage under tobacco, the ninth ranking significant variable, explains 2.08% of the spatial variation in cropland productivity. Higher acreage of tobacco is concentrated mainly in the Rangpur district. The thanas of higher productivity are found very closely associated with higher tobacco acreage. This is because of its very high market value. However, its yield (VAR_{23}) does not have

any influence on cropland productivity.

Jute acreage did not show up as a significant variable. However, Jute yield (VAR_{21}) has a very low level of influence on cropland productivity. Although the main jute growing areas are within the belt of high cropland productivity its acreage did not influence the cropland productivity index because other more important high yielding crops obscured it (Figs. 5.12 and 5.13).

Among all the crops in the model, mustard and wheat are identified as the least significant crops. Neither by acreage nor by yields could they influence the cropland productivity of Bangladesh. However, the correlation matrix (Table 5.1) shows that both crops, in terms of their acreage, have a negative correlation with cropland productivity. In terms of yield (VAR_{17} and VAR_{20}), wheat reveals a negative and mustard shows a low positive association with cropland productivity. Due to poor farm practices, inadequate water supply, lack of fertilizer and high yielding seed use, the yields of mustard are very poor. For the same reason, all wheat, including the recently introduced high yielding Mexican varieties, give poor yields.

In summary, it may be concluded that cropping intensity alone explains about 34.31% of the spatial variation in cropland productivity. Out of eleven crops, eight explain, with their acre-

Fig. 5.12

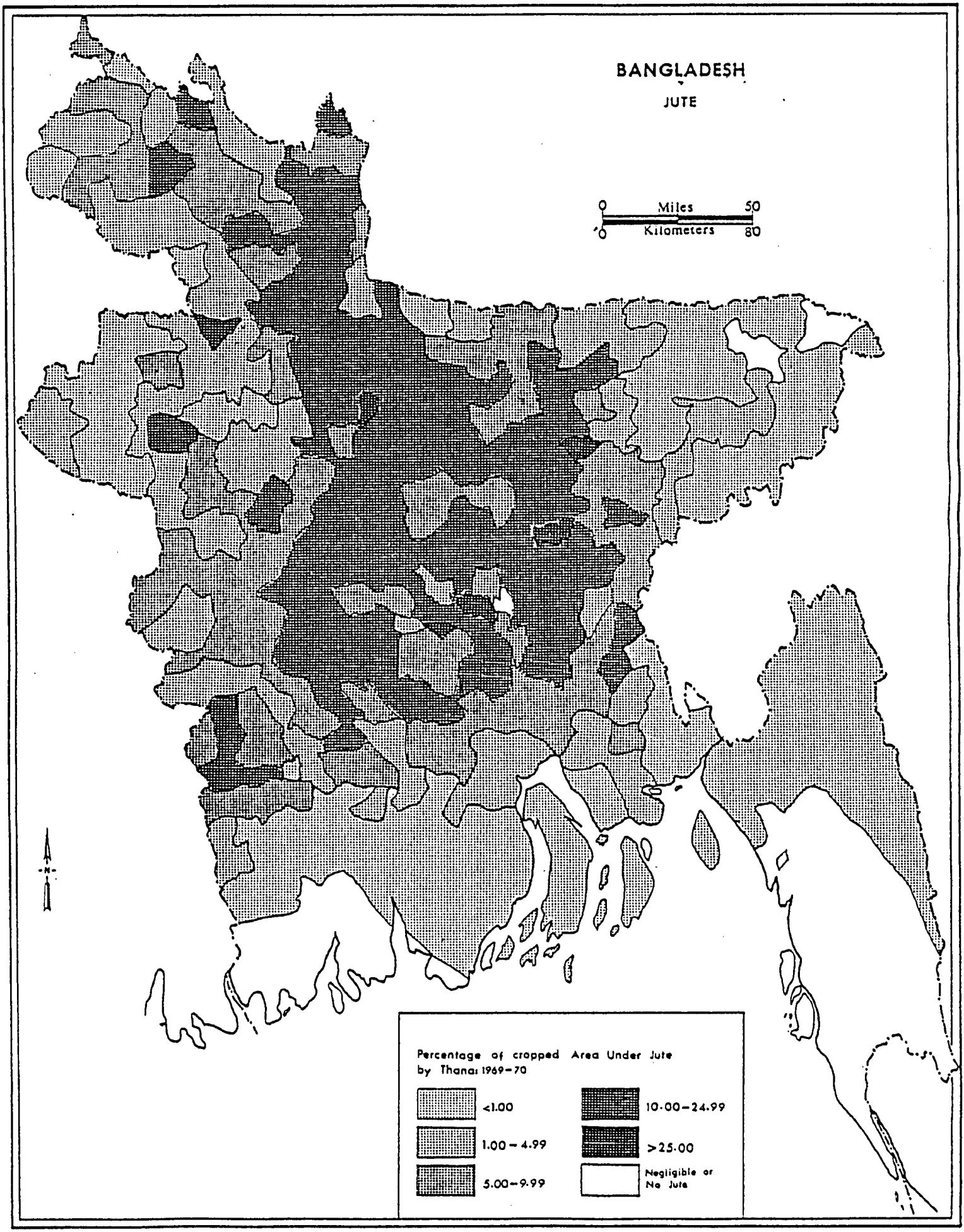
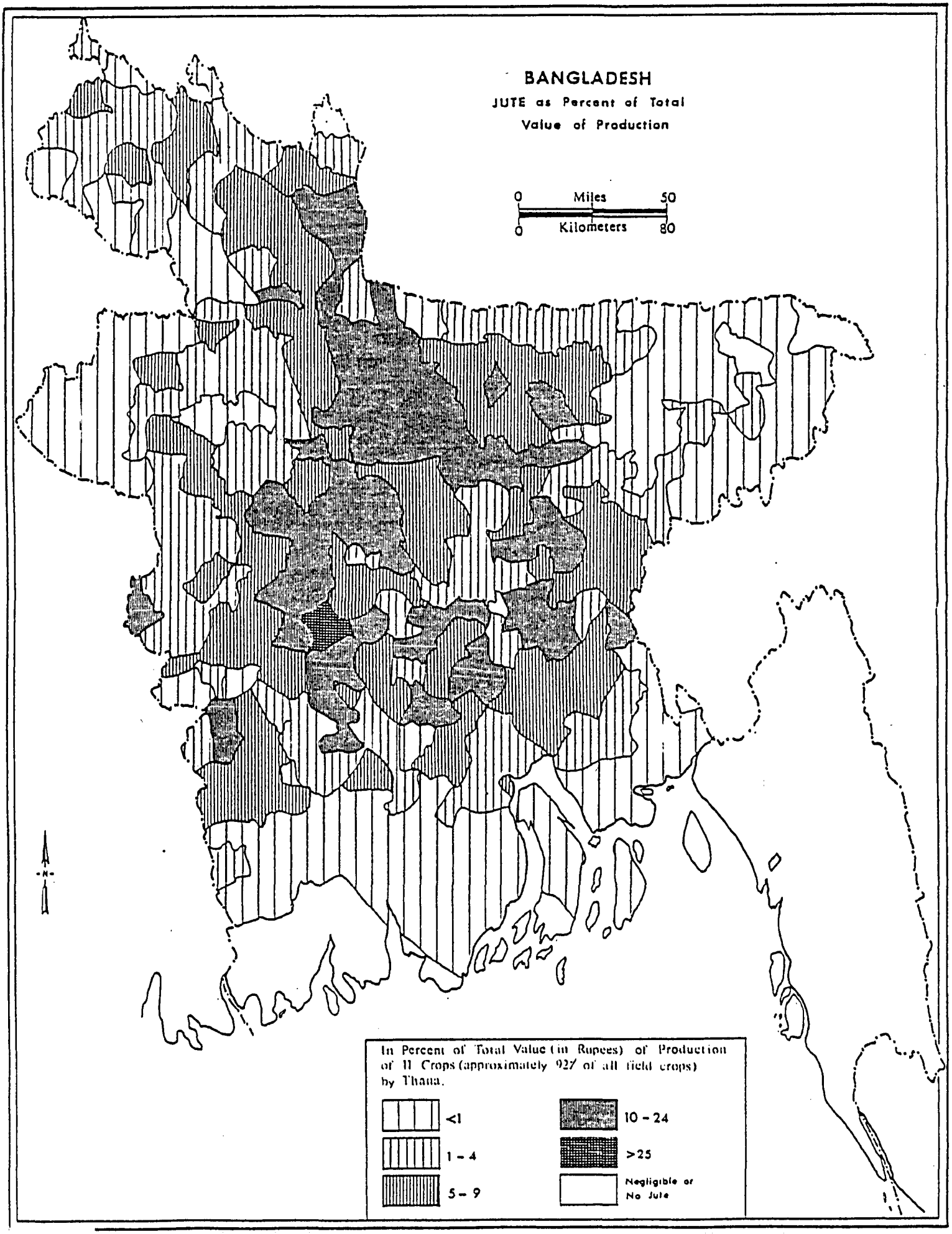


Fig. 5.13



age, about 30.27% of the spatial variation in cropland productivity, whereas five crops explain, with their yields, another 29.51% of that variation. Most of the crops which have emerged as significant in terms of their acreage are of the dry rabi type - grown and harvested in cool dry season (such as high yielding irrigated IRRI boro, boro and potato, and the low yielding pulses, tobacco and sugar-cane. The crops found significant in terms of their yields are mainly the wet Kharif type - grown most widely and nourished in the monsoon season (notably aman, aus and jute, the three most important crops).

CHAPTER 6

CONCLUSIONS

Agriculture in Bangladesh is inherently poor and stagnant. The age-old method of farm practices, dependence on the mercy of the monsoon rains, subsistence-oriented production, rice monoculture, poverty of farmers, inadequate physical and institutional infra-structure, very low level of technology, low absorption and supply of high productivity inputs, all combine to constitute backward agricultural system. Until the mid-1960's, no basic efforts were made for agricultural advancement. A few initiatives however, were undertaken in the mid-1960's, but the impact of these programs was quite limited due to the lack of adequate supply of basic inputs. Although a slight increase in growth rates was recorded over the periods, it was behind the rate of growth of population. Indeed this view of stagnant Bangladesh agriculture also came to light in the present study of cropland productivity.

This study was mainly concerned with the measurement of the cropland productivity index for all the 411 thanas of Bangladesh. It involved the interpretations of spatial patterns that emerged, and the evaluation and identification of the influence of cropping intensity and the relative acreage and yield, of various crops on crop-

land productivity within the prevailing set of physical and socio-economic conditions.

The general distribution of indices reflected a very low cropland productivity per acre of land, with a national mean of only Rs. 808.92 ($170.00 US), which is one of the lowest in under-developed countries (Alamgir 1975). This frequency distribution of indices showed that, out of 411 thanas, 221 (54%) were found to have a productivity of less than the national average (Rs. 800.00 per acre), another 181 (44%) appeared to have a productivity in the Rs. 800.00 - 1400.00 range, which is just above the national average. Only three thanas have productivity per acre over Rs. 2000.00, of which only one is above Rs. 2500.00 (Tongibari of Dacca - Rs. 3583.04).

Spatial patterns of cropland productivity were employed using trend surface mapping technique. The results of the analysis of systematic regional patterns clearly revealed the country's subsistence-oriented crop production pattern. Comparative analysis of the best fitted trend surface patterns of monsoon and pre-monsoon rainfall, the intensity of labour employed and the distribution patterns of owner-operated farms with productivity trend surface patterns showed a very close areal association which strongly indicated their major role in shaping the structure of cropland

productivity in Bangladesh. The maps of residuals revealed a general low productivity pattern throughout the whole country except for a few highly productive areas. These areas are exceptional because of their specialization in any one of the high value or high-yielding crops, such as tobacco, sugar-cane, potato, IRRI boro or boro.

The analysis of the influence of crops and cropping intensity on the spatial variation of cropland productivity was accomplished using the stepwise regression procedure. The results showed that among all the 23 independent variables, cropping intensity played the most important role in explaining cropland productivity. Aman, aus and jute, the three rain-fed monsoon crops, emerged significant in terms of their yields, but their acreages provided a very low level of explanation. On the other hand, the irrigated rice crops IRRI boro and boro, potato, tobacco and sugar-cane were significant in terms of their acreage. Pulses acreage was the only variable with a significant negative relationship to cropland productivity. Mustard and wheat neither by their acreage nor by yields were of significant relationship.

The major findings of this study are:

1. Cropland productivity in Bangladesh is low, except for a few relatively highly productive thanas of Dacca, Rangpur

and Chittagong Hill Tracts districts.

2. Analysis of spatial patterns reveals a gradient in cropland productivity from higher values in the east to the lower values in the west. The gradient has a close areal association with the monsoon and pre-monsoon rainfall distribution patterns, labour intensity patterns and with the percentage distribution of owner-operated farms. This suggests that crop cultivation in Bangladesh is still mainly dependent on the mercy of rainfall. The eastern parts get more water from both the monsoon and the pre-monsoon rainfall than the western parts, and ultimately provide a higher cropping intensity and higher cropland productivity.

The density of agricultural labour force has an even closer association with cropland productivity. Traditional cultivation of aman and aus does not require as much labour as the cultivation of IRRI boro, boro, potato, tobacco, sugar-cane and jute. The latter crops are concentrated mostly in the eastern part of Bangladesh. Moreover, the small owner-operated farms associated with dense population of the east are intensively and carefully cultivated and their cropping patterns more diversified than the tenant or share-cropper operated farms in the west. Thus all three factors are concentrated in the eastern part and ultimately make this part relatively more developed in agriculture

than the western part of the country. Special attention to water resources development programs and the supply of necessary inputs and extension services are needed for the less productive areas.

3. Cropping intensity is the most important factor in increasing land productivity. In a country like Bangladesh where cultivable land is limited, priority should be given to bring more land under multiple cropping and hence to increase crop production. For this purpose however, there is the problem of crop selection: which crops should be given priority for cultivation. Aman, aus and jute, the three main crops, show strong positive correlation in terms of yields, but weak and low correlation in terms of acreage. The cultivation of these crops without benefit of flood control and drainage and the failure to introduce improved seeds and fertilizers on any scale account for the absence of any appreciable increase in their yields (Dutt, et al, 1973). The poor performance of aus and aman, and the uncertain future market for jute need careful investigation as to whether improvements are warranted in the cultivation of these crops. The significant yield relationships with cropland productivity however, suggest that with improved farm practices and proper care these crops may give very good yields. However, vast areas under these crops may not be warranted.

The other significant crops that show good performance are IRRI boro, boro and potato. Sugar-cane and tobacco are also found significant by their acreage. These crops need more careful attention and proper application of water, fertilizer and pesticides. The yields of sugar-cane and tobacco are low, but by value they are important cash crops. However, by increasing acreage under these crops, the cropland productivity and thus income per acre can be raised to a higher level. With less water and fertilizers potato can grow in many parts of Bangladesh. It gives at least ten times higher yield in weight than rice and a five times higher per acre monetary returns. This high calorie food should take a more important place in the Bangalee diet, and save the hard-earned foreign exchange spent on foodgrain imports. Incentives should be given to the farmers to grow more potato and for consumers to enjoy it more in the daily diet. Since pulses and oil-seeds are essential for protein, mustard and pulses need more improvements in their cultivation.

This study is limited in scope to the Thana data available for only one year. Clearly, since the production of different crops fluctuates from year to year due to natural and man-made hazards, a mean value generated from several years' data would have provided a more precise measure of the productivity of various crops.

Moreover, the inclusion of other crops as well as their by-products at the farm level would have provided a comprehensive assessment of cropland productivity. Perhaps a followup study could be made with these requirements, when such data become available.

This study reveals that the age-old method of cultivation and farm practices hamper the improvement of cropland productivity. Improved farm practices or modernization is needed to increase the production of crops. However, this requires further investigation at the farm level in order to learn how various crops are grown and how the old farming practices affect cropland productivity.

Finally, it is hoped that the findings, especially the identification of areas where specific cropped acreage, crop yields, and cropping intensity have direct relationship to cropland productivity, would be of use to government decision making in Bangladesh.

APPENDIX - A

Name of the Thanas under each District, and their respective numbers as used in the Study.

Thana No.	Name
	Dinajpur District
1.	Kotwali
2.	Birol
3.	Bochagonj
4.	Kaharole
5.	Birganj
6.	Khanshama
7.	Chirirbandar
8.	Parbatipur
9.	Phulbari
10.	Nawabgonj
11.	Hakimpur
12.	Ghoraghat
13.	Thakurgaon
14.	Pirgonj
15.	Haripur
16.	Ranisankail
17.	Baliadangi
18.	Atwari
19.	Tetulia
20.	Panchagarh
21.	Boda
22.	Debigonj
	Rangpur District
23.	Kotwali
24.	Kawnia
25.	Gangchara
26.	Mithapukur
27.	Pirgonj
28.	Pirgacha
29	Badargonj
30.	Kaligonj
31.	Hatibanda
32.	Patgram
33.	Gaibandha
34.	Palshbari
35.	Gabidagonj
36.	Shaghata
37.	Sundargonj
38.	Sadullapur
39.	Fulchari
40.	Kurigram
41.	Ulipur
42.	Chilmari
43.	Rawmari
44.	Bhurungamari
45.	Nageshwari
46.	Lalmonirhat
47.	Fulbari
48.	Nilphamari
49.	Saidpur
50.	Dimla
51.	Domar
52.	Jaldhaka
53.	Kishoegonj
	Bogra District
54.	Panchbibi
55.	Joypurhat
56.	Khetlal
57.	Adamdighi
58.	Dubchanchia
59.	Kahalu
60.	Bogra
61.	Gabtali
62.	Shibgonj
63.	Sariakandi
64.	Sherpur
65.	Dhunot
66.	Nandigram
	Rajshahi District
67.	Boalia
68.	Paba
69.	Tanore
70.	Mohanpur
71.	Bagmara
72.	Durgapur
73.	Puthia
74.	Godagari
75.	Charghat
76.	Nawabganj
77.	Bholahat
78.	Nachole
79.	Shibgonj
80.	Gomastapur
81.	Porsha
82.	Naogaon
83.	Badalgachi

Continued...

Thana No.	Name
84.	Niamatpur
85.	Manda
86.	Mahadebpur
87.	Atrai
88.	Raninagar
89.	Damoirhat
90.	Patnitala
91	Natore
92.	Bagatipara
93.	Lalpur
94.	Baraigram
95.	Gurudaspur
96.	Singra
	Pabna District
97.	Pabna
98.	Atgharia
99.	Ishurdi
100.	Chatmohar
101.	Faridpur
102.	Sunthia
103.	Bera
104.	Sujanagar
105.	Sirajganj
106.	Kazipur
107.	Raigonj
108.	Tarash
109.	Ullapara
110.	Kamarkhond
111.	Belkuchi
112.	Chouhali
113.	Shazadpur
	Kushtia District
114.	Kushtia
115.	Khoksha
116.	Kumarkhali
117.	Mirpur
118.	Bheramara
119.	Daulatpur
120.	Chuadanga
121.	Alamdanga
122.	Damurhuda
123.	Jibannagar
124.	Meherpur
125.	Gangni
	Jessore District
126.	Kotwali
127.	Sharsha
128.	Jhikargacha
129.	Avoynagar
130.	Bagherpara
131.	Manirampur
132.	Keshabpur
133.	Jhenaidah
134.	Shailkupa
135.	Harinakunda
136.	Kaligonj
137.	Coat Chandpur
138.	Maheshpur
139.	Magura
140.	Sreerampur
141.	Shalika
142.	Mohammadpur
143.	Narail
144.	Kalia
145.	Lohagara
	Khulna District
146.	Khulna
147.	Batiaghata
148.	Daulatpur
149.	Fultala
150.	Terokhada
151.	Dumuria
152.	Dacope
153.	Paikgacha
154.	Bagherhat
155.	Fakirhat
156.	Mollahat
157.	Kachua
158.	Sarankhola
159.	Rampal
160.	Morrelgonj
161.	Satkhira
162.	Kalaroa
163.	Kaligonj
164.	Tala
165.	Debhata
166.	Assasuni
167.	Saymnagar
	Barisal District
168.	Kotwali
169.	Jhalakathi
170.	Rajapur
171.	Nalchity
172.	Bakergonj
173.	Charamaddi
174.	Gournadi
175.	Ujirpur
176.	Babugonj
177.	Muladi
178.	Hizla

Continued...

Thana No.	Name
179.	Mehendigonj
180.	Pirojpur
181.	Swarupkathi
182.	Banaripara
183.	Nazirpur
184.	Bhandaria
185.	Kathalia
186.	Mathbaria
187.	Kowkhali
188.	Bhola
189.	Daulatkhan
190.	Borhanuddin
191.	Tajmuddin
192.	Lalmohan
193.	Charfession
	Patuakhali District
194.	Patuakhali
195.	Bauphal
196.	Galachipa
197.	Mirzagonj
198.	Barguna
199.	Amtali
200.	Bamna
201.	Patharghata
202.	Betagi
203.	Khepupara
	Faridpur District
204.	Kotwali
205.	Char Bhadrashan
206.	Sadarpur
207.	Bhanga
208.	Nagarkanda
209.	Alfadanga
210.	Boalmari
211.	Rajbari
212.	Goalunaghat
213.	Pangsha
214.	Baliakandi
215.	Muksudpur
216.	Gopalgonj
217.	Kotwalipara
218.	Kasiani
219.	Rajoir
220.	Kalkini
221.	Goshairhat
222.	Bhedergonj
223.	Naria
224.	Janjira
225.	Madaripur
226.	Shibchar
227.	Palong
	Dacca District
228.	Tejgaon
229.	Keranigonj
230.	Nawabgonj
231.	Dohar
232.	Sreepur
233.	Kapasia
234.	Kaligonj
235.	Joydebpur
236.	Savar
237.	Dhamrai
238.	Kaliakair
239.	Munshigonj
240.	Louhajang
241.	Srinagar
242.	Sirajdikhan
243.	Tongibari
244.	Gazaria
245.	Manikgonj
246.	Saturia
247.	Singair
248.	Harirampur
249.	Shibalaya
250.	Daulatpur
251.	Gheor
252.	Narayangonj
253.	Araihazar
254.	Rupgonj
255.	Baiderbazar
256.	Fatulla
257.	Narshingdi
258.	Raipura
259.	Shibpur
260.	Monohardi
	Tangail District
261.	Tangail
262.	Basail
263.	Ghatail
264.	Kalihati
265.	Nagarpur
266.	Mirzapur
267.	Gopalpur
268.	Madhupur

Continued....

Thana No.	Name
	Mymenshingh District
269.	Kotwali
270.	Muktagacha
271.	Fulbaria
272.	Trishal
273.	Bhaluka
274.	Gaffargaon
275.	Nandail
276.	Ishwargonj
277.	Gouripur
278.	Phulpur
279.	Haluaghat
280.	Jamalpur
281.	Islampur
282.	Sherpur
283.	Sreebordi
284.	Sarishabari
285.	Nalitabari
286.	Nakhla
287.	Melandah
288.	Madargonj
289.	Dewangonj
	Kishoregonj District
290.	Kishoregonj
291.	Hussainpur
292.	Pakundia
293.	Karimgonj
294.	Tarail
295.	Bajitpur
296.	Kuliarchar
297.	Kathiadia
298.	Austogram
299.	Bhairab
300.	Nikli
301.	Itna
302.	Netrokona
303.	Purbadhola
304.	Durgapur
305.	Berhatta
306.	Mohangonj
307.	Atpara
308.	Kendua
309.	Kaliajuri
310.	Madan
311.	Kalmakanda
	Sylhet District
312.	Kotwali
313.	Gowainghat
314.	Balagonj
315.	Tajpur
316.	Biswamath
317.	Fenchugonj
318.	Gopalgonj
319.	Jaintiapur
320.	Kanaighat
321.	Zakigonj
322.	Beanibazar
323.	Habigonj
324.	Madhabpur
325.	Chunarughat
326.	Bahubal
327.	Baniachang
328.	Nabigonj
329.	Lakhai
330.	Ajmirigonj
331.	Sunamgonj
332.	Chhatak
333.	Jagannathpur
334.	Tahirpur
335.	Dharmapasha
336.	Derai
337.	Sulla
338.	Jamalgonj
339.	Moulavi Bazar
340.	Rajanagar
341.	Kulaura
342.	Sreemongal
343.	Kamalgonj
344.	Barlikha
	Comilla District
345.	Chandina
346.	Debiddar
347.	Muradnagar
348.	Daudkandi
349.	Homna
350.	Kotwali
351.	Burichong
352.	Chouddagram
353.	Laksam
354.	Barura
355.	Chandpur
356.	Faridgonj
357.	Matlab Bazar
358.	Hajigonj
359.	Kachua
360.	Brahmanbaria

Continued....

Thana No.	Name
361.	Sarail
362.	Nasirnagar
363.	Nabinagar
364.	Kasba
365.	Bancharampur
	Noakhali District
366.	Sudharam
367.	Companigonj
368.	Hatiya
369.	Ramgati
370.	Lakshmipur
371.	Raipur
372.	Begumgonj
373.	Senbag
374.	Ramgonj
375.	Feni
376.	Sonagazi
377.	Chhagalnaiya
378.	Parsuram
	Chittagong Dist.
379.	Doublemooring
380.	Panchlaish
381.	Hathazari
382.	Sandwip
383.	Mirsarai
384.	Sitakundu
385.	Fatikchhari
386.	Raojan
387.	Rangunia
388.	Anwara
389.	Banskhali
390.	Boalkhali
391.	Patiya
392.	Satkania
393.	Cox's Bazar
394.	Chakaria
395.	Kutubdia
396.	Ramu
397.	Moishkhali
398.	Teknaaf
399.	Ukhiya
	Chittagong Hill Tracts
400.	Rangamati
401.	Chandraghona
402.	Subalong
403.	Baghaichhari
404.	Langadu
405.	Ramgarh
406.	Khagrachhari
407.	Dighinala
408.	Ruma
409.	Lama
410.	Nakhyongchhari
411.	Bandarban

APPENDIX - A.1

Productivity per acre, Total cropped area (acre) , Total production (in Maund), Total value of production, Percentage of acreage and yield as percent of national average of selected 11 crops by Thana.

Crops should be read in the following sequence:

Aus, boro, IRRI boro, aman, wheat, potato, pulses, rape and mustard, jute, sugar-cane and tobacco.

KOIWALI

PRODUCTIVITY PER ACRE= 717.61 TOTAL CROPPED AREA= 58542.00 TOTAL PRODUCTION= 1198013.00 (in maund) TOTAL VALUE IN RUPEES= 25584692.00

PERCENT OF TOTAL CROPPED AREA:

18.94 0.01 0.13 66.23 0.57 3.91 0.71 3.59 3.25 1.35 1.26

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 103.35 96.62 90.61 105.79 89.92 97.60 123.61 100.15 105.43 100.52

BIRON

PRODUCTIVITY PER ACRE= 708.89 TOTAL CROPPED AREA= 63520.00 TOTAL PRODUCTION= 1339201.00 TOTAL VALUE IN RUPEES= 28311024.00

PERCENT OF TOTAL CROPPED AREA:

20.97 0.30 0.12 61.22 0.26 1.42 0.77 4.57 1.05 1.26 0.07

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 97.61 100.43 90.61 86.56 84.63 91.86 92.71 83.03 108.65 62.83

DOCHAGANJ

PRODUCTIVITY PER ACRE= 835.37 TOTAL CROPPED AREA= 70795.00 TOTAL PRODUCTION= 7286579.00 TOTAL VALUE IN RUPEES= 44803104.00

PERCENT OF TOTAL CROPPED AREA:

25.39 0.05 0.14 55.89 0.04 0.26 0.61 3.81 1.27 12.52 0.01

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 103.35 101.71 76.77 81.75 121.65 80.37 77.20 50.50 158.14 100.52

KAHAROLE

PRODUCTIVITY PER ACRE= 778.30 TOTAL CROPPED AREA= 52459.00 TOTAL PRODUCTION= 1617667.00 TOTAL VALUE IN RUPEES= 22602784.00

PERCENT OF TOTAL CROPPED AREA:

14.01 0.02 0.00 74.07 0.10 0.48 1.03 3.45 1.94 4.80 0.10

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 114.84 88.99 76.77 76.94 68.76 97.60 61.81 85.60 93.41 25.39

BIRGANJ

PRODUCTIVITY PER ACRE= 638.60 TOTAL CROPPED AREA= 79905.00 TOTAL PRODUCTION= 2240322.00 TOTAL VALUE IN RUPEES= 32501296.00

PERCENT OF TOTAL CROPPED AREA:

20.02 0.31 0.30 48.52 1.95 0.88 1.70 13.31 6.90 5.71 0.40

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 91.87 91.54 76.77 76.94 69.82 91.86 77.26 98.44 69.65 100.52

KHANSHAMA

PRODUCTIVITY PER ACRE= 471.70 TOTAL CROPPED AREA= 60702.00 TOTAL PRODUCTION= 735085.00 TOTAL VALUE IN RUPEES= 24683568.00

PERCENT OF TOTAL CROPPED AREA:

19.70 0.00 0.05 63.94 0.33 1.06 0.93 2.87 10.71 0.28 0.14

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 103.35 76.28 76.77 96.18 68.76 91.86 123.61 48.79 113.72 100.52

CHIRIMARIDER

PRODUCTIVITY PER ACRE= 511.17 TOTAL CROPPED AREA= 81908.00 TOTAL PRODUCTION= 1254389.00 TOTAL VALUE IN RUPEES= 34310768.00

PERCENT OF TOTAL CROPPED AREA:

45.01 0.0 1.09 47.35 0.44 0.73 0.67 0.59 2.99 0.97 0.16

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 0.0 96.62 76.77 125.03 75.11 86.12 69.53 91.59 102.05 62.83

PARWATIPUR

PRODUCTIVITY PER ACRE= 559.54 TOTAL CROPPED AREA= 59189.00 TOTAL PRODUCTION= 1505371.00 TOTAL VALUE IN RUPEES= 28758080.00

PERCENT OF TOTAL CROPPED AREA:

23.30 0.03 0.38 65.50 0.32 2.80 0.44 1.88 1.95 3.35 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 114.84 101.71 78.77 173.12 87.80 91.86 66.44 59.92 82.28 100.52

PHULBARI

PRODUCTIVITY PER ACRE= 578.64 TOTAL CROPPED AREA= 53649.00 TOTAL PRODUCTION= 866474.25 TOTAL VALUE IN RUPEES= 27472000.00
PERCENT OF TOTAL CROPPED AREA:

19.76 0.29 0.65 72.52 0.19 1.62 0.40 3.17 0.56 0.80 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 114.84 127.13 92.12 86.56 52.89 99.89 84.98 85.60 79.01 40.21

NAWABGUNJ

PRODUCTIVITY PER ACRE= 610.24 TOTAL CROPPED AREA= 77027.00 TOTAL PRODUCTION= 2764643.00 TOTAL VALUE IN RUPEES= 37604208.00
PERCENT OF TOTAL CROPPED AREA:

28.71 1.50 0.55 51.01 0.19 0.46 2.35 8.11 1.43 5.47 0.21

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 109.07 116.96 92.12 57.71 63.47 91.86 123.61 83.89 97.84 50.26

NAKIMPUR

PRODUCTIVITY PER ACRE= 858.86 TOTAL CROPPED AREA= 42790.00 TOTAL PRODUCTION= 612877.56 TOTAL VALUE IN RUPEES= 15973216.00
PERCENT OF TOTAL CROPPED AREA:

4.81 0.35 0.14 90.68 0.02 0.11 0.60 0.94 1.37 0.88 0.09

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 97.61 101.71 92.12 105.79 95.21 91.86 61.81 66.77 61.15 87.96

GHORAGHAT

PRODUCTIVITY PER ACRE= 472.97 TOTAL CROPPED AREA= 55717.00 TOTAL PRODUCTION= 949624.88 TOTAL VALUE IN RUPEES= 24176448.00
PERCENT OF TOTAL CROPPED AREA:

21.52 0.08 0.27 70.16 0.06 0.81 0.24 4.58 1.10 1.12 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 103.35 101.20 84.45 78.94 74.05 91.86 92.71 90.73 118.08 100.52

THAKURGAON

PRODUCTIVITY PER ACRE= 778.13 TOTAL CROPPED AREA= 128123.00 TOTAL PRODUCTION= 4090163.00 TOTAL VALUE IN RUPEES= 72244240.00
PERCENT OF TOTAL CROPPED AREA:

48.49 0.06 0.27 35.87 0.08 1.47 0.33 4.96 3.63 3.78 0.25

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 103.35 122.05 92.12 96.18 116.36 80.37 69.53 112.13 101.68 87.96

PIRGONJ

PRODUCTIVITY PER ACRE= 832.67 TOTAL CROPPED AREA= 93128.00 TOTAL PRODUCTION= 5465409.00 TOTAL VALUE IN RUPEES= 51354160.00
PERCENT OF TOTAL CROPPED AREA:

35.08 0.05 0.77 41.70 0.24 0.70 1.04 4.69 6.00 9.60 0.12

YIELD AS PERCENT OF NATIONAL AVERAGE:

133.81 97.61 88.99 92.12 105.79 79.34 97.60 92.71 86.17 105.43 56.54

HARIPUR

PRODUCTIVITY PER ACRE= 631.86 TOTAL CROPPED AREA= 69859.00 TOTAL PRODUCTION= 885335.38 TOTAL VALUE IN RUPEES= 34217760.00
PERCENT OF TOTAL CROPPED AREA:

21.47 0.45 0.05 67.66 0.31 0.47 3.12 6.01 0.37 0.00 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 103.35 101.71 99.30 125.03 84.63 80.37 77.26 66.77 84.34 79.16

RANISANKAIL

PRODUCTIVITY PER ACRE= 600.25 TOTAL CROPPED AREA= 59191.00 TOTAL PRODUCTION= 837159.94 TOTAL VALUE IN RUPEES= 27523456.00
PERCENT OF TOTAL CROPPED AREA:

22.79 0.11 0.28 66.22 0.91 0.34 0.50 7.61 0.65 0.55 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 103.33 76.28 92.12 125.07 55.01 80.37 66.44 85.60 92.78 62.83

BALIADANGI

PRODUCTIVITY PER ACRE= 579.98 TOTAL CROPPED AREA= 64219.00 TOTAL PRODUCTION= 1340288.00 TOTAL VALUE IN RUPEES= 27386624.00
PERCENT OF TOTAL CROPPED AREA:

10.82 0.0 0.02 60.37 0.91 0.33 0.16 2.57 1.98 2.66 0.16

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 103.33 81.37 84.45 144.27 95.21 80.37 92.71 81.32 84.34 87.96

ATWARI

PRODUCTIVITY PER ACRE= 790.67 TOTAL CROPPED AREA= 57956.00 TOTAL PRODUCTION= 1262648.00 TOTAL VALUE IN RUPEES= 28307024.00
PERCENT OF TOTAL CROPPED AREA:

14.14 0.04 0.30 74.00 0.79 0.78 0.19 1.34 7.15 1.21 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 100.48 122.05 92.12 173.12 63.47 86.12 92.71 98.44 168.65 50.26

TETULIA

PRODUCTIVITY PER ACRE= 715.85 TOTAL CROPPED AREA= 64556.00 TOTAL PRODUCTION= 1543716.00 TOTAL VALUE IN RUPEES= 34230944.00
PERCENT OF TOTAL CROPPED AREA:

22.14 0.0 0.0 66.45 0.05 0.69 0.07 2.32 5.27 2.84 0.18

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 0.0 0.0 99.80 70.21 89.92 80.37 81.89 128.40 80.76 100.52

PANCHAGARH

PRODUCTIVITY PER ACRE= 695.43 TOTAL CROPPED AREA= 59484.00 TOTAL PRODUCTION= 1142516.00 TOTAL VALUE IN RUPEES= 25520768.00
PERCENT OF TOTAL CROPPED AREA:

23.08 0.00 0.06 72.31 0.02 1.03 0.34 1.07 0.44 1.45 0.21

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 109.07 101.71 99.80 173.12 79.34 91.86 108.16 89.02 105.54 62.83

UDDA

PRODUCTIVITY PER ACRE= 616.33 TOTAL CROPPED AREA= 80061.00 TOTAL PRODUCTION= 1799910.00 TOTAL VALUE IN RUPEES= 38823936.00
PERCENT OF TOTAL CROPPED AREA:

31.62 0.0 0.00 50.93 0.04 2.59 0.66 2.61 9.07 2.30 0.17

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 0.0 101.71 92.12 96.18 105.78 103.34 77.26 59.92 95.31 62.83

DEBIGONJ

PRODUCTIVITY PER ACRE= 677.12 TOTAL CROPPED AREA= 68288.00 TOTAL PRODUCTION= 854699.88 TOTAL VALUE IN RUPEES= 29831616.00
PERCENT OF TOTAL CROPPED AREA:

34.41 0.15 0.06 56.77 0.19 0.95 0.68 2.56 3.00 0.40 0.81

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 100.44 101.71 92.12 67.32 89.92 86.12 67.99 86.45 63.26 87.96

KOTWALI

PRODUCTIVITY PER ACRE= 970.76 TOTAL CROPPED AREA= 86807.00 TOTAL PRODUCTION= 1427985.00 TOTAL VALUE IN RUPEES= 47077712.00
PERCENT OF TOTAL CROPPED AREA:

26.62 0.45 0.70 54.14 0.41 2.33 0.56 7.26 6.64 0.35 0.54

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 143.55 116.96 92.12 91.37 132.23 126.30 139.06 155.79 100.16 163.35

KAWNIA

PRODUCTIVITY PER ACRE=1070.06 TOTAL CROPPED AREA= 51712.00 TOTAL PRODUCTION= 807634.94 TOTAL VALUE IN RUPEES= 30913248.00
PERCENT OF TOTAL CROPPED AREA:

32.87 0.40 0.57 44.34 0.64 0.64 0.46 2.61 4.82 0.48 0.15

YIELD AS PERCENT OF NATIONAL AVERAGE:

133.81 137.80 106.79 137.48 96.18 116.48 114.82 108.16 90.71 104.59 150.78

GANGACHARA

PRODUCTIVITY PER ACRE= 917.56 TOTAL CROPPED AREA= 54925.00 TOTAL PRODUCTION= 807864.44 TOTAL VALUE IN RUPEES= 28798192.00
PERCENT OF TOTAL CROPPED AREA:

33.57 0.16 0.38 55.97 0.24 0.78 0.47 1.64 6.41 0.12 0.20

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 143.55 114.42 107.48 100.99 129.06 109.08 123.61 123.26 101.21 125.65

MITHAPUKUR

PRODUCTIVITY PER ACRE= 943.93 TOTAL CROPPED AREA= 102488.00 TOTAL PRODUCTION= 2510232.00 TOTAL VALUE IN RUPEES= 57504320.00
PERCENT OF TOTAL CROPPED AREA:

31.03 0.14 0.72 46.05 0.63 1.19 2.09 3.71 12.33 2.05 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 126.32 114.42 115.15 96.18 134.35 120.56 139.06 92.45 103.32 138.22

PINGUNJ

PRODUCTIVITY PER ACRE= 931.00 TOTAL CROPPED AREA= 91981.00 TOTAL PRODUCTION= 2368392.00 TOTAL VALUE IN RUPEES= 48933770.00
PERCENT OF TOTAL CROPPED AREA:

25.33 0.94 0.41 58.71 0.12 1.64 1.12 2.31 6.79 2.45 0.15

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 132.06 106.79 99.80 99.06 126.94 103.34 108.16 88.17 105.43 150.78

PIRGACHA

PRODUCTIVITY PER ACRE= 847.00 TOTAL CROPPED AREA= 77662.00 TOTAL PRODUCTION= 1250989.00 TOTAL VALUE IN RUPEES= 37500600.00
PERCENT OF TOTAL CROPPED AREA:

41.59 1.28 0.54 41.20 0.32 0.41 0.56 2.03 9.88 0.80 0.99

YIELD AS PERCENT OF NATIONAL AVERAGE:

89.66 132.06 101.71 107.48 86.56 126.94 120.56 123.61 97.58 101.21 138.22

BADARGANJ

PRODUCTIVITY PER ACRE=1309.89 TOTAL CROPPED AREA= 114733.00 TOTAL PRODUCTION= 4028214.00 TOTAL VALUE IN RUPEES= 85878608.00
PERCENT OF TOTAL CROPPED AREA:

22.66 0.71 0.02 41.84 0.37 0.92 0.70 2.27 5.58 4.53 20.40

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 132.06 106.79 115.15 98.10 132.23 126.30 139.06 103.57 101.21 125.65

KALIGONJ

PRODUCTIVITY PER ACRE= 860.30 TOTAL CROPPED AREA= 110003.00 TOTAL PRODUCTION= 1567085.00 TOTAL VALUE IN RUPEES= 53769984.00
PERCENT OF TOTAL CROPPED AREA:

46.36 1.17 0.23 45.45 0.14 0.82 0.12 0.55 3.68 0.37 1.10

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 132.06 101.71 107.48 89.44 132.23 103.34 139.06 94.16 97.00 150.78

NATIDANDA

PRODUCTIVITY PER ACRE = 882.90 TOTAL CROPPED AREA= 75679.00 TOTAL PRODUCTION= 894261.94 TOTAL VALUE IN RUPEES= 37964224.00
PERCENT OF TOTAL CROPPED AREA:

15.39 0.12 0.22 40.96 0.62 0.81 0.34 2.76 3.45 0.04 5.29

YIELD AS PERCENT OF NATIONAL AVERAGE:

89.66 120.56 88.99 92.12 96.18 116.36 114.82 123.61 100.15 99.10 163.35

PATGRAM

PRODUCTIVITY PER ACRE=1593.29 TOTAL CROPPED AREA= 87152.00 TOTAL PRODUCTION= 1039259.38 TOTAL VALUE IN RUPEES= 78010600.00
PERCENT OF TOTAL CROPPED AREA:

17.04 0.17 0.02 36.95 0.39 0.46 0.40 2.55 1.45 0.01 40.56

YIELD AS PERCENT OF NATIONAL AVERAGE:

89.66 120.51 88.99 92.12 97.14 114.25 114.82 123.61 91.59 94.85 150.78

GAIBANDHA

PRODUCTIVITY PER ACRE= 867.22 TOTAL CROPPED AREA= 89692.00 TOTAL PRODUCTION= 1102320.00 TOTAL VALUE IN RUPEES= 43698272.00
PERCENT OF TOTAL CROPPED AREA:

41.70 0.57 1.19 42.92 0.28 0.26 0.32 0.33 11.93 0.36 0.14

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 143.55 101.71 107.48 88.48 130.12 114.82 123.61 109.57 105.43 113.09

PALASHBARI

PRODUCTIVITY PER ACRE= 900.92 TOTAL CROPPED AREA= 60315.00 TOTAL PRODUCTION= 2131280.00 TOTAL VALUE IN RUPEES= 35874512.00
PERCENT OF TOTAL CROPPED AREA:

40.29 0.47 0.40 37.14 0.51 0.66 1.03 1.33 13.41 4.64 0.12

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 137.80 91.54 99.80 86.56 129.06 114.82 123.61 114.70 106.06 106.80

GAIBANDAGONJ

PRODUCTIVITY PER ACRE= 998.94 TOTAL CROPPED AREA= 141283.00 TOTAL PRODUCTION= 6199927.00 TOTAL VALUE IN RUPEES= 81110380.00
PERCENT OF TOTAL CROPPED AREA:

34.97 1.41 1.17 42.40 0.23 0.94 0.87 0.37 11.40 6.16 0.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 143.55 106.79 107.48 98.10 126.94 114.82 123.61 115.56 105.43 94.24

SHAGHATA

PRODUCTIVITY PER ACRE= 940.68 TOTAL CROPPED AREA= 52765.00 TOTAL PRODUCTION= 881356.00 TOTAL VALUE IN RUPEES= 28201803.00
PERCENT OF TOTAL CROPPED AREA:

26.72 4.56 2.94 47.95 0.26 0.82 2.32 0.34 13.50 0.45 0.09

YIELD AS PERCENT OF NATIONAL AVERAGE:

99.09 132.06 106.79 99.80 88.48 130.12 114.82 123.61 105.29 103.32 113.09

SUNDARGONJ

PRODUCTIVITY PER ACRE= 861.67 TOTAL CROPPED AREA= 144773.00 TOTAL PRODUCTION= 2162578.00 TOTAL VALUE IN RUPEES= 70878672.00
PERCENT OF TOTAL CROPPED AREA:

43.86 0.32 0.14 43.17 0.21 0.44 0.71 0.45 10.17 0.41 0.11

YIELD AS PERCENT OF NATIONAL AVERAGE:

89.66 132.06 101.71 115.15 96.18 123.77 114.82 139.06 118.98 106.46 113.09

SADULLAPUR

PRODUCTIVITY PER ACRE=1006.71 TOTAL CROPPED AREA= 81155.00 TOTAL PRODUCTION= 1593831.00 TOTAL VALUE IN RUPEES= 45137680.00
PERCENT OF TOTAL CROPPED AREA:

39.55 0.40 0.80 46.21 0.59 0.53 0.27 0.69 9.63 1.05 0.28

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 132.06 91.54 115.15 87.62 116.36 109.08 108.16 133.53 107.54 119.37

FULCHARI

PRODUCTIVITY PER ACRE= 801.35 TOTAL CROPPED AREA= 36316.00 TOTAL PRODUCTION= 487429.94 TOTAL VALUE IN RUPEES= 16167750.00
PERCENT OF TOTAL CROPPED AREA:

14.01 0.34 0.38 39.91 1.38 0.21 2.71 0.56 19.48 0.33 0.28

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 120.58 86.45 99.80 86.56 132.23 114.82 139.06 104.43 94.85 106.80

KURIGRAM

PRODUCTIVITY PER ACRE= 875.06 TOTAL CROPPED AREA= 48733.00 TOTAL PRODUCTION= 631849.38 TOTAL VALUE IN RUPEES= 23430396.00
PERCENT OF TOTAL CROPPED AREA:

13.15 1.72 0.84 41.04 0.57 0.60 0.59 0.49 10.68 0.01 0.10

YIELD AS PERCENT OF NATIONAL AVERAGE:

99.66 126.32 106.79 107.48 98.10 121.65 114.83 108.16 101.01 94.85 119.37

ULIPUR

PRODUCTIVITY PER ACRE= 850.64 TOTAL CROPPED AREA= 135555.00 TOTAL PRODUCTION= 1696303.00 TOTAL VALUE IN RUPEES= 63356224.00
PERCENT OF TOTAL CROPPED AREA:

40.21 0.24 0.04 41.13 1.39 0.47 1.23 2.29 12.80 0.01 0.21

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 132.06 99.16 107.48 88.48 121.65 114.82 139.06 107.85 96.15 111.83

CHILMARI

PRODUCTIVITY PER ACRE= 809.19 TOTAL CROPPED AREA= 37552.00 TOTAL PRODUCTION= 474904.13 TOTAL VALUE IN RUPEES= 16604747.00
PERCENT OF TOTAL CROPPED AREA:

43.14 1.22 0.15 35.82 0.71 0.32 1.80 1.07 15.06 0.24 0.47

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.94 114.84 88.99 107.48 87.52 115.31 114.82 131.34 101.86 91.72 100.52

RAWMARI

PRODUCTIVITY PER ACRE= 731.02 TOTAL CROPPED AREA= 35698.00 TOTAL PRODUCTION= 439940.94 TOTAL VALUE IN RUPEES= 14417763.00
PERCENT OF TOTAL CROPPED AREA:

42.02 0.96 0.07 22.97 5.66 0.08 8.12 5.04 14.57 0.38 0.17

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 114.84 101.71 99.80 86.56 116.36 103.34 139.06 101.01 84.34 113.09

BHURUNGAMARI

PRODUCTIVITY PER ACRE= 925.21 TOTAL CROPPED AREA= 64826.00 TOTAL PRODUCTION= 881997.44 TOTAL VALUE IN RUPEES= 33507104.00
PERCENT OF TOTAL CROPPED AREA:

35.17 4.48 3.31 39.74 0.46 0.15 0.80 1.85 13.70 0.01 0.33

YIELD AS PERCENT OF NATIONAL AVERAGE:

99.09 137.80 101.71 99.80 86.56 126.94 97.60 146.79 112.99 105.43 119.37

NAGESHWARI

PRODUCTIVITY PER ACRE= 815.27 TOTAL CROPPED AREA= 103591.00 TOTAL PRODUCTION= 1232513.00 TOTAL VALUE IN RUPEES= 47181188.00
PERCENT OF TOTAL CROPPED AREA:

46.53 1.03 0.36 42.12 2.01 0.07 0.42 2.03 5.32 0.02 0.09

YIELD AS PERCENT OF NATIONAL AVERAGE:

99.66 114.84 104.25 107.48 86.56 126.94 103.34 139.06 102.72 99.10 113.09

LALMONIRHAT

PRODUCTIVITY PER ACRE= 940.33 TOTAL CROPPED AREA= 77929.00 TOTAL PRODUCTION= 2704394.00 TOTAL VALUE IN RUPEES= 41400640.00
PERCENT OF TOTAL CROPPED AREA:

37.51 0.82 0.89 35.93 1.58 0.13 1.27 2.94 11.23 4.91 2.79

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 132.06 106.79 107.48 97.14 126.94 103.34 123.61 102.72 99.10 113.09

FULBARI

PRODUCTIVITY PER ACRE= 885.88 TOTAL CROPPED AREA= 66557.00 TOTAL PRODUCTION= 909879.88 TOTAL VALUE IN RUPEES= 25628932.00
PERCENT OF TOTAL CROPPED AREA:

46.43 0.37 0.26 42.52 0.20 0.17 0.35 1.44 7.59 0.45 0.23

YIELD AS PERCENT OF NATIONAL AVERAGE:

90.22 114.84 91.54 107.48 105.79 121.65 103.34 134.43 108.71 105.43 94.24

NILPHAMARI

PRODUCTIVITY PER ACRE= 917.70 TOTAL CROPPED AREA= 110748.00 TOTAL PRODUCTION= 1537847.00 TOTAL VALUE IN RUPEES= 60850864.00
PERCENT OF TOTAL CROPPED AREA:

35.85 0.14 0.19 46.29 0.37 0.23 0.23 6.61 11.05 0.18 4.88

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 126.32 91.54 107.48 93.29 105.78 126.30 111.34 117.27 105.43 157.06

SAIDPUR

PRODUCTIVITY PER ACRE= 914.55 TOTAL CROPPED AREA= 35761.00 TOTAL PRODUCTION= 557531.89 TOTAL VALUE IN RUPEES= 19467408.00
PERCENT OF TOTAL CROPPED AREA:

20.69 0.0 1.16 62.55 0.31 0.63 0.32 3.08 9.80 0.34 1.12

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 0.0 91.54 107.48 89.44 121.65 114.82 139.06 92.45 105.43 150.78

DIMLA

PRODUCTIVITY PER ACRE= 813.17 TOTAL CROPPED AREA= 66365.00 TOTAL PRODUCTION= 922267.94 TOTAL VALUE IN RUPEES= 32509696.00
PERCENT OF TOTAL CROPPED AREA:

25.62 0.07 0.17 59.52 0.22 0.57 0.19 1.81 10.24 0.27 1.33

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 120.58 88.99 99.80 91.37 116.36 114.82 131.34 100.15 105.43 138.22

DUMAR

PRODUCTIVITY PER ACRE= 844.57 TOTAL CROPPED AREA= 70760.00 TOTAL PRODUCTION= 1285586.00 TOTAL VALUE IN RUPEES= 35785728.00
PERCENT OF TOTAL CROPPED AREA:

37.03 0.01 0.03 55.12 0.45 0.26 0.19 0.51 4.13 1.15 1.13

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 132.06 91.54 107.48 89.44 114.25 137.79 139.06 95.87 105.43 138.22

JALDHAKA

PRODUCTIVITY PER ACRE= 933.62 TOTAL CROPPED AREA= 105031.00 TOTAL PRODUCTION= 1474475.00 TOTAL VALUE IN RUPEES= 58718178.00
PERCENT OF TOTAL CROPPED AREA:

32.51 0.24 0.47 53.89 0.24 0.30 0.16 0.93 8.11 0.07 3.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 126.32 91.54 115.15 86.56 116.36 114.82 123.61 104.43 107.54 157.06

KISHORGONJ

PRODUCTIVITY PER ACRE= 985.35 TOTAL CROPPED AREA= 91321.00 TOTAL PRODUCTION= 1474550.00 TOTAL VALUE IN RUPEES= 53561232.00
PERCENT OF TOTAL CROPPED AREA:

37.89 0.07 0.35 48.18 0.33 0.17 0.23 0.57 6.17 0.49 5.54

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 126.32 96.62 115.15 96.18 113.19 120.56 169.97 110.42 107.54 138.22

PANCHBIBI

PRODUCTIVITY PER ACRE= 781.88 TOTAL CROPPED AREA= 81634.00 TOTAL PRODUCTION= 4359531.00 TOTAL VALUE IN RUPEES= 44325120.00
PERCENT OF TOTAL CROPPED AREA:

16.54 0.04 0.15 67.07 0.31 0.37 0.76 2.08 4.73 7.84 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 86.13 81.37 92.12 153.88 74.05 132.04 108.16 82.17 115.97 62.89

JOYPURHAT

PRODUCTIVITY PER ACRE= 951.81 TOTAL CROPPED AREA= 80458.00 TOTAL PRODUCTION= 3223651.00 TOTAL VALUE IN RUPEES= 43266944.00
PERCENT OF TOTAL CROPPED AREA:

20.26 0.09 0.21 52.84 0.29 4.55 3.68 2.18 11.47 4.35 0.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 91.87 83.91 80.61 125.03 105.78 137.79 123.61 112.13 126.52 113.09

KHETLAL

PRODUCTIVITY PER ACRE= 524.42 TOTAL CROPPED AREA= 75478.00 TOTAL PRODUCTION= 1213661.00 TOTAL VALUE IN RUPEES= 37697664.00
PERCENT OF TOTAL CROPPED AREA:

12.59 0.25 0.19 80.16 0.06 4.04 0.04 0.56 1.63 0.44 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 68.90 73.74 84.45 96.18 84.63 91.86 92.71 105.29 105.43 100.52

ADANDIGHI

PRODUCTIVITY PER ACRE= 654.83 TOTAL CROPPED AREA= 66547.00 TOTAL PRODUCTION= 1507539.00 TOTAL VALUE IN RUPEES= 32520176.00
PERCENT OF TOTAL CROPPED AREA:

18.03 2.49 0.59 72.13 0.17 2.67 0.38 0.40 1.25 1.84 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 80.39 81.37 84.45 163.50 79.34 109.08 77.26 124.12 115.97 87.96

DUNCHANCHIA

PRODUCTIVITY PER ACRE= 635.18 TOTAL CROPPED AREA= 44296.00 TOTAL PRODUCTION= 607795.19 TOTAL VALUE IN RUPEES= 21643188.00
PERCENT OF TOTAL CROPPED AREA:

18.51 0.31 0.94 74.92 0.05 2.03 0.16 0.21 2.71 0.14 0.02

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 91.87 114.42 92.12 96.18 84.63 68.89 92.71 116.41 84.34 87.96

KAHALU

PRODUCTIVITY PER ACRE= 553.75 TOTAL CROPPED AREA= 63070.00 TOTAL PRODUCTION= 895633.94 TOTAL VALUE IN RUPEES= 26865344.00
PERCENT OF TOTAL CROPPED AREA:

19.82 0.10 0.61 75.95 0.02 0.75 0.15 0.18 1.59 0.75 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 91.87 122.05 88.28 96.18 52.89 103.34 77.26 86.45 90.67 87.96

BOGRA

PRODUCTIVITY PER ACRE= 937.72 TOTAL CROPPED AREA= 106869.00 TOTAL PRODUCTION= 2291766.00 TOTAL VALUE IN RUPEES= 61859868.00
PERCENT OF TOTAL CROPPED AREA:

24.42 2.80 0.92 55.35 0.82 5.39 0.91 2.03 6.24 1.01 0.12

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 91.87 114.42 99.80 153.88 89.92 126.30 139.06 124.12 105.43 113.09

GAIBTALI

PRODUCTIVITY PER ACRE=1094.15 TOTAL CROPPED AREA= 113700.00 TOTAL PRODUCTION= 2292220.00 TOTAL VALUE IN RUPEES= 60685130.00
PERCENT OF TOTAL CROPPED AREA:

28.06 2.36 1.95 46.33 0.35 0.91 5.31 1.67 11.88 1.12 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 97.61 106.79 103.64 173.12 95.21 103.34 139.06 116.41 115.97 113.09

SHIBGONJ

PRODUCTIVITY PER ACRE= 999.54 TOTAL CROPPED AREA= 110794.00 TOTAL PRODUCTION= 3729957.00 TOTAL VALUE IN RUPEES= 62922000.00
PERCENT OF TOTAL CROPPED AREA:

31.59 0.39 0.99 49.30 1.05 3.05 1.39 2.62 6.07 3.52 0.02

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 91.87 101.71 103.64 115.41 95.21 126.30 139.06 107.85 115.97 100.52

SARIAKANDI

PRODUCTIVITY PER ACRE=1052.53 TOTAL CROPPED AREA= 86320.00 TOTAL PRODUCTION= 1200203.00 TOTAL VALUE IN RUPEES= 42455480.00
PERCENT OF TOTAL CROPPED AREA:

21.78 3.99 0.77 52.71 2.58 0.46 4.41 2.28 10.76 0.20 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 103.35 106.79 95.96 127.92 42.31 103.34 139.06 120.69 84.34 113.09

SHERPUR

PRODUCTIVITY PER ACRE= 743.15 TOTAL CROPPED AREA= 72030.00 TOTAL PRODUCTION= 846587.94 TOTAL VALUE IN RUPEES= 32053280.00
PERCENT OF TOTAL CROPPED AREA:

30.68 6.14 0.79 57.06 0.09 0.33 0.64 1.30 2.89 0.05 0.03

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 86.13 101.71 95.96 144.27 105.78 91.86 108.16 98.21 105.43 100.52

DHUNOT

PRODUCTIVITY PER ACRE=1127.77 TOTAL CROPPED AREA= 47691.00 TOTAL PRODUCTION= 805187.25 TOTAL VALUE IN RUPEES= 25490288.00
PERCENT OF TOTAL CROPPED AREA:

38.58 12.97 0.47 30.40 0.50 0.63 3.88 1.07 10.90 0.53 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 103.35 114.42 99.80 129.84 95.21 103.34 123.61 118.98 109.65 113.09

NANDIGRAM

PRODUCTIVITY PER ACRE= 559.25 TOTAL CROPPED AREA= 55535.00 TOTAL PRODUCTION= 766105.00 TOTAL VALUE IN RUPEES= 29579024.00
PERCENT OF TOTAL CROPPED AREA:

12.42 0.59 0.38 84.63 0.0 1.11 0.0 0.54 0.32 0.0 0.0

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 91.87 114.42 107.48 0.0 47.60 0.0 92.71 85.60 0.0 0.0

BOALIA

PRODUCTIVITY PER ACRE= 533.54 TOTAL CROPPED AREA= 539.00 TOTAL PRODUCTION= 3713.00 TOTAL VALUE IN RUPEES= 139600.38
PERCENT OF TOTAL CROPPED AREA:

46.38 0.93 0.0 44.53 0.19 0.93 2.04 4.64 0.37 0.0 0.0

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 68.90 0.0 0.0 86.56 79.34 103.34 92.71 85.60 0.0 0.0

PAUA

PRODUCTIVITY PER ACRE=1043.73 TOTAL CROPPED AREA= 67273.00 TOTAL PRODUCTION= 8912367.00 TOTAL VALUE IN RUPEES= 44723056.00
PERCENT OF TOTAL CROPPED AREA:

22.59 2.02 0.25 33.27 6.67 0.30 7.58 1.49 0.98 24.82 0.02

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 68.90 0.0 76.77 173.12 132.23 103.34 139.06 121.55 105.43 125.65

TANURE

PRODUCTIVITY PER ACRE= 557.67 TOTAL CROPPED AREA= 63564.00 TOTAL PRODUCTION= 770896.38 TOTAL VALUE IN RUPEES= 30040336.00
PERCENT OF TOTAL CROPPED AREA:

10.56 2.38 0.19 85.72 0.68 0.06 0.21 0.12 0.07 0.0 0.01

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 80.39 96.62 92.12 134.65 74.05 103.34 77.26 93.30 0.0 150.78

MOHANPUR

PRODUCTIVITY PER ACRE= 706.63 TOTAL CROPPED AREA= 39203.00 TOTAL PRODUCTION= 602142.44 TOTAL VALUE IN RUPEES= 18844976.00
PERCENT OF TOTAL CROPPED AREA:

15.87 10.11 1.42 56.63 1.91 1.91 7.18 2.14 2.36 0.46 0.01

YIELD AS PERCENT OF NATIONAL AVERAGE:

108.53 68.90 53.40 92.12 153.88 79.34 109.08 139.06 114.70 105.43 125.65

BAGHARA

PRODUCTIVITY PER ACRE= 547.72 TOTAL CROPPED AREA= 87694.00 TOTAL PRODUCTION= 1015726.44 TOTAL VALUE IN RUPEES= 33125664.00
PERCENT OF TOTAL CROPPED AREA:

22.75 5.43 0.52 44.99 2.19 6.16 3.45 1.66 12.83 0.0 0.02

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 57.42 38.14 61.41 110.60 68.76 97.60 123.61 57.35 0.0 125.65

DURGAPUR

PRODUCTIVITY PER ACRE= 687.28 TOTAL CROPPED AREA= 53967.00 TOTAL PRODUCTION= 715644.00 TOTAL VALUE IN RUPEES= 21690384.00
PERCENT OF TOTAL CROPPED AREA:

37.59 2.52 0.23 43.77 2.19 0.93 4.47 4.87 2.85 0.50 0.07

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 80.39 61.02 76.77 125.03 68.76 91.86 123.61 81.32 110.08 150.78

PUTHIA

PRODUCTIVITY PER ACRE= 757.64 TOTAL CROPPED AREA= 47571.00 TOTAL PRODUCTION= 3427184.00 TOTAL VALUE IN RUPEES= 26501344.00
PERCENT OF TOTAL CROPPED AREA:

38.31 0.97 0.23 36.15 3.56 0.70 3.49 1.14 4.06 11.29 0.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 86.13 76.28 84.45 88.48 63.47 109.08 77.26 85.60 115.97 75.39

GODAGARI

PRODUCTIVITY PER ACRE= 404.29 TOTAL CROPPED AREA= 92874.00 TOTAL PRODUCTION= 1086330.00 TOTAL VALUE IN RUPEES= 31290330.00
PERCENT OF TOTAL CROPPED AREA:

56.96 1.85 0.24 35.45 0.40 0.12 1.52 2.61 0.26 0.55 0.02

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 68.90 0.0 69.09 120.22 52.89 103.34 92.71 77.89 126.52 138.22

CHARGHAT

PRODUCTIVITY PER ACRE= 954.85 TOTAL CROPPED AREA= 101751.00 TOTAL PRODUCTION= 8153111.00 TOTAL VALUE IN RUPEES= 56816720.00
PERCENT OF TOTAL CROPPED AREA:

31.84 0.94 0.11 37.74 4.86 0.69 3.17 0.57 2.35 17.69 0.02

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 57.42 0.0 92.12 86.56 74.05 91.86 92.71 127.54 84.34 100.52

NAWABGANJ

PRODUCTIVITY PER ACRE= 382.45 TOTAL CROPPED AREA= 87390.00 TOTAL PRODUCTION= 816066.38 TOTAL VALUE IN RUPEES= 23703472.00
PERCENT OF TOTAL CROPPED AREA:

44.45 1.58 0.09 31.15 1.47 0.14 11.53 6.29 2.88 0.34 0.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 68.90 88.99 61.41 127.92 79.34 80.37 92.71 70.19 137.06 113.09

BHOLAHAT

PRODUCTIVITY PER ACRE= 640.22 TOTAL CROPPED AREA= 32105.00 TOTAL PRODUCTION= 370270.00 TOTAL VALUE IN RUPEES= 14273825.00
PERCENT OF TOTAL CROPPED AREA:

20.84 26.97 8.88 29.25 0.25 0.14 7.27 6.23 0.12 0.0 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 57.42 76.28 76.77 144.27 63.47 103.34 92.71 68.48 0.0 113.09

NACHOLE

PRODUCTIVITY PER ACRE= 508.15 TOTAL CROPPED AREA= 64682.00 TOTAL PRODUCTION= 690985.19 TOTAL VALUE IN RUPEES= 26943440.00
PERCENT OF TOTAL CROPPED AREA:

11.04 2.06 0.20 79.46 0.36 0.13 1.91 4.70 0.07 0.02 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 68.90 76.28 84.45 144.27 52.89 103.34 123.61 80.46 94.89 150.78

SHIBGONJ

PRODUCTIVITY PER ACRE= 520.65 TOTAL CROPPED AREA= 130089.00 TOTAL PRODUCTION= 2867933.00 TOTAL VALUE IN RUPEES= 46710688.00
PERCENT OF TOTAL CROPPED AREA:

36.83 1.18 0.13 53.54 0.77 0.09 2.48 0.94 1.28 2.75 0.01

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 63.16 45.77 76.77 139.46 52.89 109.08 92.71 71.90 105.43 50.26

GOMASTAPUR

PRODUCTIVITY PER ACRE= 575.50 TOTAL CROPPED AREA= 70220.00 TOTAL PRODUCTION= 725643.38 TOTAL VALUE IN RUPEES= 27870304.00
PERCENT OF TOTAL CROPPED AREA:

21.36 5.91 1.23 62.19 0.11 0.11 3.60 5.13 0.15 0.04 0.18

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 80.39 0.0 84.45 144.27 63.47 114.82 92.71 61.63 105.43 138.22

PURSHA

PRODUCTIVITY PER ACRE= 429.84 TOTAL CROPPED AREA= 90564.00 TOTAL PRODUCTION= 831226.06 TOTAL VALUE IN RUPEES= 32439920.00

PERCENT OF TOTAL CROPPED AREA:

10.71 5.27 0.87 81.16 0.10 0.09 0.19 1.41 0.07 0.01 0.13

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 63.16 91.54 69.09 86.56 63.47 103.34 92.71 59.06 100.16 100.52

NAUGAON

PRODUCTIVITY PER ACRE= 765.42 TOTAL CROPPED AREA= 126502.00 TOTAL PRODUCTION= 1784748.00 TOTAL VALUE IN RUPEES= 54397472.00

PERCENT OF TOTAL CROPPED AREA:

15.85 33.37 12.33 30.12 0.10 2.77 0.36 1.16 3.35 0.46 0.12

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 68.90 0.0 92.12 88.48 52.89 114.82 123.61 78.75 126.52 62.83

BADALGACHI

PRODUCTIVITY PER ACRE= 893.46 TOTAL CROPPED AREA= 74787.00 TOTAL PRODUCTION= 3483037.00 TOTAL VALUE IN RUPEES= 41240368.00

PERCENT OF TOTAL CROPPED AREA:

21.07 1.68 0.22 57.83 1.74 2.82 3.21 1.94 3.68 5.68 0.13

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 74.64 0.0 92.12 163.50 74.05 103.34 123.61 120.69 126.52 150.78

NIAMATPUR

PRODUCTIVITY PER ACRE= 487.91 TOTAL CROPPED AREA= 90554.00 TOTAL PRODUCTION= 1041048.94 TOTAL VALUE IN RUPEES= 40909504.00

PERCENT OF TOTAL CROPPED AREA:

15.12 3.12 0.12 79.01 0.02 0.0 0.19 2.32 0.08 0.0 0.03

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 63.16 0.0 92.12 76.94 0.0 86.12 92.71 43.65 0.0 62.83

MANDA

PRODUCTIVITY PER ACRE= 461.88 TOTAL CROPPED AREA= 66808.00 TOTAL PRODUCTION= 1309284.00 TOTAL VALUE IN RUPEES= 28571680.00

PERCENT OF TOTAL CROPPED AREA:

10.59 6.21 1.28 66.40 2.74 0.74 2.48 2.65 4.92 1.99 0.10

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 74.64 152.56 76.77 163.50 47.60 80.37 92.71 59.06 94.85 62.83

MAHADEVPUR

PRODUCTIVITY PER ACRE= 487.00 TOTAL CROPPED AREA= 92234.00 TOTAL PRODUCTION= 1694767.00 TOTAL VALUE IN RUPEES= 37431520.00

PERCENT OF TOTAL CROPPED AREA:

9.75 1.58 0.17 72.68 0.81 0.15 1.62 2.94 8.63 1.63 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 74.64 127.13 76.77 115.41 47.60 86.12 92.71 71.90 109.65 125.65

ATRAI

PRODUCTIVITY PER ACRE= 526.79 TOTAL CROPPED AREA= 56783.00 TOTAL PRODUCTION= 716714.25 TOTAL VALUE IN RUPEES= 26239328.00

PERCENT OF TOTAL CROPPED AREA:

8.28 7.34 3.08 68.86 5.19 2.87 1.79 1.32 0.84 0.0 0.43

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 68.90 0.0 92.12 168.31 47.60 109.08 108.16 134.39 0.0 163.35

RANINAGAR

PRODUCTIVITY PER ACRE= 511.60 TOTAL CROPPED AREA= 58212.00 TOTAL PRODUCTION= 648632.88 TOTAL VALUE IN RUPEES= 24612528.00

PERCENT OF TOTAL CROPPED AREA:

8.46 7.30 1.45 76.32 1.12 1.26 2.20 0.89 0.56 0.01 0.44

YIELD AS PERCENT OF NATIONAL AVERAGE:

34.94 63.16 127.13 76.77 100.99 52.89 122.86 108.16 131.82 126.52 113.09

DAMDIHAT

PRODUCTIVITY PER ACRE= 561.19 TOTAL CROPPED AREA= 56501.00 TOTAL PRODUCTION= 1784984.00 TOTAL VALUE IN RUPEES= 27813024.00

PERCENT OF TOTAL CROPPED AREA:

13.72 2.63 0.39 71.80 0.53 2.35 0.94 2.48 1.31 3.82 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 68.90 88.99 84.45 67.32 52.89 80.37 77.26 78.75 110.70 75.39

PATNITALA

PRODUCTIVITY PER ACRE= 542.58 TOTAL CROPPED AREA= 76078.00 TOTAL PRODUCTION= 1373928.00 TOTAL VALUE IN RUPEES= 36529520.00

PERCENT OF TOTAL CROPPED AREA:

11.83 0.92 0.30 80.84 0.25 1.09 1.35 1.51 0.76 1.12 0.03

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.94 68.90 76.28 92.12 118.30 95.21 120.56 92.71 41.09 109.65 50.26

NATORE

PRODUCTIVITY PER ACRE= 573.50 TOTAL CROPPED AREA= 99283.00 TOTAL PRODUCTION= 3273265.00 TOTAL VALUE IN RUPEES= 44138960.00

PERCENT OF TOTAL CROPPED AREA:

10.67 4.46 1.47 65.57 2.63 0.60 3.65 0.93 6.21 3.78 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 68.90 88.99 69.09 204.86 79.34 97.60 123.61 122.40 126.52 87.96

BAGATIPARA

PRODUCTIVITY PER ACRE=1109.35 TOTAL CROPPED AREA= 40595.00 TOTAL PRODUCTION= 7416275.00 TOTAL VALUE IN RUPEES= 328715.30.00

PERCENT OF TOTAL CROPPED AREA:

17.49 3.82 0.14 30.78 3.05 0.18 7.16 0.79 7.44 29.12 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 80.39 76.28 76.77 131.76 74.05 109.08 123.61 128.40 126.52 150.78

LALPUR

PRODUCTIVITY PER ACRE= 781.48 TOTAL CROPPED AREA= 91464.00 TOTAL PRODUCTION= 8030680.00 TOTAL VALUE IN RUPEES= 4862.032.00

PERCENT OF TOTAL CROPPED AREA:

35.86 1.69 0.16 27.38 1.37 0.04 10.22 0.38 4.29 18.59 0.01

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 68.90 0.0 76.77 86.56 47.60 80.37 92.71 94.16 90.67 100.52

BARAIGRAM

PRODUCTIVITY PER ACRE= 649.66 TOTAL CROPPED AREA= 63480.00 TOTAL PRODUCTION= 2855441.00 TOTAL VALUE IN RUPEES= 31723552.00

PERCENT OF TOTAL CROPPED AREA:

25.67 2.28 0.19 48.56 4.44 0.31 4.19 2.60 5.97 5.72 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 68.90 139.85 84.45 110.60 95.21 80.37 123.61 119.84 126.52 62.83

GURUDASPUR

PRODUCTIVITY PER ACRE= 543.54 TOTAL CROPPED AREA= 57863.00 TOTAL PRODUCTION= 819277.88 TOTAL VALUE IN RUPEES= 2665342.00

PERCENT OF TOTAL CROPPED AREA:

16.25 2.31 0.13 66.32 4.18 0.15 4.41 1.64 4.20 0.35 0.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 86.13 101.71 92.12 117.34 74.05 114.82 139.06 116.41 126.52 113.09

SINGRA

PRODUCTIVITY PER ACRE= 549.40 TOTAL CROPPED AREA= 100693.00 TOTAL PRODUCTION= 1226807.00 TOTAL VALUE IN RUPEES= 4088192.0.00

PERCENT OF TOTAL CROPPED AREA:

6.91 2.44 0.22 85.91 1.06 0.09 1.52 0.39 1.42 0.03 0.01

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 74.64 101.71 92.12 120.22 80.40 114.82 108.16 116.41 94.85 125.65

PAUNA

PRODUCTIVITY PER ACRE= 743.04 TOTAL CROPPED AREA= 96460.00 TOTAL PRODUCTION= 3349665.00 TOTAL VALUE IN RUPEES= 44517712.00
PERCENT OF TOTAL CROPPED AREA:

35.25 0.01 0.02 31.41 3.21 0.21 13.89 4.20 7.36 4.35 0.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 80.39 88.99 92.12 108.68 74.05 103.34 92.71 128.40 115.97 138.22

ATGHARIA

PRODUCTIVITY PER ACRE= 939.13 TOTAL CROPPED AREA= 43501.00 TOTAL PRODUCTION= 1293714.00 TOTAL VALUE IN RUPEES= 24402976.00
PERCENT OF TOTAL CROPPED AREA:

15.40 0.45 9.43 48.96 5.97 0.25 6.83 1.84 7.83 2.99 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 103.35 101.71 92.12 108.68 58.18 91.86 77.26 128.40 111.76 125.65

ISHURDI

PRODUCTIVITY PER ACRE= 743.61 TOTAL CROPPED AREA= 49108.00 TOTAL PRODUCTION= 2186402.00 TOTAL VALUE IN RUPEES= 24508096.00
PERCENT OF TOTAL CROPPED AREA:

51.11 0.20 0.03 21.89 4.25 0.81 7.84 3.05 4.64 6.11 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 80.39 63.57 95.96 108.68 63.47 103.34 77.26 128.40 115.97 113.09

CHATMOHAR

PRODUCTIVITY PER ACRE= 702.93 TOTAL CROPPED AREA= 84481.00 TOTAL PRODUCTION= 1214384.00 TOTAL VALUE IN RUPEES= 35327328.00
PERCENT OF TOTAL CROPPED AREA:

17.76 1.91 1.10 48.12 6.04 0.47 10.45 3.37 10.18 0.31 0.30

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 97.61 88.99 103.64 107.72 74.05 109.08 92.71 128.40 111.76 138.22

FARIDPUR

PRODUCTIVITY PER ACRE= 793.79 TOTAL CROPPED AREA= 68423.00 TOTAL PRODUCTION= 986204.94 TOTAL VALUE IN RUPEES= 34816304.00
PERCENT OF TOTAL CROPPED AREA:

6.58 2.19 4.43 58.53 6.25 0.22 14.73 1.75 5.12 0.10 0.10

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 103.35 101.71 103.64 107.72 63.47 109.08 77.26 128.40 94.85 138.22

SUNTHIA

PRODUCTIVITY PER ACRE= 708.03 TOTAL CROPPED AREA= 81773.00 TOTAL PRODUCTION= 2037286.00 TOTAL VALUE IN RUPEES= 36044256.00
PERCENT OF TOTAL CROPPED AREA:

13.70 0.85 0.88 46.10 7.46 0.24 13.09 4.55 10.04 2.45 0.24

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 103.35 101.71 95.96 110.60 63.47 103.34 77.26 128.40 115.97 138.22

UERA

PRODUCTIVITY PER ACRE= 668.34 TOTAL CROPPED AREA= 41822.00 TOTAL PRODUCTION= 843716.44 TOTAL VALUE IN RUPEES= 17803344.00
PERCENT OF TOTAL CROPPED AREA:

10.76 9.68 0.14 35.87 12.25 0.48 15.78 4.78 7.94 1.91 0.41

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 91.87 76.28 92.12 112.53 74.05 103.34 92.71 128.40 94.85 113.09

SUJANAGAR

PRODUCTIVITY PER ACRE= 738.28 TOTAL CROPPED AREA= 75327.00 TOTAL PRODUCTION= 2288887.00 TOTAL VALUE IN RUPEES= 34541952.00
PERCENT OF TOTAL CROPPED AREA:

22.57 3.93 0.04 33.59 8.86 0.13 11.30 4.12 11.95 3.45 0.07

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 86.14 76.28 95.96 110.60 63.47 103.34 77.26 128.40 115.97 125.65

SIRAJGONJ

PRODUCTIVITY PER ACRE= 828.79 TOTAL CROPPED AREA= 85105.00 TOTAL PRODUCTION= 1932614.00 TOTAL VALUE IN RUPEES= 43088544.00
PERCENT OF TOTAL CROPPED AREA:

38.54 0.05 0.0 41.13 2.48 0.51 4.91 2.70 7.55 2.00 0.14

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 91.87 0.0 107.48 107.72 74.05 97.60 77.26 128.40 105.43 125.65

KAZIPUR

PRODUCTIVITY PER ACRE= 726.58 TOTAL CROPPED AREA= 74671.00 TOTAL PRODUCTION= 1635543.00 TOTAL VALUE IN RUPEES= 36667760.00
PERCENT OF TOTAL CROPPED AREA:

31.47 0.95 0.03 40.18 3.50 0.31 1.86 4.08 15.64 1.87 0.11

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 97.61 63.57 99.80 106.76 89.92 91.86 77.26 128.40 105.43 125.65

RAIGONJ

PRODUCTIVITY PER ACRE= 907.40 TOTAL CROPPED AREA= 81981.00 TOTAL PRODUCTION= 1527829.00 TOTAL VALUE IN RUPEES= 40429320.00
PERCENT OF TOTAL CROPPED AREA:

26.84 0.63 0.77 48.18 1.57 0.30 5.00 2.87 12.58 1.10 0.16

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 74.64 101.71 99.80 105.79 95.21 103.34 77.26 128.40 111.76 125.65

TARASH

PRODUCTIVITY PER ACRE= 773.47 TOTAL CROPPED AREA= 77035.00 TOTAL PRODUCTION= 1008562.94 TOTAL VALUE IN RUPEES= 38650848.00
PERCENT OF TOTAL CROPPED AREA:

9.09 0.21 0.04 85.03 1.60 0.08 1.03 1.04 1.84 0.03 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 80.39 63.57 103.64 98.10 74.05 103.34 77.26 128.40 94.85 113.09

ULLAPARA

PRODUCTIVITY PER ACRE= 734.26 TOTAL CROPPED AREA= 116452.00 TOTAL PRODUCTION= 1460825.00 TOTAL VALUE IN RUPEES= 53441376.00
PERCENT OF TOTAL CROPPED AREA:

38.64 0.47 0.04 46.37 4.49 0.13 2.28 1.85 5.60 0.09 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 91.87 66.11 99.80 113.49 84.63 103.34 92.71 128.40 94.85 138.22

KAMARKHOND

PRODUCTIVITY PER ACRE= 827.88 TOTAL CROPPED AREA= 29838.00 TOTAL PRODUCTION= 572930.94 TOTAL VALUE IN RUPEES= 13800175.00
PERCENT OF TOTAL CROPPED AREA:

37.54 0.40 0.01 22.45 3.35 0.50 6.03 4.02 24.30 1.34 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 80.39 63.57 95.96 112.53 84.63 91.86 77.26 128.40 105.43 138.22

BELKUCHI

PRODUCTIVITY PER ACRE= 746.84 TOTAL CROPPED AREA= 47649.00 TOTAL PRODUCTION= 603256.00 TOTAL VALUE IN RUPEES= 21182240.00
PERCENT OF TOTAL CROPPED AREA:

38.83 0.54 0.0 36.94 4.34 1.05 5.96 0.73 11.44 0.06 0.10

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 80.39 0.0 92.12 105.79 84.63 103.34 77.26 128.40 88.56 125.65

CHOUHALI

PRODUCTIVITY PER ACRE= 586.80 TOTAL CROPPED AREA= 35963.00 TOTAL PRODUCTION= 440087.00 TOTAL VALUE IN RUPEES= 15748481.00
PERCENT OF TOTAL CROPPED AREA:

30.59 0.70 0.0 44.63 4.31 0.42 3.20 3.34 12.65 0.08 0.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 80.39 0.0 92.12 105.79 63.47 97.60 77.26 128.40 88.56 113.09

SHAZADPUR

PRODUCTIVITY PER ACRE= 723.15 TOTAL CROPPED AREA= 66198.00 TOTAL PRODUCTION= 1103416.00 TOTAL VALUE IN RUPEES= 39451968.00
PERCENT OF TOTAL CROPPED AREA:

32.48 0.94 0.87 34.40 6.03 0.81 7.71 4.06 12.41 0.01 0.27

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 103.35 101.71 99.80 107.72 84.63 109.08 92.71 128.40 84.34 138.22

KUSHTIA

PRODUCTIVITY PER ACRE= 616.63 TOTAL CROPPED AREA= 96219.00 TOTAL PRODUCTION= 3600075.00 TOTAL VALUE IN RUPEES= 44277312.00
PERCENT OF TOTAL CROPPED AREA:

44.57 0.52 0.19 19.06 9.86 0.11 10.46 1.64 7.98 5.37 0.23

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 80.39 101.71 126.67 96.18 105.78 103.34 108.16 66.77 105.43 131.93

KHOKSHA

PRODUCTIVITY PER ACRE= 544.68 TOTAL CROPPED AREA= 21999.00 TOTAL PRODUCTION= 833040.00 TOTAL VALUE IN RUPEES= 9821623.00
PERCENT OF TOTAL CROPPED AREA:

46.74 0.0 0.27 14.59 4.09 0.05 8.50 3.59 15.91 6.20 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 114.84 76.28 115.15 115.41 63.47 80.37 123.61 85.60 94.85 113.09

KUMARKHALI

PRODUCTIVITY PER ACRE= 546.01 TOTAL CROPPED AREA= 62482.00 TOTAL PRODUCTION= 1641850.00 TOTAL VALUE IN RUPEES= 20862880.00
PERCENT OF TOTAL CROPPED AREA:

41.61 0.00 0.0 33.61 2.08 0.32 5.51 1.04 7.68 8.00 0.14

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 114.84 0.0 103.64 96.18 126.94 80.37 108.16 102.72 42.17 150.78

MIRPUR

PRODUCTIVITY PER ACRE= 673.22 TOTAL CROPPED AREA= 73147.00 TOTAL PRODUCTION= 4298843.00 TOTAL VALUE IN RUPEES= 37879776.00
PERCENT OF TOTAL CROPPED AREA:

46.36 0.05 0.03 15.22 7.19 0.13 12.85 2.06 7.80 8.03 0.27

YIELD AS PERCENT OF NATIONAL AVERAGE:

96.26 143.55 81.37 118.99 153.88 95.21 91.86 92.71 110.42 126.52 125.65

BHERAMARA

PRODUCTIVITY PER ACRE= 677.86 TOTAL CROPPED AREA= 41192.00 TOTAL PRODUCTION= 2072016.00 TOTAL VALUE IN RUPEES= 18131328.00
PERCENT OF TOTAL CROPPED AREA:

40.32 0.01 0.01 9.23 2.91 0.29 29.38 5.68 3.70 8.25 0.32

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 103.35 76.28 111.31 115.41 95.21 91.86 139.06 35.95 105.43 150.78

DAULATPUR

PRODUCTIVITY PER ACRE= 514.86 TOTAL CROPPED AREA= 91343.00 TOTAL PRODUCTION= 2725886.00 TOTAL VALUE IN RUPEES= 38234848.00
PERCENT OF TOTAL CROPPED AREA:

66.36 0.28 0.10 3.83 5.53 0.44 10.98 2.30 6.66 3.32 0.22

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 172.26 101.71 122.83 67.32 137.52 80.37 77.26 84.74 126.52 138.22

CHUADANGA

PRODUCTIVITY PER ACRE= 624.05 TOTAL CROPPED AREA= 52230.00 TOTAL PRODUCTION= 2318157.00 TOTAL VALUE IN RUPEES= 24880960.00
PERCENT OF TOTAL CROPPED AREA:

50.87 0.07 0.36 16.31 4.31 0.11 12.93 4.37 3.96 6.70 0.02

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 114.84 101.71 122.83 86.56 132.23 103.34 95.80 85.00 107.54 116.86
ALAMDANGA

PRODUCTIVITY PER ACRE= 776.23 TOTAL CROPPED AREA= 87271.00 TOTAL PRODUCTION= 6307072.00 TOTAL VALUE IN RUPEES= 47045536.00
PERCENT OF TOTAL CROPPED AREA:

63.04 0.03 0.05 6.08 4.18 0.25 8.93 2.62 4.68 10.12 0.03

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 103.35 101.71 103.64 105.79 160.79 68.89 77.26 40.23 130.73 113.09
DAMURHUDA

PRODUCTIVITY PER ACRE= 563.18 TOTAL CROPPED AREA= 58142.00 TOTAL PRODUCTION= 2392401.00 TOTAL VALUE IN RUPEES= 26195328.00
PERCENT OF TOTAL CROPPED AREA:

49.53 0.35 0.41 15.25 2.77 0.05 14.31 6.18 4.64 6.33 0.16

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 114.84 101.71 111.31 115.41 52.89 57.41 92.71 114.70 105.43 125.65
JIBANNAGAR

PRODUCTIVITY PER ACRE= 802.73 TOTAL CROPPED AREA= 38551.00 TOTAL PRODUCTION= 2788227.00 TOTAL VALUE IN RUPEES= 22263488.00
PERCENT OF TOTAL CROPPED AREA:

42.63 0.22 0.42 23.27 3.55 0.25 9.96 3.55 5.82 10.26 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 114.84 101.71 115.15 105.79 79.34 103.34 97.34 161.78 126.52 75.39
MEHERPUR

PRODUCTIVITY PER ACRE= 466.45 TOTAL CROPPED AREA= 81321.00 TOTAL PRODUCTION= 1307367.00 TOTAL VALUE IN RUPEES= 30039472.00
PERCENT OF TOTAL CROPPED AREA:

52.02 0.35 0.35 18.52 3.64 0.05 12.64 1.69 9.71 0.99 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 143.55 101.71 105.17 125.03 105.78 103.34 123.61 124.12 126.52 75.39
GANGNI

PRODUCTIVITY PER ACRE= 543.62 TOTAL CROPPED AREA= 61849.00 TOTAL PRODUCTION= 2264365.00 TOTAL VALUE IN RUPEES= 26684288.00
PERCENT OF TOTAL CROPPED AREA:

50.55 0.08 0.16 22.83 4.05 0.12 10.79 1.96 6.39 3.00 0.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 172.26 101.71 103.64 105.79 126.94 103.34 139.06 92.45 189.77 100.52
KOTWALI

PRODUCTIVITY PER ACRE= 621.48 TOTAL CROPPED AREA= 73624.00 TOTAL PRODUCTION= 1174026.00 TOTAL VALUE IN RUPEES= 34928240.00
PERCENT OF TOTAL CROPPED AREA:

47.54 0.35 0.96 35.99 0.58 0.26 2.81 1.60 9.00 0.64 0.28

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 103.35 104.25 111.31 115.41 142.81 80.37 111.25 96.73 124.41 100.52
SHARSHA

PRODUCTIVITY PER ACRE= 620.92 TOTAL CROPPED AREA= 76254.00 TOTAL PRODUCTION= 1321676.00 TOTAL VALUE IN RUPEES= 34063232.00
PERCENT OF TOTAL CROPPED AREA:

32.79 0.23 3.56 40.81 0.43 0.43 11.26 3.93 5.57 0.72 0.27

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 114.84 109.33 88.28 115.41 148.10 103.34 112.80 57.35 168.65 89.21
JHIKARGACHHA

PRODUCTIVITY PER ACRE= 557.13 TOTAL CROPPED AREA= 96096.00 TOTAL PRODUCTION= 1450904.00 TOTAL VALUE IN RUPEES= 39658048.00
PERCENT OF TOTAL CROPPED AREA:

44.94 0.18 2.19 23.19 1.35 0.38 13.17 2.08 11.81 0.50 0.21

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 109.09 108.06 95.96 115.41 74.05 91.86 92.71 111.28 168.69 89.21

AYUYNAGAR

PRODUCTIVITY PER ACRE= 571.71 TOTAL CROPPED AREA= 59000.00 TOTAL PRODUCTION= 727496.81 TOTAL VALUE IN RUPEES= 28109024.00
PERCENT OF TOTAL CROPPED AREA:

32.68 0.01 0.02 59.14 0.05 0.08 0.93 3.05 3.67 0.02 0.35

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 91.87 96.62 103.64 86.56 132.23 68.89 77.26 152.36 88.56 89.21

BAGHERPARA

PRODUCTIVITY PER ACRE= 647.10 TOTAL CROPPED AREA= 75324.00 TOTAL PRODUCTION= 989802.50 TOTAL VALUE IN RUPEES= 35578208.00
PERCENT OF TOTAL CROPPED AREA:

37.17 0.21 0.85 46.77 0.20 0.12 3.29 6.53 3.98 0.20 0.27

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 114.84 114.42 99.80 115.41 84.63 91.86 77.26 71.05 118.97 89.21

MANIRAMPUR

PRODUCTIVITY PER ACRE= 621.11 TOTAL CROPPED AREA= 143633.00 TOTAL PRODUCTION= 1951792.00 TOTAL VALUE IN RUPEES= 73728896.00
PERCENT OF TOTAL CROPPED AREA:

40.08 0.05 0.58 47.21 0.42 0.17 1.47 1.08 8.77 0.03 0.14

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 114.84 101.71 115.15 76.94 89.92 91.86 108.16 130.11 105.43 89.21

KESHAIPUR

PRODUCTIVITY PER ACRE= 844.26 TOTAL CROPPED AREA= 75239.00 TOTAL PRODUCTION= 968562.56 TOTAL VALUE IN RUPEES= 36091616.00
PERCENT OF TOTAL CROPPED AREA:

43.27 0.13 0.38 37.10 0.28 0.20 5.10 2.92 10.30 0.06 0.27

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 86.13 101.71 111.31 86.56 84.63 68.89 123.61 85.60 126.52 89.21

JHENAIDAH

PRODUCTIVITY PER ACRE= 557.71 TOTAL CROPPED AREA= 101362.00 TOTAL PRODUCTION= 1399753.00 TOTAL VALUE IN RUPEES= 46719936.00
PERCENT OF TOTAL CROPPED AREA:

50.31 0.02 0.02 31.57 1.78 0.06 6.22 3.01 6.51 0.30 0.20

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 103.35 106.79 111.31 86.56 105.78 103.34 108.16 118.98 126.52 89.21

SHAILKUPA

PRODUCTIVITY PER ACRE= 614.99 TOTAL CROPPED AREA= 82608.00 TOTAL PRODUCTION= 2704446.00 TOTAL VALUE IN RUPEES= 44563904.00
PERCENT OF TOTAL CROPPED AREA:

32.08 0.12 0.94 49.15 3.61 0.11 1.16 1.27 7.08 4.24 0.25

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 86.13 104.25 103.64 86.56 126.94 91.86 108.16 129.25 100.16 89.21

HARINAKUNDA

PRODUCTIVITY PER ACRE= 963.96 TOTAL CROPPED AREA= 52035.00 TOTAL PRODUCTION= 1819016.00 TOTAL VALUE IN RUPEES= 24831440.00
PERCENT OF TOTAL CROPPED AREA:

51.59 0.11 0.0 31.80 1.96 0.06 2.69 0.96 6.96 3.48 0.40

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 91.87 0.0 95.96 96.18 105.78 97.60 123.61 107.00 147.60 89.21

KALIGONJ

PRODUCTIVITY PER ACRE= 576.15 TOTAL CROPPED AREA= 72122.00 TOTAL PRODUCTION= 2269272.00 TOTAL VALUE IN RUPEES= 36133248.00
PERCENT OF TOTAL CROPPED AREA:

57.13 0.03 0.13 33.47 0.35 0.07 3.07 0.14 2.84 2.50 0.29

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 114.84 101.71 107.44 86.56 105.78 103.34 77.26 192.60 168.65 89.21

COAT CHANDPUR

PRODUCTIVITY PER ACRE= 560.60 TOTAL CROPPED AREA= 43589.00 TOTAL PRODUCTION= 2451782.00 TOTAL VALUE IN RUPEES= 17574912.00
PERCENT OF TOTAL CROPPED AREA:

41.29 0.03 0.18 31.01 0.37 0.05 12.62 2.98 4.82 6.18 0.47

YIELD AS PERCENT OF NATIONAL AVERAGE:

28.31 114.84 106.79 103.64 81.75 126.94 80.37 80.35 21.40 168.65 89.21

MAHESHPUR

PRODUCTIVITY PER ACRE= 534.38 TOTAL CROPPED AREA= 108099.00 TOTAL PRODUCTION= 1428004.00 TOTAL VALUE IN RUPEES= 51576576.00
PERCENT OF TOTAL CROPPED AREA:

41.63 0.05 1.14 48.10 0.28 0.08 1.38 3.70 3.32 0.14 0.19

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 103.35 104.25 95.96 120.22 84.63 97.60 108.16 32.53 168.65 89.21

MAGURA

PRODUCTIVITY PER ACRE= 680.03 TOTAL CROPPED AREA= 94361.00 TOTAL PRODUCTION= 1809701.00 TOTAL VALUE IN RUPEES= 49360496.00
PERCENT OF TOTAL CROPPED AREA:

42.16 0.21 0.99 40.80 0.66 0.04 2.10 1.91 10.17 0.74 0.22

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 114.84 108.06 111.31 96.18 68.76 91.86 77.26 120.69 168.65 89.21

SREERAMPUR

PRODUCTIVITY PER ACRE= 550.59 TOTAL CROPPED AREA= 33344.00 TOTAL PRODUCTION= 519510.50 TOTAL VALUE IN RUPEES= 14014506.00
PERCENT OF TOTAL CROPPED AREA:

31.19 0.40 3.24 32.72 3.60 0.09 7.80 1.50 17.95 0.90 0.62

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 86.13 88.99 84.45 86.56 74.05 80.37 77.26 101.01 105.43 89.21

SHALIKA

PRODUCTIVITY PER ACRE= 704.99 TOTAL CROPPED AREA= 49911.00 TOTAL PRODUCTION= 674245.50 TOTAL VALUE IN RUPEES= 24955232.00
PERCENT OF TOTAL CROPPED AREA:

48.16 0.51 1.08 36.06 0.70 0.08 0.85 5.19 6.81 0.14 0.41

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 103.35 88.99 107.48 86.56 84.63 103.34 108.16 114.70 105.43 89.21

MOHAMMADPUR

PRODUCTIVITY PER ACRE= 711.87 TOTAL CROPPED AREA= 58908.00 TOTAL PRODUCTION= 1259231.00 TOTAL VALUE IN RUPEES= 29953456.00
PERCENT OF TOTAL CROPPED AREA:

26.99 0.42 0.96 42.23 0.68 0.10 3.73 1.53 21.30 1.70 0.35

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 86.13 101.71 116.69 76.94 105.78 68.89 77.26 92.45 105.43 89.21

NARAIL

PRODUCTIVITY PER ACRE= 524.96 TOTAL CROPPED AREA= 74753.00 TOTAL PRODUCTION= 854202.50 TOTAL VALUE IN RUPEES= 32166064.00
PERCENT OF TOTAL CROPPED AREA:

39.98 0.50 0.68 46.86 1.12 0.27 2.18 1.61 6.49 0.04 0.28

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 97.61 96.62 92.12 96.18 126.94 80.37 108.16 74.47 94.85 89.21

KALIA

PRODUCTIVITY PER ACRE= 588.36 TOTAL CROPPED AREA= 54085.00 TOTAL PRODUCTION= 739271.50 TOTAL VALUE IN RUPEES= 24478016.00
PERCENT OF TOTAL CROPPED AREA:

17.81 6.36 0.85 48.02 0.81 0.17 8.23 3.70 13.31 0.36 0.38

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 91.87 104.25 99.80 96.18 79.34 68.89 108.16 95.87 105.43 89.21

LOHAGARA

PRODUCTIVITY PER ACRE= 488.69 TOTAL CROPPED AREA= 71815.00 TOTAL PRODUCTION= 850079.50 TOTAL VALUE IN RUPEES= 26996384.00
PERCENT OF TOTAL CROPPED AREA:

30.63 0.32 0.26 41.50 0.92 0.14 6.27 6.28 12.91 0.45 0.29

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 86.11 96.62 80.61 96.18 52.89 68.89 77.26 116.41 84.34 89.21

KHULNA

PRODUCTIVITY PER ACRE= 829.38 TOTAL CROPPED AREA= 15133.00 TOTAL PRODUCTION= 191851.44 TOTAL VALUE IN RUPEES= 6571205.00
PERCENT OF TOTAL CROPPED AREA:

13.22 2.56 0.0 74.51 0.40 0.93 2.11 1.98 3.96 0.23 0.10

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 97.61 0.0 80.61 91.37 126.94 109.08 123.61 100.15 101.21 113.09

BATIAGHATA

PRODUCTIVITY PER ACRE= 476.42 TOTAL CROPPED AREA= 50564.00 TOTAL PRODUCTION= 591554.94 TOTAL VALUE IN RUPEES= 20415104.00
PERCENT OF TOTAL CROPPED AREA:

1.66 0.27 0.0 96.73 0.02 0.35 0.01 0.27 0.34 0.30 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 97.61 0.0 76.77 86.56 126.94 91.86 92.71 55.87 94.85 113.09

DAULATPUR

PRODUCTIVITY PER ACRE= 668.73 TOTAL CROPPED AREA= 14443.00 TOTAL PRODUCTION= 178487.94 TOTAL VALUE IN RUPEES= 6312691.00
PERCENT OF TOTAL CROPPED AREA:

12.46 1.81 0.0 77.93 0.14 0.60 1.30 3.60 1.42 0.22 0.52

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 103.35 0.0 80.61 86.56 116.36 114.82 108.16 93.30 105.43 100.52

FULTALA

PRODUCTIVITY PER ACRE= 605.27 TOTAL CROPPED AREA= 14377.00 TOTAL PRODUCTION= 175719.00 TOTAL VALUE IN RUPEES= 5879688.00
PERCENT OF TOTAL CROPPED AREA:

31.72 0.03 0.0 59.82 0.11 1.13 3.62 2.64 0.54 0.28 0.11

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 103.35 0.0 80.61 76.94 105.78 103.34 108.16 47.08 105.43 150.78

TERUKHADA

PRODUCTIVITY PER ACRE= 739.48 TOTAL CROPPED AREA= 33563.00 TOTAL PRODUCTION= 883063.94 TOTAL VALUE IN RUPEES= 18116064.00
PERCENT OF TOTAL CROPPED AREA:

13.41 36.58 0.0 37.50 0.18 0.06 1.79 1.50 6.11 2.68 0.21

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 103.35 0.0 84.45 76.94 105.78 103.34 123.61 86.45 105.43 100.52

DUMURIA

PRODUCTIVITY PER ACRE= 477.16 TOTAL CROPPED AREA= 18660.00 TOTAL PRODUCTION= 205635.94 TOTAL VALUE IN RUPEES= 6849139.00
PERCENT OF TOTAL CROPPED AREA:

32.15 1.43 0.0 46.62 0.13 1.63 1.83 8.05 7.72 0.19 0.24

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 103.35 0.0 57.58 76.94 116.36 103.34 92.71 106.14 105.43 113.09

DACOPE

PRODUCTIVITY PER ACRE= 457.83 TOTAL CROPPED AREA= 57421.00 TOTAL PRODUCTION= 592672.94 TOTAL VALUE IN RUPEES= 22859936.00
PERCENT OF TOTAL CROPPED AREA:

0.17 0.0 0.0 99.28 0.00 0.25 0.0 0.14 0.11 0.01 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 0.0 0.0 76.77 67.32 126.94 0.0 123.61 106.14 126.52 125.65

PAIKGACHHA

PRODUCTIVITY PER ACRE= 545.40 TOTAL CROPPED AREA= 156602.00 TOTAL PRODUCTION= 1922488.00 TOTAL VALUE IN RUPEES= 70587888.00
PERCENT OF TOTAL CROPPED AREA:

1.92 0.0 0.0 96.11 0.01 0.10 0.32 0.56 0.70 0.14 0.14

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 0.0 0.0 88.28 76.94 105.78 103.34 108.16 107.00 115.97 75.39

BAGERHAT

PRODUCTIVITY PER ACRE= 673.30 TOTAL CROPPED AREA= 50337.00 TOTAL PRODUCTION= 724010.94 TOTAL VALUE IN RUPEES= 24920416.00
PERCENT OF TOTAL CROPPED AREA:

3.97 13.73 0.0 79.07 0.07 0.94 0.34 0.37 1.18 0.27 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 103.35 0.0 84.45 76.94 137.52 109.08 108.16 100.15 105.43 163.35

FAKIRHAT

PRODUCTIVITY PER ACRE= 593.66 TOTAL CROPPED AREA= 30388.00 TOTAL PRODUCTION= 365404.81 TOTAL VALUE IN RUPEES= 13072559.00
PERCENT OF TOTAL CROPPED AREA:

13.82 1.31 0.0 80.95 0.02 0.82 1.24 1.33 0.35 0.12 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 97.61 0.0 80.61 76.94 158.68 111.38 92.71 101.01 105.43 163.35

MOLLAHAT

PRODUCTIVITY PER ACRE= 702.26 TOTAL CROPPED AREA= 59751.00 TOTAL PRODUCTION= 877958.00 TOTAL VALUE IN RUPEES= 27605728.00
PERCENT OF TOTAL CROPPED AREA:

38.83 19.10 0.0 29.74 0.02 0.42 1.09 0.84 7.70 0.59 1.67

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 109.09 0.0 80.61 76.94 126.94 103.34 108.16 85.60 105.43 62.83

KACHUA

PRODUCTIVITY PER ACRE= 681.46 TOTAL CROPPED AREA= 30886.00 TOTAL PRODUCTION= 534466.19 TOTAL VALUE IN RUPEES= 15825150.00
PERCENT OF TOTAL CROPPED AREA:

2.98 3.61 0.0 90.66 0.04 0.49 0.06 0.21 0.75 0.97 0.23

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 103.35 0.0 95.96 67.32 126.94 103.34 108.16 86.45 54.85 150.78

SARANKHOLA

PRODUCTIVITY PER ACRE= 751.11 TOTAL CROPPED AREA= 25722.00 TOTAL PRODUCTION= 433567.00 TOTAL VALUE IN RUPEES= 15707321.00
PERCENT OF TOTAL CROPPED AREA:

0.29 0.19 0.0 94.08 0.0 0.20 4.61 0.12 0.19 0.25 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 103.35 0.0 122.83 0.0 105.78 91.86 123.61 85.60 54.85 113.09

RAMPAL

PRODUCTIVITY PER ACRE= 715.47 TOTAL CROPPED AREA= 97411.00 TOTAL PRODUCTION= 1553743.00 TOTAL VALUE IN RUPEES= 57599200.00
PERCENT OF TOTAL CROPPED AREA:

0.15 0.05 0.0 98.56 0.01 0.10 0.05 0.19 0.49 0.21 0.20

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 103.35 0.0 115.15 76.94 116.36 91.86 92.71 104.43 54.85 175.91

MORRELGONJ

PRODUCTIVITY PER ACRE= 724.21 TOTAL CROPPED AREA= 68041.00 TOTAL PRODUCTION= 1157560.00 TOTAL VALUE IN RUPEES= 39420520.00
PERCENT OF TOTAL CROPPED AREA:

3.42 0.08 0.0 94.21 0.02 0.15 1.30 0.10 0.06 0.51 0.15

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 103.35 0.0 115.15 100.99 105.78 91.86 92.71 85.60 94.89 75.39

SATKHIRA

PRODUCTIVITY PER ACRE= 497.82 TOTAL CROPPED AREA= 69317.00 TOTAL PRODUCTION= 810227.44 TOTAL VALUE IN RUPEES= 26958704.00
PERCENT OF TOTAL CROPPED AREA:

15.36 0.00 0.0 73.72 0.01 0.94 0.45 0.80 8.42 0.27 0.02

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 103.35 0.0 76.77 91.37 89.92 109.08 108.16 101.86 105.43 87.96

KALAROA

PRODUCTIVITY PER ACRE= 691.43 TOTAL CROPPED AREA= 40487.00 TOTAL PRODUCTION= 954561.88 TOTAL VALUE IN RUPEES= 18296720.00
PERCENT OF TOTAL CROPPED AREA:

37.44 0.00 0.0 36.93 0.38 2.37 5.93 3.97 10.62 2.28 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

90.22 103.35 0.0 76.77 88.48 142.81 120.56 139.06 99.29 105.43 125.65

KALIGONJ

PRODUCTIVITY PER ACRE= 613.78 TOTAL CROPPED AREA= 51674.00 TOTAL PRODUCTION= 732733.56 TOTAL VALUE IN RUPEES= 24973552.00
PERCENT OF TOTAL CROPPED AREA:

2.32 0.0 0.0 93.86 0.08 0.68 0.21 0.39 2.05 0.29 0.11

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 0.0 0.0 92.12 89.44 126.94 103.34 108.16 107.00 115.97 75.39

TALA

PRODUCTIVITY PER ACRE= 550.79 TOTAL CROPPED AREA= 47698.00 TOTAL PRODUCTION= 1359224.00 TOTAL VALUE IN RUPEES= 19176208.00
PERCENT OF TOTAL CROPPED AREA:

20.97 0.11 0.0 65.45 0.01 1.17 0.78 1.07 6.85 3.44 0.16

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 103.35 0.0 57.58 86.56 186.18 114.82 154.52 85.60 114.92 100.52

DEBHATA

PRODUCTIVITY PER ACRE= 582.65 TOTAL CROPPED AREA= 24626.00 TOTAL PRODUCTION= 349284.50 TOTAL VALUE IN RUPEES= 12476855.00
PERCENT OF TOTAL CROPPED AREA:

2.03 0.0 0.0 93.40 0.16 1.42 0.33 0.91 1.62 0.08 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 0.0 0.0 92.12 91.37 158.68 109.08 108.16 85.60 105.43 75.39

ASSASUNI

PRODUCTIVITY PER ACRE= 615.40 TOTAL CROPPED AREA= 74458.00 TOTAL PRODUCTION= 926388.00 TOTAL VALUE IN RUPEES= 35247104.00
PERCENT OF TOTAL CROPPED AREA:

0.67 0.05 0.0 98.11 0.01 0.20 0.13 0.30 0.40 0.06 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 103.35 0.0 92.12 96.18 126.94 91.86 92.71 85.60 105.43 100.52

SAYAMNAGAR

PRODUCTIVITY PER ACRE= 693.40 TOTAL CROPPED AREA= 75863.00 TOTAL PRODUCTION= 1158340.00 TOTAL VALUE IN RUPEES= 44960304.00
PERCENT OF TOTAL CROPPED AREA:

0.26 0.0 0.0 98.99 0.01 0.34 0.00 0.30 0.04 0.0 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 0.0 0.0 115.15 76.94 116.36 91.86 92.71 85.60 0.0 75.39

KOTWALI

PRODUCTIVITY PER ACRE= 956.44 TOTAL CROPPED AREA= 76271.00 TOTAL PRODUCTION= 1514156.00 TOTAL VALUE IN RUPEES= 43512800.00
PERCENT OF TOTAL CROPPED AREA:

27.28 2.15 2.64 61.75 0.03 0.16 2.44 0.33 2.05 0.87 0.31

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 103.35 127.13 99.80 91.37 116.36 97.60 123.61 113.85 136.00 125.65
JHALAKATHI

PRODUCTIVITY PER ACRE= 907.79 TOTAL CROPPED AREA= 56544.00 TOTAL PRODUCTION= 1097136.00 TOTAL VALUE IN RUPEES= 27596704.00
PERCENT OF TOTAL CROPPED AREA:

29.66 0.18 3.98 60.13 0.01 0.51 1.41 0.17 2.32 1.42 0.21

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 91.87 114.42 82.14 144.27 95.21 91.86 92.71 119.84 107.54 125.65
RAJAPUR

PRODUCTIVITY PER ACRE= 581.90 TOTAL CROPPED AREA= 40180.00 TOTAL PRODUCTION= 573038.00 TOTAL VALUE IN RUPEES= 15164496.00
PERCENT OF TOTAL CROPPED AREA:

26.38 0.0 2.04 67.20 0.0 0.31 2.98 0.10 0.10 0.42 0.46

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 0.0 88.99 95.96 0.0 132.23 80.37 108.16 59.92 105.43 125.65
MALCHITY

PRODUCTIVITY PER ACRE= 864.44 TOTAL CROPPED AREA= 45877.00 TOTAL PRODUCTION= 757691.44 TOTAL VALUE IN RUPEES= 23328224.00
PERCENT OF TOTAL CROPPED AREA:

15.41 1.98 2.70 74.11 0.01 0.24 3.45 0.48 0.48 0.74 0.40

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 68.90 88.99 95.19 81.75 95.21 91.86 92.71 55.64 105.43 113.09
BAKERGONJ

PRODUCTIVITY PER ACRE= 712.47 TOTAL CROPPED AREA= 59557.00 TOTAL PRODUCTION= 967335.88 TOTAL VALUE IN RUPEES= 31667216.00
PERCENT OF TOTAL CROPPED AREA:

29.48 0.15 2.14 63.51 0.00 0.20 2.66 0.67 0.42 0.50 0.26

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 86.13 114.42 94.43 96.18 105.78 91.86 108.16 109.57 115.97 125.65
CHARANADDI

PRODUCTIVITY PER ACRE= 936.99 TOTAL CROPPED AREA= 32747.00 TOTAL PRODUCTION= 486846.00 TOTAL VALUE IN RUPEES= 17040432.00
PERCENT OF TOTAL CROPPED AREA:

27.43 0.25 1.83 54.97 0.02 0.02 4.32 0.09 10.33 0.34 0.40

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 97.61 101.71 107.48 115.41 132.23 91.86 108.16 111.28 84.34 125.65
GOURNADI

PRODUCTIVITY PER ACRE= 814.75 TOTAL CROPPED AREA= 95792.00 TOTAL PRODUCTION= 1477738.00 TOTAL VALUE IN RUPEES= 42416576.00
PERCENT OF TOTAL CROPPED AREA:

40.15 0.28 1.74 44.78 0.03 0.17 3.07 0.42 8.35 0.85 0.16

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 86.13 114.42 76.77 112.53 95.21 91.86 139.06 121.55 101.21 113.09
UJIRPUR

PRODUCTIVITY PER ACRE=1119.22 TOTAL CROPPED AREA= 82242.00 TOTAL PRODUCTION= 1551910.00 TOTAL VALUE IN RUPEES= 47203392.00
PERCENT OF TOTAL CROPPED AREA:

37.11 0.87 0.77 51.92 0.01 0.10 1.55 0.39 6.23 0.85 0.20

YIELD AS PERCENT OF NATIONAL AVERAGE:

169.87 97.61 88.99 89.82 120.22 95.21 91.86 108.16 162.64 105.43 113.09
BABUGONJ

PRODUCTIVITY PER ACRE= 977.48 TOTAL CROPPED AREA= 48773.00 TOTAL PRODUCTION= 1421002.00 TOTAL VALUE IN RUPEES= 27359120.00
PERCENT OF TOTAL CROPPED AREA:

33.42 0.31 3.94 49.43 0.01 2.17 5.14 0.55 2.11 2.46 0.46

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 86.13 114.42 84.82 115.41 126.94 103.34 139.06 107.85 126.52 113.09

NULADI

PRODUCTIVITY PER ACRE= 861.50 TOTAL CROPPED AREA= 70226.00 TOTAL PRODUCTION= 1594022.00 TOTAL VALUE IN RUPEES= 32526888.00
PERCENT OF TOTAL CROPPED AREA:

24.31 0.53 0.67 65.92 0.01 0.07 2.34 0.18 3.43 2.30 0.24

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 68.90 114.42 84.45 86.56 132.23 91.86 108.16 126.68 106.48 100.52

NIZLA

PRODUCTIVITY PER ACRE=1075.25 TOTAL CROPPED AREA= 82394.00 TOTAL PRODUCTION= 1346240.00 TOTAL VALUE IN RUPEES= 42593504.00
PERCENT OF TOTAL CROPPED AREA:

39.30 3.65 0.60 50.85 0.01 0.07 1.16 0.12 3.40 0.64 0.21

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 74.64 96.62 88.28 96.18 105.78 91.86 108.16 106.14 107.54 113.09

MEHENDIGONJ

PRODUCTIVITY PER ACRE= 808.16 TOTAL CROPPED AREA= 96227.00 TOTAL PRODUCTION= 1567611.00 TOTAL VALUE IN RUPEES= 46423104.00
PERCENT OF TOTAL CROPPED AREA:

34.35 2.04 0.47 57.72 0.01 0.08 1.09 0.15 3.11 0.81 0.19

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 80.39 88.99 88.28 120.22 95.21 103.34 123.61 133.53 106.43 100.52

PIROJPUR

PRODUCTIVITY PER ACRE= 661.06 TOTAL CROPPED AREA= 53831.00 TOTAL PRODUCTION= 840652.75 TOTAL VALUE IN RUPEES= 28697872.00
PERCENT OF TOTAL CROPPED AREA:

14.28 0.01 6.30 77.09 0.02 0.28 1.05 0.12 0.04 0.33 0.48

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 91.87 101.71 92.12 134.65 116.36 86.12 108.16 95.01 137.06 113.09

SWARUPKATHI

PRODUCTIVITY PER ACRE= 869.40 TOTAL CROPPED AREA= 60492.00 TOTAL PRODUCTION= 992032.44 TOTAL VALUE IN RUPEES= 26736752.00
PERCENT OF TOTAL CROPPED AREA:

43.41 0.21 0.83 53.23 0.00 0.13 1.06 0.05 0.04 0.66 0.38

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 68.90 101.71 92.12 129.84 105.78 80.37 123.61 75.33 147.60 125.65

BANARIPARA

PRODUCTIVITY PER ACRE=1073.25 TOTAL CROPPED AREA= 37144.00 TOTAL PRODUCTION= 793343.56 TOTAL VALUE IN RUPEES= 22779936.00
PERCENT OF TOTAL CROPPED AREA:

35.81 3.11 0.90 54.38 0.01 0.67 1.40 1.86 0.21 1.08 0.57

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 91.87 88.99 115.15 129.84 100.60 80.37 139.06 113.85 118.08 113.09

NAZIRPUR

PRODUCTIVITY PER ACRE= 687.31 TOTAL CROPPED AREA= 66026.00 TOTAL PRODUCTION= 952892.00 TOTAL VALUE IN RUPEES= 30456816.00
PERCENT OF TOTAL CROPPED AREA:

36.31 1.87 1.50 53.99 0.01 0.39 1.84 0.24 3.03 0.45 0.36

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 68.90 88.99 76.77 115.41 95.21 80.37 77.26 98.44 126.52 125.65

BHANDARIA

PRODUCTIVITY PER ACRE= 684.35 TOTAL CROPPED AREA= 32200.00 TOTAL PRODUCTION= 522797.00 TOTAL VALUE IN RUPEES= 16444753.00
PERCENT OF TOTAL CROPPED AREA:

15.49 0.12 3.54 78.57 0.01 0.22 0.84 0.16 0.06 0.50 0.50

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 68.90 81.37 92.12 134.65 95.21 80.37 123.61 68.48 147.60 125.65

KATHALIA

PRODUCTIVITY PER ACRE= 583.91 TOTAL CROPPED AREA= 34356.00 TOTAL PRODUCTION= 588215.00 TOTAL VALUE IN RUPEES= 17000608.00
PERCENT OF TOTAL CROPPED AREA:

15.39 0.0 0.75 80.92 0.00 0.03 1.64 0.09 0.00 0.81 0.35

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 0.0 83.91 95.96 163.50 100.50 68.89 123.61 68.48 126.52 125.65

MATHURIA

PRODUCTIVITY PER ACRE= 839.65 TOTAL CROPPED AREA= 85954.00 TOTAL PRODUCTION= 1653339.00 TOTAL VALUE IN RUPEES= 55045792.00
PERCENT OF TOTAL CROPPED AREA:

11.94 0.26 16.37 69.92 0.01 0.08 0.85 0.03 0.15 0.23 0.15

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 74.64 114.42 97.50 153.68 52.89 80.37 92.71 86.45 147.60 113.09

KOWKHALI

PRODUCTIVITY PER ACRE= 985.75 TOTAL CROPPED AREA= 19339.00 TOTAL PRODUCTION= 389127.50 TOTAL VALUE IN RUPEES= 13147197.00
PERCENT OF TOTAL CROPPED AREA:

14.94 0.81 2.82 78.18 0.0 0.41 1.75 0.16 0.10 0.47 0.36

YIELD AS PERCENT OF NATIONAL AVERAGE:

151.00 114.84 76.28 130.51 0.0 105.78 86.12 92.71 55.64 128.62 113.09

BHOLA

PRODUCTIVITY PER ACRE= 823.18 TOTAL CROPPED AREA= 78132.00 TOTAL PRODUCTION= 1973607.00 TOTAL VALUE IN RUPEES= 42036832.00
PERCENT OF TOTAL CROPPED AREA:

20.35 0.58 2.34 71.55 0.02 0.15 2.53 0.10 0.70 1.64 0.15

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 74.64 101.71 95.96 117.34 211.57 80.37 77.26 68.17 168.69 113.09

DAULATKHAN

PRODUCTIVITY PER ACRE= 735.27 TOTAL CROPPED AREA= 71921.00 TOTAL PRODUCTION= 1496858.00 TOTAL VALUE IN RUPEES= 34338400.00
PERCENT OF TOTAL CROPPED AREA:

43.93 0.0 2.08 49.78 0.00 0.06 2.32 0.13 0.32 1.32 0.07

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 0.0 88.99 88.28 144.27 105.78 86.12 77.26 98.44 147.60 113.09

BORHANUDDIN

PRODUCTIVITY PER ACRE= 930.37 TOTAL CROPPED AREA= 105829.00 TOTAL PRODUCTION= 1729970.00 TOTAL VALUE IN RUPEES= 55943008.00
PERCENT OF TOTAL CROPPED AREA:

37.38 0.19 3.02 56.70 0.01 0.09 1.75 0.05 0.23 0.38 0.20

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 68.90 101.71 99.80 122.15 105.78 80.37 92.71 38.52 168.69 75.39

TAJHUDDIN

PRODUCTIVITY PER ACRE= 580.56 TOTAL CROPPED AREA= 65641.00 TOTAL PRODUCTION= 1059582.00 TOTAL VALUE IN RUPEES= 34961712.00
PERCENT OF TOTAL CROPPED AREA:

17.27 0.0 0.31 78.46 0.01 0.09 3.05 0.08 0.27 0.38 0.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 0.0 88.99 107.48 115.41 105.78 86.12 92.71 53.93 145.45 87.96

LALMOHAN

PRODUCTIVITY PER ACRE= 707.52 TOTAL CROPPED AREA= 121132.00 TOTAL PRODUCTION= 1864302.00 TOTAL VALUE IN RUPEES= 62566864.00
PERCENT OF TOTAL CROPPED AREA:

58.89 0.30 0.59 38.02 0.00 0.21 1.28 0.08 0.14 0.31 0.18

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 91.87 81.37 95.96 115.41 211.57 91.86 108.16 50.50 147.60 100.52

CHARFESSION

PRODUCTIVITY PER ACRE= 546.75 TOTAL CROPPED AREA= 98553.00 TOTAL PRODUCTION= 1391183.00 TOTAL VALUE IN RUPEES= 52827096.00
PERCENT OF TOTAL CROPPED AREA:

14.21 0.28 0.12 84.22 0.00 0.02 1.01 0.03 0.0 0.06 0.03

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 74.64 101.71 107.48 125.03 105.78 91.86 61.81 0.0 147.60 100.52

PATUAKHALI

PRODUCTIVITY PER ACRE= 552.69 TOTAL CROPPED AREA= 81105.00 TOTAL PRODUCTION= 987777.56 TOTAL VALUE IN RUPEES= 35256160.00
PERCENT OF TOTAL CROPPED AREA:

2.59 0.00 0.42 94.82 0.02 0.18 1.06 0.11 0.26 0.35 0.18

YIELD AS PERCENT OF NATIONAL AVERAGE:

70.78 74.64 99.16 84.45 88.48 100.50 103.34 77.26 89.88 65.37 100.52

BAUPHAL

PRODUCTIVITY PER ACRE= 858.10 TOTAL CROPPED AREA= 87312.00 TOTAL PRODUCTION= 1294351.00 TOTAL VALUE IN RUPEES= 45864288.00
PERCENT OF TOTAL CROPPED AREA:

4.81 0.25 1.98 88.38 0.00 0.02 1.91 0.19 0.97 0.65 0.83

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 80.39 114.42 99.80 57.71 95.21 103.34 84.98 72.76 52.71 87.96

GALACHIPA

PRODUCTIVITY PER ACRE= 546.09 TOTAL CROPPED AREA= 162657.00 TOTAL PRODUCTION= 1977976.00 TOTAL VALUE IN RUPEES= 64830512.00
PERCENT OF TOTAL CROPPED AREA:

14.88 1.32 0.43 80.05 0.01 0.02 1.64 0.10 0.49 0.61 0.45

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 91.87 109.33 76.77 91.37 100.50 103.34 84.98 98.44 73.80 100.52

MIRZAGUNJ

PRODUCTIVITY PER ACRE= 644.17 TOTAL CROPPED AREA= 48702.00 TOTAL PRODUCTION= 645138.00 TOTAL VALUE IN RUPEES= 23238672.00
PERCENT OF TOTAL CROPPED AREA:

21.77 0.04 1.50 73.92 0.00 0.04 1.66 0.07 0.28 0.41 0.31

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 86.13 106.79 92.12 76.94 79.34 91.86 77.26 94.16 57.95 87.96

BARGUNA

PRODUCTIVITY PER ACRE= 718.17 TOTAL CROPPED AREA= 78646.00 TOTAL PRODUCTION= 1232340.00 TOTAL VALUE IN RUPEES= 40634272.00
PERCENT OF TOTAL CROPPED AREA:

19.71 0.0 7.20 70.90 0.02 0.05 1.01 0.11 0.07 0.53 0.40

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 0.0 88.99 92.12 76.94 95.21 91.86 108.16 94.16 106.48 87.96

AMTALI

PRODUCTIVITY PER ACRE= 625.94 TOTAL CROPPED AREA= 133348.00 TOTAL PRODUCTION= 1969920.00 TOTAL VALUE IN RUPEES= 67313344.00
PERCENT OF TOTAL CROPPED AREA:

8.10 0.12 3.05 86.62 0.01 0.02 1.01 0.13 0.03 0.75 0.17

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 97.61 116.96 92.12 86.56 89.92 97.60 84.98 51.36 56.93 81.67

BAMNA

PRODUCTIVITY PER ACRE= 554.81 TOTAL CROPPED AREA= 20465.00 TOTAL PRODUCTION= 231417.00 TOTAL VALUE IN RUPEES= 8734058.00
PERCENT OF TOTAL CROPPED AREA:

4.89 0.19 3.89 83.07 0.01 0.15 6.38 0.13 0.50 0.05 0.76

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 80.39 104.25 76.77 86.56 95.21 103.34 92.71 89.88 115.13 87.96

PATHARGHATA

PRODUCTIVITY PER ACRE= 558.19 TOTAL CROPPED AREA= 8002.00 TOTAL PRODUCTION= 182456.00 TOTAL VALUE IN RUPEES= 3952400.00
PERCENT OF TOTAL CROPPED AREA:

19.99 0.27 5.80 54.36 0.04 0.31 6.79 0.50 0.44 2.50 9.00

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 68.90 104.25 76.77 76.94 95.21 91.86 77.26 51.36 103.32 87.96

BETAGI

PRODUCTIVITY PER ACRE= 695.91 TOTAL CROPPED AREA= 48481.00 TOTAL PRODUCTION= 1095088.00 TOTAL VALUE IN RUPEES= 21355552.00
PERCENT OF TOTAL CROPPED AREA:

20.63 0.0 1.26 72.84 0.01 0.05 2.05 0.10 0.37 2.31 0.39

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 0.0 111.88 84.45 81.75 95.21 120.56 92.71 89.88 111.76 100.52

KHEPUPARA

PRODUCTIVITY PER ACRE= 435.38 TOTAL CROPPED AREA= 52006.00 TOTAL PRODUCTION= 539101.50 TOTAL VALUE IN RUPEES= 20965088.00
PERCENT OF TOTAL CROPPED AREA:

0.67 0.0 1.06 96.72 0.0 0.02 1.04 0.12 0.07 0.03 0.26

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 0.0 101.71 76.77 0.0 84.63 91.86 77.26 89.88 63.26 100.52

KOTWALI

PRODUCTIVITY PER ACRE= 676.99 TOTAL CROPPED AREA= 115035.00 TOTAL PRODUCTION= 2193724.00 TOTAL VALUE IN RUPEES= 44757008.00
PERCENT OF TOTAL CROPPED AREA:

27.72 0.22 0.15 36.07 7.73 0.30 6.78 2.61 16.95 1.27 0.20

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 97.61 127.13 80.61 91.37 52.89 97.60 77.26 96.73 147.60 50.26

CHAR BHADRASHAN

PRODUCTIVITY PER ACRE= 699.01 TOTAL CROPPED AREA= 29710.00 TOTAL PRODUCTION= 573157.44 TOTAL VALUE IN RUPEES= 11733141.00
PERCENT OF TOTAL CROPPED AREA:

47.46 0.72 0.0 37.06 0.82 0.14 6.61 1.01 3.87 1.62 0.67

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 74.64 0.0 80.61 88.48 100.50 74.63 77.26 132.68 126.52 87.96

SADARPUR

PRODUCTIVITY PER ACRE= 749.12 TOTAL CROPPED AREA= 46472.00 TOTAL PRODUCTION= 806868.06 TOTAL VALUE IN RUPEES= 19023552.00
PERCENT OF TOTAL CROPPED AREA:

29.05 0.65 0.40 39.92 4.30 0.09 11.02 3.53 9.71 1.13 0.20

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 86.13 114.42 95.96 76.94 74.05 80.37 77.26 117.27 126.52 113.09

BHANGA

PRODUCTIVITY PER ACRE= 750.92 TOTAL CROPPED AREA= 68956.00 TOTAL PRODUCTION= 1156422.00 TOTAL VALUE IN RUPEES= 33400624.00
PERCENT OF TOTAL CROPPED AREA:

30.43 0.68 4.64 39.80 7.41 0.04 5.73 3.77 6.48 0.72 0.30

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.37 91.87 132.22 95.96 81.75 52.89 68.89 108.16 85.60 126.52 62.83

NAGARKANDA

PRODUCTIVITY PER ACRE= 623.47 TOTAL CROPPED AREA= 88977.00 TOTAL PRODUCTION= 828412.69 TOTAL VALUE IN RUPEES= 30149184.00
PERCENT OF TOTAL CROPPED AREA:

36.79 1.16 1.35 37.13 2.87 0.03 4.10 2.14 14.06 0.07 0.30

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 68.90 101.71 80.61 81.75 26.45 40.19 46.35 58.21 105.43 37.70

ALFADANGA

PRODUCTIVITY PER ACRE= 496.53 TOTAL CROPPED AREA= 18325.00 TOTAL PRODUCTION= 273002.50 TOTAL VALUE IN RUPEES= 7776855.00
PERCENT OF TOTAL CROPPED AREA:

26.41 0.81 0.32 41.04 4.53 0.16 10.18 7.09 7.37 0.53 1.56

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 86.11 101.71 103.64 76.94 105.78 86.12 77.26 128.40 153.93 62.83

BOALMARI

PRODUCTIVITY PER ACRE= 625.17 TOTAL CROPPED AREA= 132331.00 TOTAL PRODUCTION= 3373188.00 TOTAL VALUE IN RUPEES= 53373856.00
PERCENT OF TOTAL CROPPED AREA:

29.89 0.15 0.45 24.62 8.92 0.05 11.84 3.40 17.08 3.06 0.55

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 91.87 114.42 103.64 87.52 105.78 68.89 46.35 128.40 105.43 62.83

RAJBARI

PRODUCTIVITY PER ACRE= 783.28 TOTAL CROPPED AREA= 84398.00 TOTAL PRODUCTION= 2104564.00 TOTAL VALUE IN RUPEES= 34793184.00
PERCENT OF TOTAL CROPPED AREA:

33.88 0.15 0.29 35.74 9.36 0.57 6.55 1.37 9.09 2.47 0.54

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 103.35 114.42 92.12 76.94 68.76 86.12 92.71 83.89 126.52 87.96

GOALUNDAGHAT

PRODUCTIVITY PER ACRE= 684.78 TOTAL CROPPED AREA= 28327.00 TOTAL PRODUCTION= 438599.00 TOTAL VALUE IN RUPEES= 10155896.00
PERCENT OF TOTAL CROPPED AREA:

36.36 10.05 0.0 14.13 10.94 0.11 14.37 6.00 6.63 1.06 0.34

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 86.11 0.0 92.12 91.37 79.34 91.86 61.81 85.60 115.97 37.70

PANGSHA

PRODUCTIVITY PER ACRE= 738.13 TOTAL CROPPED AREA= 105227.00 TOTAL PRODUCTION= 5158997.00 TOTAL VALUE IN RUPEES= 47360784.00
PERCENT OF TOTAL CROPPED AREA:

15.86 0.62 0.13 38.34 6.24 0.33 7.52 2.40 20.61 7.20 0.75

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 74.64 127.13 84.45 120.22 116.36 91.86 77.26 84.74 115.97 87.96

BALIAKANDI

PRODUCTIVITY PER ACRE= 629.51 TOTAL CROPPED AREA= 65127.00 TOTAL PRODUCTION= 1733217.00 TOTAL VALUE IN RUPEES= 27701296.00
PERCENT OF TOTAL CROPPED AREA:

43.57 0.00 0.07 14.41 9.44 0.39 5.54 2.40 21.78 2.15 0.25

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 103.35 114.42 92.12 67.32 105.78 80.37 92.71 142.95 153.93 87.96

MUKSUDPUR

PRODUCTIVITY PER ACRE= 757.92 TOTAL CROPPED AREA= 112475.00 TOTAL PRODUCTION= 1315039.00 TOTAL VALUE IN RUPEES= 46582944.00
PERCENT OF TOTAL CROPPED AREA:

15.90 0.35 1.26 43.71 1.96 0.01 2.53 1.69 11.99 0.22 0.39

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 91.87 127.13 92.12 67.32 63.47 80.37 92.71 85.60 84.34 75.39

GOPALGONJ

PRODUCTIVITY PER ACRE= 810.17 TOTAL CROPPED AREA= 122243.00 TOTAL PRODUCTION= 1641362.00 TOTAL VALUE IN RUPEES= 56918400.00
PERCENT OF TOTAL CROPPED AREA:

32.41 0.37 0.09 57.18 1.66 0.02 1.67 3.20 2.63 0.33 0.45

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.94 91.87 127.13 107.48 96.18 84.63 68.89 92.71 82.17 105.43 100.52

KOTWALIPARA

PRODUCTIVITY PER ACRE= 757.93 TOTAL CROPPED AREA= 112106.00 TOTAL PRODUCTION= 1318209.00 TOTAL VALUE IN RUPEES= 51185952.00

PERCENT OF TOTAL CROPPED AREA:

32.66 2.89 0.68 61.55 0.17 0.11 0.50 0.19 0.85 0.04 0.36

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 74.64 127.13 92.12 67.32 63.47 45.93 92.71 143.80 63.26 100.52

KASIANI

PRODUCTIVITY PER ACRE= 889.36 TOTAL CROPPED AREA= 69215.00 TOTAL PRODUCTION= 1333277.00 TOTAL VALUE IN RUPEES= 38209984.00

PERCENT OF TOTAL CROPPED AREA:

20.06 0.29 0.42 63.54 3.01 0.20 3.22 2.96 5.06 0.94 0.30

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 80.39 127.13 118.99 76.94 84.63 80.37 61.81 83.03 137.06 87.96

RAJOIR

PRODUCTIVITY PER ACRE= 952.59 TOTAL CROPPED AREA= 67626.00 TOTAL PRODUCTION= 1689312.00 TOTAL VALUE IN RUPEES= 31891136.00

PERCENT OF TOTAL CROPPED AREA:

29.62 0.05 2.07 44.38 3.58 0.01 4.14 1.45 12.42 2.06 0.22

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 74.64 122.05 92.12 81.75 63.47 97.60 92.71 128.40 137.06 75.39

KALKINI

PRODUCTIVITY PER ACRE= 743.75 TOTAL CROPPED AREA= 80655.00 TOTAL PRODUCTION= 2800085.00 TOTAL VALUE IN RUPEES= 36577472.00

PERCENT OF TOTAL CROPPED AREA:

32.40 0.06 1.54 46.51 0.25 0.02 4.65 1.80 6.45 6.20 0.12

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 68.90 127.13 84.45 76.94 105.78 63.15 61.81 97.58 84.34 50.26

GOSHAIRHAT

PRODUCTIVITY PER ACRE= 885.89 TOTAL CROPPED AREA= 53534.00 TOTAL PRODUCTION= 1025376.00 TOTAL VALUE IN RUPEES= 24446096.00

PERCENT OF TOTAL CROPPED AREA:

24.90 2.24 0.0 60.58 0.18 0.01 3.72 0.75 6.34 1.21 0.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 57.42 0.0 99.80 76.94 63.47 68.89 77.26 85.60 137.06 87.96

BHEDARGONJ

PRODUCTIVITY PER ACRE= 751.15 TOTAL CROPPED AREA= 85155.00 TOTAL PRODUCTION= 1406488.00 TOTAL VALUE IN RUPEES= 36138016.00

PERCENT OF TOTAL CROPPED AREA:

37.64 4.43 0.06 38.45 1.02 0.07 6.56 4.50 6.42 0.81 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 86.13 101.71 99.80 120.22 84.63 103.34 92.71 147.23 147.60 100.52

NARIA

PRODUCTIVITY PER ACRE= 687.77 TOTAL CROPPED AREA= 58610.00 TOTAL PRODUCTION= 950248.94 TOTAL VALUE IN RUPEES= 22027376.00

PERCENT OF TOTAL CROPPED AREA:

44.87 1.63 0.13 30.73 2.07 0.06 6.14 2.61 10.29 1.32 0.15

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 80.39 114.42 76.77 76.94 84.63 103.34 77.26 107.85 105.43 87.96

JANJIRA

PRODUCTIVITY PER ACRE= 728.31 TOTAL CROPPED AREA= 67602.00 TOTAL PRODUCTION= 933450.63 TOTAL VALUE IN RUPEES= 24741344.00

PERCENT OF TOTAL CROPPED AREA:

33.80 3.03 0.0 33.06 0.75 0.11 10.12 2.51 15.71 0.62 0.38

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 91.87 0.0 76.77 79.83 84.63 97.60 77.26 90.73 168.69 100.52

MADARIPUR

PRODUCTIVITY PER ACRE= 812.86 TOTAL CROPPED AREA= 90451.00 TOTAL PRODUCTION= 1689324.00 TOTAL VALUE IN RUPEES= 43764256.00
PERCENT OF TOTAL CROPPED AREA:

20.40 0.45 0.82 42.09 5.98 0.11 8.99 1.76 17.69 1.26 0.44

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 68.90 101.71 107.48 91.37 84.63 57.41 61.81 168.63 94.85 87.96

SHIBCHAR

PRODUCTIVITY PER ACRE= 795.45 TOTAL CROPPED AREA= 107068.00 TOTAL PRODUCTION= 1431693.00 TOTAL VALUE IN RUPEES= 46036384.00
PERCENT OF TOTAL CROPPED AREA:

32.77 0.37 0.13 42.10 2.30 0.14 10.68 5.19 5.35 0.38 0.62

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 57.42 114.42 103.64 67.32 74.05 91.86 108.16 169.48 126.52 62.83

PALONG

PRODUCTIVITY PER ACRE= 736.48 TOTAL CROPPED AREA= 51758.00 TOTAL PRODUCTION= 1414043.00 TOTAL VALUE IN RUPEES= 23973904.00
PERCENT OF TOTAL CROPPED AREA:

38.64 0.08 0.44 38.74 0.77 0.08 5.98 3.86 8.66 2.51 0.23

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 74.64 127.13 95.96 76.94 105.78 80.37 77.26 128.40 137.06 37.70

TEJGAON

PRODUCTIVITY PER ACRE=1485.47 TOTAL CROPPED AREA= 35274.00 TOTAL PRODUCTION= 932103.50 TOTAL VALUE IN RUPEES= 35166088.00
PERCENT OF TOTAL CROPPED AREA:

3.47 26.37 39.12 16.73 0.50 0.62 2.08 3.40 7.26 0.14 0.31

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 97.61 104.25 134.34 115.41 158.68 97.60 77.26 68.48 80.13 113.09

KERANIGONJ

PRODUCTIVITY PER ACRE= 688.56 TOTAL CROPPED AREA= 28239.00 TOTAL PRODUCTION= 448302.00 TOTAL VALUE IN RUPEES= 12962909.00
PERCENT OF TOTAL CROPPED AREA:

16.29 1.20 2.33 33.71 0.99 0.21 6.94 5.31 31.86 0.85 0.27

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 91.87 101.71 111.31 96.18 137.52 103.34 92.71 81.32 84.34 100.52

NAWABGONJ

PRODUCTIVITY PER ACRE= 719.56 TOTAL CROPPED AREA= 45060.00 TOTAL PRODUCTION= 759551.56 TOTAL VALUE IN RUPEES= 24378496.00
PERCENT OF TOTAL CROPPED AREA:

16.26 12.86 0.61 35.60 0.84 0.44 8.28 4.44 19.97 0.44 0.27

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 86.13 104.25 134.34 86.56 84.63 114.82 108.16 91.59 115.97 125.65

DOHAR

PRODUCTIVITY PER ACRE= 633.23 TOTAL CROPPED AREA= 27621.00 TOTAL PRODUCTION= 447556.94 TOTAL VALUE IN RUPEES= 12146185.00
PERCENT OF TOTAL CROPPED AREA:

21.62 2.38 0.28 28.24 1.41 0.09 6.67 5.79 32.57 0.91 0.14

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 91.87 101.71 122.83 79.83 89.92 103.34 92.71 77.04 105.43 87.96

SREEPUR

PRODUCTIVITY PER ACRE= 804.47 TOTAL CROPPED AREA= 70320.00 TOTAL PRODUCTION= 1612637.00 TOTAL VALUE IN RUPEES= 37924240.00
PERCENT OF TOTAL CROPPED AREA:

41.24 2.81 2.96 42.56 0.22 0.04 0.08 2.84 5.50 1.71 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 80.39 88.99 126.67 86.56 31.74 91.86 77.26 42.80 122.30 100.52

KAPASIA

PRODUCTIVITY PER ACRE= 956.12 TOTAL CROPPED AREA= 81427.00 TOTAL PRODUCTION= 1760763.00 TOTAL VALUE IN RUPEES= 53892368.00
PERCENT OF TOTAL CROPPED AREA:

18.43 10.90 3.46 39.42 0.42 0.14 2.08 2.95 20.86 1.11 0.25

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 114.84 114.42 153.54 122.15 58.18 126.30 92.71 81.32 89.62 125.65

KALIGONJ

PRODUCTIVITY PER ACRE= 724.34 TOTAL CROPPED AREA= 78069.00 TOTAL PRODUCTION= 1653168.00 TOTAL VALUE IN RUPEES= 40662592.00
PERCENT OF TOTAL CROPPED AREA:

19.85 11.08 2.15 40.99 0.45 0.06 0.90 3.20 19.54 1.61 0.15

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 97.61 106.79 103.64 115.41 116.36 103.34 92.71 87.31 106.43 87.96

JOYDEBPUR

PRODUCTIVITY PER ACRE= 844.20 TOTAL CROPPED AREA= 114149.00 TOTAL PRODUCTION= 1953045.00 TOTAL VALUE IN RUPEES= 63817520.00
PERCENT OF TOTAL CROPPED AREA:

26.19 6.60 2.33 58.91 0.32 0.07 0.15 1.31 3.47 0.61 0.03

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 114.84 76.28 107.48 115.41 89.92 109.08 108.16 55.64 103.32 113.09

SAVAR

PRODUCTIVITY PER ACRE=1270.58 TOTAL CROPPED AREA= 61857.00 TOTAL PRODUCTION= 1756574.00 TOTAL VALUE IN RUPEES= 45430256.00
PERCENT OF TOTAL CROPPED AREA:

42.14 11.34 11.96 9.96 0.87 0.30 4.07 4.45 11.84 2.21 0.86

YIELD AS PERCENT OF NATIONAL AVERAGE:

151.00 120.58 119.50 103.64 117.34 169.26 126.30 77.26 74.47 54.85 75.39

DHAMRAI

PRODUCTIVITY PER ACRE=1055.24 TOTAL CROPPED AREA= 109664.00 TOTAL PRODUCTION= 2006123.00 TOTAL VALUE IN RUPEES= 55344672.00
PERCENT OF TOTAL CROPPED AREA:

32.74 1.35 2.74 35.47 0.69 0.32 5.71 2.23 17.65 0.91 0.18

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 103.35 114.42 115.15 99.06 121.65 114.82 77.26 81.32 94.85 87.96

KALIAKAIR

PRODUCTIVITY PER ACRE= 804.55 TOTAL CROPPED AREA= 83074.00 TOTAL PRODUCTION= 1386427.00 TOTAL VALUE IN RUPEES= 47741008.00
PERCENT OF TOTAL CROPPED AREA:

13.00 8.50 4.81 44.35 1.36 0.14 3.47 4.09 19.71 0.36 0.20

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 109.09 106.79 130.51 86.56 52.89 109.08 92.71 77.04 97.00 62.83

NUNSHIGONJ

PRODUCTIVITY PER ACRE=2433.23 TOTAL CROPPED AREA= 47032.00 TOTAL PRODUCTION= 3098073.00 TOTAL VALUE IN RUPEES= 66534656.00
PERCENT OF TOTAL CROPPED AREA:

14.55 1.23 2.66 39.12 0.83 25.22 2.52 1.70 9.19 2.76 0.21

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 86.13 106.79 107.48 120.22 179.83 126.30 77.26 83.03 103.32 75.39

LOUHAJANG

PRODUCTIVITY PER ACRE=1014.83 TOTAL CROPPED AREA= 35757.00 TOTAL PRODUCTION= 815381.94 TOTAL VALUE IN RUPEES= 24712896.00
PERCENT OF TOTAL CROPPED AREA:

18.30 0.53 0.69 44.84 0.98 5.59 0.85 4.30 23.79 0.08 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 103.35 104.25 107.48 107.72 206.28 103.34 46.35 85.60 84.34 62.83

SRINAGAR

PRODUCTIVITY PER ACRE= 841.65 TOTAL CROPPED AREA= 62326.00 TOTAL PRODUCTION= 1121725.00 TOTAL VALUE IN RUPEES= 38857940.00
PERCENT OF TOTAL CROPPED AREA:

5.65 16.84 5.45 52.03 0.60 2.25 5.49 1.64 9.81 0.11 0.12

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 91.87 109.33 107.48 91.37 143.87 103.34 77.26 87.31 97.00 62.83

SIRAJDIKHAN

PRODUCTIVITY PER ACRE=1414.61 TOTAL CROPPED AREA= 38977.00 TOTAL PRODUCTION= 1186691.00 TOTAL VALUE IN RUPEES= 31328016.00
PERCENT OF TOTAL CROPPED AREA:

14.53 2.71 1.81 53.99 0.95 6.49 0.65 3.59 14.02 1.03 0.23

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 86.13 114.42 107.48 89.44 222.15 103.34 92.71 68.17 94.85 75.39

TONGIBARI

PRODUCTIVITY PER ACRE=3583.04 TOTAL CROPPED AREA= 46843.00 TOTAL PRODUCTION= 4195397.00 TOTAL VALUE IN RUPEES= 95435568.00
PERCENT OF TOTAL CROPPED AREA:

11.26 0.26 1.96 35.56 0.69 30.71 1.19 2.05 14.17 2.05 0.10

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 103.35 127.13 115.15 100.99 243.30 109.08 92.71 79.61 63.26 87.96

GAZARIA

PRODUCTIVITY PER ACRE= 738.18 TOTAL CROPPED AREA= 32605.00 TOTAL PRODUCTION= 480089.94 TOTAL VALUE IN RUPEES= 15834501.00
PERCENT OF TOTAL CROPPED AREA:

15.95 7.93 0.92 20.09 1.38 0.34 2.16 33.74 16.35 0.92 0.23

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 97.61 134.76 122.83 93.29 132.23 91.86 123.61 89.88 63.26 87.96

MANIKGONJ

PRODUCTIVITY PER ACRE= 651.72 TOTAL CROPPED AREA= 35460.00 TOTAL PRODUCTION= 419655.50 TOTAL VALUE IN RUPEES= 14354088.00
PERCENT OF TOTAL CROPPED AREA:

22.14 1.35 0.56 45.83 1.25 0.35 5.48 7.61 15.15 0.20 0.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 91.87 91.54 95.96 105.79 126.94 91.86 77.26 55.64 118.08 50.26

SATURIA

PRODUCTIVITY PER ACRE= 496.77 TOTAL CROPPED AREA= 39068.00 TOTAL PRODUCTION= 399780.06 TOTAL VALUE IN RUPEES= 14929215.00
PERCENT OF TOTAL CROPPED AREA:

16.28 0.42 0.13 52.96 0.82 0.11 2.70 10.37 16.11 0.05 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 97.61 104.25 84.45 81.75 63.47 103.34 92.71 74.47 103.32 75.39

SINGAIR

PRODUCTIVITY PER ACRE=1304.34 TOTAL CROPPED AREA= 71925.00 TOTAL PRODUCTION= 1281759.00 TOTAL VALUE IN RUPEES= 38082688.00
PERCENT OF TOTAL CROPPED AREA:

42.38 0.47 0.14 34.58 0.57 0.26 10.80 4.17 4.96 1.35 0.28

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 86.13 109.33 126.67 98.10 89.92 114.82 77.26 77.04 73.80 87.96

HARIRAMPUR

PRODUCTIVITY PER ACRE= 667.48 TOTAL CROPPED AREA= 53380.00 TOTAL PRODUCTION= 725078.88 TOTAL VALUE IN RUPEES= 27620144.00
PERCENT OF TOTAL CROPPED AREA:

12.50 2.69 0.09 67.83 0.83 0.31 2.64 3.65 9.17 0.02 0.27

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 103.35 101.71 111.31 86.56 132.23 103.34 61.81 50.50 84.34 87.96

SHIBALAYA

PRODUCTIVITY PER ACRE= 531.37 TOTAL CROPPED AREA= 41264.00 TOTAL PRODUCTION= 508312.13 TOTAL VALUE IN RUPEES= 17401840.00

PERCENT OF TOTAL CROPPED AREA:

20.94 1.83 0.01 47.35 1.84 0.52 7.33 5.33 14.27 0.19 0.36

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 80.39 111.08 103.64 107.72 121.65 114.82 77.26 58.21 105.43 113.09

DAULATPUR

PRODUCTIVITY PER ACRE= 621.74 TOTAL CROPPED AREA= 65869.00 TOTAL PRODUCTION= 989275.94 TOTAL VALUE IN RUPEES= 32502624.00

PERCENT OF TOTAL CROPPED AREA:

38.32 0.77 0.12 46.80 0.56 0.22 2.31 1.37 9.01 0.46 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 114.84 127.13 115.15 105.79 105.78 114.82 77.26 66.77 105.43 125.65

GHEOR

PRODUCTIVITY PER ACRE= 676.18 TOTAL CROPPED AREA= 45300.00 TOTAL PRODUCTION= 676409.00 TOTAL VALUE IN RUPEES= 24310288.00

PERCENT OF TOTAL CROPPED AREA:

26.49 0.62 0.05 53.10 0.93 0.26 5.52 0.31 12.46 0.18 0.11

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 103.35 101.71 122.83 78.87 101.55 103.34 108.16 65.91 107.64 87.96

NAHAYANGANJ

PRODUCTIVITY PER ACRE=1029.27 TOTAL CROPPED AREA= 15705.00 TOTAL PRODUCTION= 314142.38 TOTAL VALUE IN RUPEES= 10565120.00

PERCENT OF TOTAL CROPPED AREA:

4.46 2.06 12.94 32.16 4.08 2.39 2.83 15.66 22.60 0.45 0.38

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 97.61 109.33 130.51 110.60 89.92 97.60 112.80 90.73 84.34 87.96

ARAIHAZAR

PRODUCTIVITY PER ACRE= 839.96 TOTAL CROPPED AREA= 46253.00 TOTAL PRODUCTION= 702946.19 TOTAL VALUE IN RUPEES= 24434336.00

PERCENT OF TOTAL CROPPED AREA:

22.48 4.70 0.72 40.00 1.12 0.69 3.38 3.57 23.03 0.22 0.10

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 91.87 106.79 138.18 100.99 100.50 103.34 61.81 75.33 97.00 100.52

RUPGANJ

PRODUCTIVITY PER ACRE= 970.77 TOTAL CROPPED AREA= 73142.00 TOTAL PRODUCTION= 1359244.00 TOTAL VALUE IN RUPEES= 50357472.00

PERCENT OF TOTAL CROPPED AREA:

5.06 8.70 8.10 62.22 0.45 0.40 1.32 1.30 12.22 0.14 0.10

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 74.64 101.71 138.18 100.99 116.36 109.08 111.25 65.91 101.21 75.39

HAIDERGAZAAR

PRODUCTIVITY PER ACRE= 923.67 TOTAL CROPPED AREA= 50121.00 TOTAL PRODUCTION= 998441.00 TOTAL VALUE IN RUPEES= 30859040.00

PERCENT OF TOTAL CROPPED AREA:

14.16 3.03 4.95 41.49 1.42 2.50 4.40 2.19 25.13 0.40 0.32

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 91.87 101.71 122.83 96.18 158.68 103.34 108.16 77.04 126.52 62.83

FATULLA

PRODUCTIVITY PER ACRE=1058.31 TOTAL CROPPED AREA= 18537.00 TOTAL PRODUCTION= 765272.94 TOTAL VALUE IN RUPEES= 12991947.00

PERCENT OF TOTAL CROPPED AREA:

37.76 3.52 18.87 11.19 2.65 1.40 5.53 6.91 6.96 4.86 0.35

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 86.13 109.33 107.48 105.79 89.92 91.86 77.26 53.93 106.76 75.39
NARSHINGDI

PRODUCTIVITY PER ACRE= 862.86 TOTAL CROPPED AREA= 100965.00 TOTAL PRODUCTION= 1973952.00 TOTAL VALUE IN RUPEES= 58260192.00
PERCENT OF TOTAL CROPPED AREA:

14.55 7.71 2.10 51.72 1.23 0.47 1.96 1.98 17.03 0.99 0.25

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 97.61 114.42 118.99 100.99 116.36 103.34 80.35 87.31 97.00 113.09
RAIPURA

PRODUCTIVITY PER ACRE= 867.11 TOTAL CROPPED AREA= 99809.00 TOTAL PRODUCTION= 1521198.00 TOTAL VALUE IN RUPEES= 56158368.00
PERCENT OF TOTAL CROPPED AREA:

23.04 6.07 5.09 43.11 0.69 0.25 1.71 2.50 17.23 0.10 0.21

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 80.39 106.79 122.83 100.99 126.94 114.82 92.71 100.16 69.56 87.96
SHIBPUR

PRODUCTIVITY PER ACRE= 683.70 TOTAL CROPPED AREA= 65954.00 TOTAL PRODUCTION= 1096985.00 TOTAL VALUE IN RUPEES= 32676128.00
PERCENT OF TOTAL CROPPED AREA:

26.69 4.33 2.04 34.57 0.62 0.49 1.54 2.50 26.08 0.90 0.24

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 86.13 127.13 107.48 98.10 158.68 103.34 92.71 66.77 82.24 50.26
MONOHARDI

PRODUCTIVITY PER ACRE= 806.39 TOTAL CROPPED AREA= 73874.00 TOTAL PRODUCTION= 1854132.00 TOTAL VALUE IN RUPEES= 42857200.00
PERCENT OF TOTAL CROPPED AREA:

28.83 4.44 2.03 35.09 0.45 0.11 1.18 2.03 23.28 2.40 0.16

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 80.39 101.71 145.86 93.29 121.65 114.82 92.71 83.03 92.78 100.52
TANGAIL

PRODUCTIVITY PER ACRE= 551.55 TOTAL CROPPED AREA= 97976.00 TOTAL PRODUCTION= 1645320.00 TOTAL VALUE IN RUPEES= 35551792.00
PERCENT OF TOTAL CROPPED AREA:

35.00 1.05 0.72 35.96 0.96 0.51 3.24 4.41 16.45 1.63 0.07

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 86.13 83.91 69.09 107.72 100.50 103.34 77.26 117.27 94.89 113.09
BASAIL

PRODUCTIVITY PER ACRE= 805.82 TOTAL CROPPED AREA= 119581.00 TOTAL PRODUCTION= 1428301.00 TOTAL VALUE IN RUPEES= 49415824.00
PERCENT OF TOTAL CROPPED AREA:

24.42 4.21 1.50 57.98 0.05 0.33 2.13 1.67 7.36 0.27 0.07

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 143.56 139.85 76.77 100.99 63.47 114.82 77.26 102.72 90.67 100.52
GHATAIL

PRODUCTIVITY PER ACRE= 767.02 TOTAL CROPPED AREA= 136638.00 TOTAL PRODUCTION= 1537529.00 TOTAL VALUE IN RUPEES= 56340464.00
PERCENT OF TOTAL CROPPED AREA:

30.01 4.10 2.98 39.04 0.37 0.23 3.83 3.66 15.69 0.04 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 126.32 139.85 80.61 115.41 58.18 114.82 77.26 102.72 97.00 100.52
KALIHATI

PRODUCTIVITY PER ACRE= 616.38 TOTAL CROPPED AREA= 152409.00 TOTAL PRODUCTION= 1662591.00 TOTAL VALUE IN RUPEES= 62213088.00
PERCENT OF TOTAL CROPPED AREA:

31.20 2.97 3.25 47.61 0.28 0.20 2.74 1.07 10.53 0.03 0.14

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 86.13 127.13 76.77 105.79 52.89 120.56 92.71 105.29 84.34 113.09

NAGARPUR

PRODUCTIVITY PER ACRE= 596.65 TOTAL CROPPED AREA= 106321.00 TOTAL PRODUCTION= 1147644.00 TOTAL VALUE IN RUPEES= 37536344.00

PERCENT OF TOTAL CROPPED AREA:

12.64 0.21 0.25 43.58 1.65 0.28 5.70 1.79 13.47 0.28 0.16

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 86.13 111.88 72.93 81.75 68.76 103.34 108.16 105.29 94.85 113.09

MIRZAPUR

PRODUCTIVITY PER ACRE= 702.52 TOTAL CROPPED AREA= 130543.00 TOTAL PRODUCTION= 1974729.00 TOTAL VALUE IN RUPEES= 54915600.00

PERCENT OF TOTAL CROPPED AREA:

27.12 1.68 1.96 54.85 0.05 0.15 2.55 1.49 8.68 1.00 0.48

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 114.84 104.25 84.45 100.99 58.18 103.34 92.71 111.28 94.85 100.52

GOPALPUR

PRODUCTIVITY PER ACRE= 544.73 TOTAL CROPPED AREA= 109579.00 TOTAL PRODUCTION= 1392906.00 TOTAL VALUE IN RUPEES= 44880064.00

PERCENT OF TOTAL CROPPED AREA:

23.60 4.62 2.31 46.58 0.30 0.47 2.97 1.83 16.63 0.46 0.24

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 97.61 101.71 80.61 81.75 89.92 91.86 108.16 94.16 84.34 87.96

MADHUPUR

PRODUCTIVITY PER ACRE= 660.79 TOTAL CROPPED AREA= 81926.00 TOTAL PRODUCTION= 826230.25 TOTAL VALUE IN RUPEES= 31112810.00

PERCENT OF TOTAL CROPPED AREA:

60.18 9.36 1.78 4.33 0.09 0.55 1.59 6.62 15.27 0.0 0.24

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 143.55 152.56 72.93 81.75 55.01 114.82 92.71 100.15 0.0 100.52

KOTWALI

PRODUCTIVITY PER ACRE= 715.34 TOTAL CROPPED AREA= 113693.00 TOTAL PRODUCTION= 1264177.00 TOTAL VALUE IN RUPEES= 42139312.00

PERCENT OF TOTAL CROPPED AREA:

42.25 4.10 0.36 37.11 0.06 0.34 3.21 1.24 10.96 0.27 0.10

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 114.84 104.25 84.45 67.32 68.76 145.82 77.26 85.60 103.32 100.52

MUKTAGACHA

PRODUCTIVITY PER ACRE= 677.25 TOTAL CROPPED AREA= 119461.00 TOTAL PRODUCTION= 1187917.00 TOTAL VALUE IN RUPEES= 43732288.00

PERCENT OF TOTAL CROPPED AREA:

38.76 3.45 0.04 44.53 0.06 0.39 0.54 1.28 10.85 0.05 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 103.35 96.62 84.45 67.32 63.47 114.82 77.26 119.84 85.40 87.96

FULBARIA

PRODUCTIVITY PER ACRE= 761.22 TOTAL CROPPED AREA= 125092.00 TOTAL PRODUCTION= 1985799.00 TOTAL VALUE IN RUPEES= 50650592.00

PERCENT OF TOTAL CROPPED AREA:

35.21 5.86 0.77 43.35 0.17 0.18 0.96 1.33 10.87 1.12 0.16

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 109.09 101.71 80.61 67.32 65.59 132.04 92.71 117.27 105.43 113.09

TRISHAL

PRODUCTIVITY PER ACRE= 714.59 TOTAL CROPPED AREA= 97274.00 TOTAL PRODUCTION= 1069234.00 TOTAL VALUE IN RUPEES= 38617024.00

PERCENT OF TOTAL CROPPED AREA:

37.16 4.64 0.81 45.55 0.08 0.51 0.68 1.57 8.79 0.12 0.09

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 109.09 106.79 76.77 67.32 68.76 120.56 92.71 117.27 93.83 113.09

BHALUKA

PRODUCTIVITY PER ACRE= 600.23 TOTAL CROPPED AREA= 95621.00 TOTAL PRODUCTION= 1037699.94 TOTAL VALUE IN RUPEES= 38790604.00
PERCENT OF TOTAL CROPPED AREA:

29.83 11.71 2.91 37.63 0.02 0.13 0.64 3.03 14.02 0.04 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 109.09 101.71 72.93 67.32 55.01 132.04 77.26 100.15 90.67 100.52

GAFFARGAON

PRODUCTIVITY PER ACRE= 815.36 TOTAL CROPPED AREA= 132461.00 TOTAL PRODUCTION= 1919700.00 TOTAL VALUE IN RUPEES= 66676272.00
PERCENT OF TOTAL CROPPED AREA:

34.40 7.46 4.68 36.46 0.03 1.09 1.45 0.78 13.00 0.51 0.14

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 114.84 104.25 84.45 67.32 74.05 137.79 92.71 113.85 94.85 113.09

NANDAIL

PRODUCTIVITY PER ACRE= 675.28 TOTAL CROPPED AREA= 94529.00 TOTAL PRODUCTION= 1186198.00 TOTAL VALUE IN RUPEES= 37112544.00
PERCENT OF TOTAL CROPPED AREA:

38.08 6.60 0.75 38.04 0.17 0.53 2.45 0.85 11.96 0.50 0.07

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 114.84 99.16 84.45 67.32 63.47 137.79 108.16 83.03 94.85 113.09

ISHWARDNJ

PRODUCTIVITY PER ACRE= 690.20 TOTAL CROPPED AREA= 97438.00 TOTAL PRODUCTION= 1250768.00 TOTAL VALUE IN RUPEES= 37781804.00
PERCENT OF TOTAL CROPPED AREA:

33.87 3.80 0.10 49.97 0.13 1.57 0.78 0.73 8.13 0.51 0.41

YIELD AS PERCENT OF NATIONAL AVERAGE:

47.19 109.09 96.62 84.45 67.32 68.76 126.30 108.16 117.27 105.43 125.65

GOURIPUR

PRODUCTIVITY PER ACRE= 665.71 TOTAL CROPPED AREA= 105789.00 TOTAL PRODUCTION= 1301967.00 TOTAL VALUE IN RUPEES= 41671264.00
PERCENT OF TOTAL CROPPED AREA:

28.36 2.97 0.09 52.38 0.06 0.87 0.24 0.48 13.74 0.57 0.24

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 114.84 106.79 88.28 67.32 68.76 114.82 92.71 85.60 71.65 113.09

PHULPUR

PRODUCTIVITY PER ACRE= 676.84 TOTAL CROPPED AREA= 193155.00 TOTAL PRODUCTION= 2186129.00 TOTAL VALUE IN RUPEES= 76453184.00
PERCENT OF TOTAL CROPPED AREA:

32.62 2.63 1.05 52.12 0.09 0.77 0.94 1.55 7.71 0.26 0.26

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 109.09 101.71 84.45 67.32 52.89 91.86 108.16 83.03 84.34 113.09

HALUAGHAT

PRODUCTIVITY PER ACRE= 706.28 TOTAL CROPPED AREA= 128460.00 TOTAL PRODUCTION= 1418568.00 TOTAL VALUE IN RUPEES= 53057584.00
PERCENT OF TOTAL CROPPED AREA:

33.47 5.73 2.32 52.79 0.03 0.30 0.36 0.55 4.31 0.09 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 114.84 101.71 84.45 67.32 74.05 137.79 92.71 105.29 81.18 125.65

JAMALPUR

PRODUCTIVITY PER ACRE= 695.21 TOTAL CROPPED AREA= 170022.00 TOTAL PRODUCTION= 2640971.00 TOTAL VALUE IN RUPEES= 67159328.00
PERCENT OF TOTAL CROPPED AREA:

31.38 2.90 1.09 45.30 0.21 0.31 1.33 0.30 15.85 1.18 0.15

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 114.84 104.25 76.77 67.32 100.50 109.08 92.71 108.71 94.89 125.65

ISLAMPUR

PRODUCTIVITY PER ACRE= 848.85 TOTAL CROPPED AREA= 64328.00 TOTAL PRODUCTION= 3137549.00 TOTAL VALUE IN RUPEES= 30676880.00
PERCENT OF TOTAL CROPPED AREA:

33.58 3.46 1.34 27.98 0.23 0.47 1.83 1.11 21.30 8.58 0.16

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 114.84 101.71 76.77 67.32 58.18 114.82 92.71 105.29 95.94 125.65

SHERPUR

PRODUCTIVITY PER ACRE= 673.86 TOTAL CROPPED AREA= 142918.00 TOTAL PRODUCTION= 1712841.00 TOTAL VALUE IN RUPEES= 55348544.00
PERCENT OF TOTAL CROPPED AREA:

37.64 3.32 0.14 42.60 0.10 0.45 3.45 0.84 10.21 0.36 0.89

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 109.09 96.62 76.77 67.32 79.34 103.34 77.26 113.85 111.76 113.09

SREEBORDI

PRODUCTIVITY PER ACRE= 579.28 TOTAL CROPPED AREA= 100803.00 TOTAL PRODUCTION= 1266222.00 TOTAL VALUE IN RUPEES= 35150368.00
PERCENT OF TOTAL CROPPED AREA:

37.69 3.27 0.13 44.27 0.33 0.23 1.16 0.85 11.40 0.60 0.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 109.09 94.08 84.45 67.32 74.05 132.04 92.71 122.40 84.34 113.09

SANSHABARI

PRODUCTIVITY PER ACRE= 634.47 TOTAL CROPPED AREA= 56004.00 TOTAL PRODUCTION= 662004.44 TOTAL VALUE IN RUPEES= 20779440.00
PERCENT OF TOTAL CROPPED AREA:

26.07 3.04 1.28 38.75 0.08 0.54 2.92 1.41 25.41 0.37 0.12

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 114.84 88.99 76.77 67.32 52.89 109.08 108.16 100.15 94.85 113.09

NALITABARI

PRODUCTIVITY PER ACRE= 717.43 TOTAL CROPPED AREA= 152148.00 TOTAL PRODUCTION= 1703730.00 TOTAL VALUE IN RUPEES= 65362578.00
PERCENT OF TOTAL CROPPED AREA:

29.58 7.23 0.67 59.44 0.03 0.39 0.15 2.17 0.24 0.05 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 114.84 101.71 84.45 67.32 52.89 109.08 92.71 94.16 87.51 113.09

NAKILA

PRODUCTIVITY PER ACRE= 647.04 TOTAL CROPPED AREA= 66226.00 TOTAL PRODUCTION= 1229733.00 TOTAL VALUE IN RUPEES= 26288832.00
PERCENT OF TOTAL CROPPED AREA:

41.98 5.02 0.19 40.62 0.06 0.98 0.78 1.54 6.52 2.05 0.26

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 114.84 104.25 76.77 67.32 74.05 109.08 108.16 117.27 89.62 113.09

MELANDAH

PRODUCTIVITY PER ACRE= 788.58 TOTAL CROPPED AREA= 93040.00 TOTAL PRODUCTION= 2092477.00 TOTAL VALUE IN RUPEES= 40988640.00
PERCENT OF TOTAL CROPPED AREA:

28.48 3.22 3.22 43.07 0.23 0.70 2.96 1.52 13.54 2.65 0.37

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 109.09 99.16 80.61 67.32 52.89 114.82 108.16 128.40 90.67 125.65

MADARGANJ

PRODUCTIVITY PER ACRE= 604.60 TOTAL CROPPED AREA= 60257.00 TOTAL PRODUCTION= 645715.94 TOTAL VALUE IN RUPEES= 22769472.00
PERCENT OF TOTAL CROPPED AREA:

25.23 3.34 0.43 50.78 0.08 0.27 2.06 2.36 15.14 0.18 0.13

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 114.84 96.62 76.77 67.32 52.89 126.30 92.71 105.29 76.96 125.65

DEWANGANJ

PRODUCTIVITY PER ACRE= 611.02 TOTAL CROPPED AREA= 110481.00 TOTAL PRODUCTION= 3330350.00 TOTAL VALUE IN RUPEES= 42725184.00
PERCENT OF TOTAL CROPPED AREA:

37.96 0.96 0.08 38.85 3.17 0.44 6.44 3.80 4.26 3.90 0.16

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 114.84 104.25 76.77 67.32 74.05 120.56 92.71 100.15 115.97 113.09

KISHORGONJ

PRODUCTIVITY PER ACRE= 898.74 TOTAL CROPPED AREA= 69395.00 TOTAL PRODUCTION= 1724739.00 TOTAL VALUE IN RUPEES= 31983600.00
PERCENT OF TOTAL CROPPED AREA:

28.75 6.02 0.12 44.48 0.43 0.65 0.59 0.43 14.87 3.31 0.35

YIELD AS PERCENT OF NATIONAL AVERAGE:

96.62 114.84 99.16 99.80 96.18 63.47 91.86 77.26 113.85 86.45 100.52

HUSSAINPUR

PRODUCTIVITY PER ACRE= 810.68 TOTAL CROPPED AREA= 36546.00 TOTAL PRODUCTION= 835361.44 TOTAL VALUE IN RUPEES= 17325824.00
PERCENT OF TOTAL CROPPED AREA:

28.39 5.47 2.46 39.06 0.03 0.75 0.60 0.82 19.43 2.74 0.25

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 120.58 96.62 95.96 144.27 52.89 103.34 77.26 108.71 84.34 75.39

PAKUNDIA

PRODUCTIVITY PER ACRE= 628.18 TOTAL CROPPED AREA= 56323.00 TOTAL PRODUCTION= 2154747.00 TOTAL VALUE IN RUPEES= 29000688.00
PERCENT OF TOTAL CROPPED AREA:

36.31 4.99 1.05 34.73 0.17 3.20 1.62 0.37 10.91 6.35 0.27

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 114.84 99.16 103.64 105.79 52.89 105.64 92.71 97.58 86.45 87.96

KARIMGANJ

PRODUCTIVITY PER ACRE= 919.90 TOTAL CROPPED AREA= 80712.00 TOTAL PRODUCTION= 1293400.00 TOTAL VALUE IN RUPEES= 40794944.00
PERCENT OF TOTAL CROPPED AREA:

17.74 21.06 0.28 23.91 0.12 0.55 1.12 5.23 28.88 0.74 0.37

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 114.84 104.25 111.31 144.27 63.47 120.56 92.71 95.87 73.80 75.39

TAHAIL

PRODUCTIVITY PER ACRE= 879.62 TOTAL CROPPED AREA= 40856.00 TOTAL PRODUCTION= 540127.94 TOTAL VALUE IN RUPEES= 26054000.00
PERCENT OF TOTAL CROPPED AREA:

3.92 39.01 0.26 33.53 0.02 0.29 0.90 4.90 16.40 0.08 0.67

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 114.84 106.79 84.45 96.18 63.47 80.37 123.61 16.26 73.80 100.52

BAJITPUR

PRODUCTIVITY PER ACRE=1157.38 TOTAL CROPPED AREA= 65164.00 TOTAL PRODUCTION= 1020141.75 TOTAL VALUE IN RUPEES= 38479296.00
PERCENT OF TOTAL CROPPED AREA:

23.17 18.12 5.08 41.43 0.20 0.34 0.50 1.15 9.75 0.05 0.13

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 120.58 106.79 111.31 134.65 63.47 103.34 123.61 130.11 94.85 100.52

KULIANCHAR

PRODUCTIVITY PER ACRE=1178.73 TOTAL CROPPED AREA= 28028.00 TOTAL PRODUCTION= 515334.38 TOTAL VALUE IN RUPEES= 17297152.00
PERCENT OF TOTAL CROPPED AREA:

14.77 12.94 10.36 45.31 0.54 1.43 1.52 1.78 10.35 0.54 0.46

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 114.84 104.25 99.80 105.79 68.76 91.86 108.16 80.46 88.56 62.83

KATHIADIA

PRODUCTIVITY PER ACRE= 811.16 TOTAL CROPPED AREA= 76747.00 TOTAL PRODUCTION= 952732.44 TOTAL VALUE IN RUPEES= 35573984.00
PERCENT OF TOTAL CROPPED AREA:

23.64 11.72 1.38 46.91 0.30 1.50 0.59 0.52 13.11 0.14 0.20

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 97.61 101.71 107.48 115.41 68.76 86.12 123.61 43.65 95.54 75.39

AUSTUGRAM

PRODUCTIVITY PER ACRE=1333.08 TOTAL CROPPED AREA= 70153.00 TOTAL PRODUCTION= 1716288.00 TOTAL VALUE IN RUPEES= 66837840.00
PERCENT OF TOTAL CROPPED AREA:

0.83 57.51 19.20 14.50 0.06 0.36 0.24 0.77 5.80 0.01 0.73

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 132.06 106.79 107.48 115.41 63.47 103.34 108.16 102.72 87.51 87.96

BHAIRAB

PRODUCTIVITY PER ACRE=1000.81 TOTAL CROPPED AREA= 24130.00 TOTAL PRODUCTION= 403477.50 TOTAL VALUE IN RUPEES= 15284543.00
PERCENT OF TOTAL CROPPED AREA:

16.58 13.09 7.38 41.44 0.25 1.86 1.28 5.88 7.01 0.0 1.22

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 126.32 101.71 99.80 105.79 74.05 97.60 123.61 209.71 0.0 62.83

NIKLI

PRODUCTIVITY PER ACRE= 892.80 TOTAL CROPPED AREA= 49035.00 TOTAL PRODUCTION= 945800.00 TOTAL VALUE IN RUPEES= 36788752.00
PERCENT OF TOTAL CROPPED AREA:

2.52 73.19 4.22 7.55 0.07 0.25 0.46 3.26 8.16 0.0 0.32

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 120.58 104.25 92.12 96.18 74.05 91.86 92.71 72.76 0.0 75.39

ITNA

PRODUCTIVITY PER ACRE= 933.25 TOTAL CROPPED AREA= 95225.00 TOTAL PRODUCTION= 2091421.00 TOTAL VALUE IN RUPEES= 81531328.00
PERCENT OF TOTAL CROPPED AREA:

0.95 68.44 12.63 13.13 0.03 0.24 1.16 2.00 1.37 0.0 0.17

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 120.58 104.25 103.64 96.18 79.34 114.82 92.71 122.40 0.0 75.39

NETROKUNA

PRODUCTIVITY PER ACRE= 921.03 TOTAL CROPPED AREA= 91266.00 TOTAL PRODUCTION= 1084605.00 TOTAL VALUE IN RUPEES= 41408128.00
PERCENT OF TOTAL CROPPED AREA:

26.30 7.67 4.19 47.12 0.01 0.44 0.41 2.19 10.92 0.01 0.77

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 126.32 101.71 80.61 144.27 74.05 120.56 123.61 109.57 105.43 75.39

PURBADHOLA

PRODUCTIVITY PER ACRE= 820.62 TOTAL CROPPED AREA= 67281.00 TOTAL PRODUCTION= 825098.25 TOTAL VALUE IN RUPEES= 30844800.00
PERCENT OF TOTAL CROPPED AREA:

24.51 10.03 3.15 50.47 0.01 0.30 0.89 0.67 9.55 0.07 0.33

YIELD AS PERCENT OF NATIONAL AVERAGE:

47.19 126.32 104.25 88.28 76.94 52.89 103.34 92.71 101.86 87.51 75.39

DURGAPUR

PRODUCTIVITY PER ACRE= 757.22 TOTAL CROPPED AREA= 111499.00 TOTAL PRODUCTION= 1547029.00 TOTAL VALUE IN RUPEES= 53430112.00
PERCENT OF TOTAL CROPPED AREA:

22.23 5.54 1.90 61.97 0.01 0.13 0.10 0.36 7.02 0.41 0.33

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 126.32 104.25 99.80 76.94 74.05 114.82 92.71 94.78 86.45 62.83
BERHATTA

PRODUCTIVITY PER ACRE= 925.48 TOTAL CROPPED AREA= 61493.00 TOTAL PRODUCTION= 784782.44 TOTAL VALUE IN RUPEES= 30271504.00
PERCENT OF TOTAL CROPPED AREA:

20.59 15.50 0.49 51.94 0.0 0.16 0.58 2.47 8.16 0.0 0.11

YIELD AS PERCENT OF NATIONAL AVERAGE:

56.62 126.32 109.33 95.96 0.0 74.05 114.82 139.06 106.14 0.0 100.52
MOHANGANJ

PRODUCTIVITY PER ACRE= 816.61 TOTAL CROPPED AREA= 61239.00 TOTAL PRODUCTION= 1048076.44 TOTAL VALUE IN RUPEES= 40657184.00
PERCENT OF TOTAL CROPPED AREA:

7.05 42.32 4.80 30.48 0.01 0.13 0.14 4.70 10.18 0.0 0.20

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 126.32 106.79 88.28 67.32 74.05 91.86 123.61 103.57 0.0 62.83
ATPARA

PRODUCTIVITY PER ACRE= 665.13 TOTAL CROPPED AREA= 43432.00 TOTAL PRODUCTION= 538197.38 TOTAL VALUE IN RUPEES= 20343632.00
PERCENT OF TOTAL CROPPED AREA:

19.70 22.70 2.29 29.02 0.01 0.46 1.84 1.88 21.95 0.0 0.16

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 126.32 104.25 80.61 67.32 63.47 103.34 92.71 57.35 0.0 62.83
KENDUA

PRODUCTIVITY PER ACRE=1010.76 TOTAL CROPPED AREA= 147519.00 TOTAL PRODUCTION= 1948421.00 TOTAL VALUE IN RUPEES= 72734800.00
PERCENT OF TOTAL CROPPED AREA:

31.83 7.53 0.16 44.71 0.01 0.44 1.86 2.04 11.31 0.03 0.09

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 126.32 99.16 103.64 57.71 63.47 103.34 92.71 145.52 86.45 100.52
KALIAJURI

PRODUCTIVITY PER ACRE=1035.31 TOTAL CROPPED AREA= 64132.00 TOTAL PRODUCTION= 1292542.00 TOTAL VALUE IN RUPEES= 51074480.00
PERCENT OF TOTAL CROPPED AREA:

0.07 72.82 15.51 0.74 0.0 0.16 0.02 7.02 3.20 0.0 0.47

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 109.09 88.99 99.80 0.0 52.89 126.30 123.61 31.67 0.0 75.39
MADAN

PRODUCTIVITY PER ACRE= 940.16 TOTAL CROPPED AREA= 57782.00 TOTAL PRODUCTION= 873907.00 TOTAL VALUE IN RUPEES= 33741776.00
PERCENT OF TOTAL CROPPED AREA:

12.81 40.22 5.22 28.14 0.0 0.29 1.12 2.34 9.69 0.0 0.17

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 103.35 104.25 92.12 0.0 63.47 103.34 139.06 85.60 0.0 113.09
KALMAKANDA

PRODUCTIVITY PER ACRE= 625.22 TOTAL CROPPED AREA= 45165.00 TOTAL PRODUCTION= 661435.88 TOTAL VALUE IN RUPEES= 24343344.00
PERCENT OF TOTAL CROPPED AREA:

19.20 19.66 1.52 52.31 0.04 0.30 0.30 2.66 3.52 0.22 0.27

YIELD AS PERCENT OF NATIONAL AVERAGE:

66.06 114.84 101.71 103.64 76.94 52.89 114.82 123.61 91.59 86.45 87.96
KOTWALI

PRODUCTIVITY PER ACRE= 986.23 TOTAL CROPPED AREA= 91988.00 TOTAL PRODUCTION= 1489568.00 TOTAL VALUE IN RUPEES= 57218688.00
PERCENT OF TOTAL CROPPED AREA:

19.72 20.81 0.36 58.24 0.0 0.56 0.02 0.11 0.0 0.0 0.14

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 109.09 101.71 118.99 0.0 158.68 137.79 77.26 0.0 0.0 75.39

GOWAINGHAT

PRODUCTIVITY PER ACRE= 714.32 TOTAL CROPPED AREA= 63280.00 TOTAL PRODUCTION= 1175264.00 TOTAL VALUE IN RUPEES= 45760192.00
PERCENT OF TOTAL CROPPED AREA:

5.76 5.40 0.53 85.55 0.02 0.24 0.17 1.80 0.05 0.05 0.41

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 114.84 104.25 102.87 96.18 158.68 137.79 135.06 119.84 10.84 62.83

BALAGANJ

PRODUCTIVITY PER ACRE= 733.86 TOTAL CROPPED AREA= 29199.00 TOTAL PRODUCTION= 411892.94 TOTAL VALUE IN RUPEES= 15991017.00
PERCENT OF TOTAL CROPPED AREA:

8.90 24.81 1.46 61.30 0.04 0.21 0.02 1.20 1.82 0.0 0.24

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 109.09 50.85 92.12 76.94 126.94 45.93 92.71 160.92 0.0 62.83

TAJPUR

PRODUCTIVITY PER ACRE= 734.98 TOTAL CROPPED AREA= 29051.00 TOTAL PRODUCTION= 397999.19 TOTAL VALUE IN RUPEES= 15585320.00
PERCENT OF TOTAL CROPPED AREA:

15.28 18.04 0.01 65.75 0.0 0.07 0.0 0.33 0.39 0.0 0.14

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 114.84 101.71 92.12 0.0 142.81 0.0 154.52 152.36 0.0 163.35

BISWANATH

PRODUCTIVITY PER ACRE= 946.24 TOTAL CROPPED AREA= 53974.00 TOTAL PRODUCTION= 927031.94 TOTAL VALUE IN RUPEES= 35466752.00
PERCENT OF TOTAL CROPPED AREA:

26.86 10.57 0.41 60.21 0.0 0.96 0.04 0.37 0.01 0.0 0.56

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 143.55 127.13 115.15 0.0 132.23 149.27 88.07 85.60 0.0 75.39

FENCHUGANJ

PRODUCTIVITY PER ACRE=1021.39 TOTAL CROPPED AREA= 25753.00 TOTAL PRODUCTION= 562131.00 TOTAL VALUE IN RUPEES= 20233696.00
PERCENT OF TOTAL CROPPED AREA:

6.19 49.66 1.28 37.48 0.0 2.25 0.15 1.75 0.58 0.03 0.62

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 114.84 104.25 115.15 0.0 222.15 103.34 108.16 128.40 6.33 87.96

GOPALGANJ

PRODUCTIVITY PER ACRE=1011.52 TOTAL CROPPED AREA= 47800.00 TOTAL PRODUCTION= 783087.50 TOTAL VALUE IN RUPEES= 29663056.00
PERCENT OF TOTAL CROPPED AREA:

28.76 41.88 1.04 25.63 0.01 1.27 0.10 0.52 0.56 0.0 0.23

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 103.35 99.16 103.64 76.94 116.36 97.60 92.71 128.40 0.0 62.83

JAINTIAPUR

PRODUCTIVITY PER ACRE= 768.41 TOTAL CROPPED AREA= 44440.00 TOTAL PRODUCTION= 581620.00 TOTAL VALUE IN RUPEES= 22614640.00
PERCENT OF TOTAL CROPPED AREA:

27.12 1.16 0.32 68.97 0.0 0.25 0.09 1.98 0.0 0.0 0.12

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 109.09 114.42 99.80 0.0 158.68 91.86 92.71 0.0 0.0 87.96

KANAIGHAT

PRODUCTIVITY PER ACRE= 738.77 TOTAL CROPPED AREA= 64467.00 TOTAL PRODUCTION= 1014682.00 TOTAL VALUE IN RUPEES= 38408320.00
PERCENT OF TOTAL CROPPED AREA:

15.51 1.60 0.15 81.03 0.0 1.51 0.03 0.11 0.0 0.0 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 103.35 101.71 115.15 0.0 95.21 97.60 123.61 0.0 0.0 100.52

ZAKIGANJ

PRODUCTIVITY PER ACRE= 878.09 TOTAL CROPPED AREA= 51608.00 TOTAL PRODUCTION= 767869.00 TOTAL VALUE IN RUPEES= 25813440.00
PERCENT OF TOTAL CROPPED AREA:

26.26 6.75 0.17 65.51 0.0 0.63 0.01 0.58 0.0 0.0 0.09

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 103.35 101.71 111.31 0.0 63.47 91.86 92.71 105.29 0.0 75.39

BEANIBAZAR

PRODUCTIVITY PER ACRE= 594.76 TOTAL CROPPED AREA= 46272.00 TOTAL PRODUCTION= 638872.94 TOTAL VALUE IN RUPEES= 24965568.00
PERCENT OF TOTAL CROPPED AREA:

11.15 4.57 1.31 81.85 0.0 0.46 0.06 0.41 0.03 0.0 0.17

YIELD AS PERCENT OF NATIONAL AVERAGE:

74.37 97.61 101.71 99.80 0.0 31.74 126.30 84.98 126.68 0.0 75.39

HABIGANJ

PRODUCTIVITY PER ACRE=1065.88 TOTAL CROPPED AREA= 63102.00 TOTAL PRODUCTION= 1146358.00 TOTAL VALUE IN RUPEES= 42037136.00
PERCENT OF TOTAL CROPPED AREA:

27.73 5.08 0.86 60.72 0.00 1.58 0.13 1.82 1.59 0.38 0.12

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 103.35 101.71 122.83 115.41 158.68 114.82 77.26 188.32 11.60 75.39

MADHAIPUR

PRODUCTIVITY PER ACRE= 900.71 TOTAL CROPPED AREA= 66125.00 TOTAL PRODUCTION= 932287.44 TOTAL VALUE IN RUPEES= 35664224.00
PERCENT OF TOTAL CROPPED AREA:

29.49 3.21 0.73 58.83 0.02 0.94 0.34 0.90 4.99 0.02 0.55

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 97.61 99.16 99.80 115.41 63.47 97.60 77.26 139.52 9.49 75.39

CHUNARUGHAT

PRODUCTIVITY PER ACRE= 874.84 TOTAL CROPPED AREA= 47594.00 TOTAL PRODUCTION= 923835.00 TOTAL VALUE IN RUPEES= 27392784.00
PERCENT OF TOTAL CROPPED AREA:

59.04 0.32 0.92 28.58 0.04 1.76 0.21 1.66 0.05 7.04 0.38

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 103.35 101.71 122.83 96.18 84.63 137.79 92.71 128.40 13.71 75.39

BANUDAL

PRODUCTIVITY PER ACRE=1057.74 TOTAL CROPPED AREA= 53021.00 TOTAL PRODUCTION= 910991.63 TOTAL VALUE IN RUPEES= 34156688.00
PERCENT OF TOTAL CROPPED AREA:

27.35 7.79 1.10 61.49 0.0 1.60 0.04 0.26 0.09 0.23 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 86.13 144.93 126.67 0.0 100.50 88.41 77.26 160.07 11.60 75.39

BANIACHONG

PRODUCTIVITY PER ACRE= 796.83 TOTAL CROPPED AREA= 111050.00 TOTAL PRODUCTION= 1993960.00 TOTAL VALUE IN RUPEES= 78307568.00
PERCENT OF TOTAL CROPPED AREA:

0.48 32.05 6.69 59.88 0.02 0.05 0.04 0.39 0.03 0.0 0.38

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 109.09 101.71 115.15 76.94 169.26 172.23 92.71 85.60 0.0 113.09

NABIGANJ

PRODUCTIVITY PER ACRE= 604.35 TOTAL CROPPED AREA= 75447.00 TOTAL PRODUCTION= 1160022.00 TOTAL VALUE IN RUPEES= 45291130.00
PERCENT OF TOTAL CROPPED AREA:

6.18 24.51 1.66 62.43 0.0 0.13 0.04 1.25 3.31 0.0 0.49

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 97.61 114.42 111.31 0.0 74.05 45.93 92.71 121.55 0.0 75.39

LAKHAI

PRODUCTIVITY PER ACRE= 932.83 TOTAL CROPPED AREA= 48096.00 TOTAL PRODUCTION= 886750.00 TOTAL VALUE IN RUPEES= 34248352.00
PERCENT OF TOTAL CROPPED AREA:

3.27 18.21 9.36 56.14 0.15 0.23 0.89 1.98 8.63 0.00 1.14

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 114.84 101.71 110.99 153.88 150.68 114.82 108.16 128.40 6.33 75.39

AJMIRIGANJ

PRODUCTIVITY PER ACRE= 819.01 TOTAL CROPPED AREA= 37077.00 TOTAL PRODUCTION= 700609.44 TOTAL VALUE IN RUPEES= 27357136.00
PERCENT OF TOTAL CROPPED AREA:

0.71 44.77 6.88 46.12 0.02 0.22 0.05 0.41 0.67 0.0 0.15

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 103.35 114.42 122.83 96.18 74.05 63.15 77.26 117.27 0.0 75.39

SUNAMGANJ

PRODUCTIVITY PER ACRE= 790.81 TOTAL CROPPED AREA= 133755.00 TOTAL PRODUCTION= 2283432.00 TOTAL VALUE IN RUPEES= 88886720.00
PERCENT OF TOTAL CROPPED AREA:

8.65 48.97 2.42 38.09 0.0 0.42 0.06 0.71 0.15 0.06 0.47

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 103.35 127.13 103.64 0.0 132.23 97.60 123.61 188.32 8.43 138.22

CHHATAK

PRODUCTIVITY PER ACRE= 869.63 TOTAL CROPPED AREA= 157867.00 TOTAL PRODUCTION= 2641963.00 TOTAL VALUE IN RUPEES= 103222752.00
PERCENT OF TOTAL CROPPED AREA:

33.26 13.75 0.44 50.86 0.01 0.17 0.01 1.17 0.06 0.06 0.20

YIELD AS PERCENT OF NATIONAL AVERAGE:

151.00 103.35 101.71 126.67 163.50 111.07 80.37 154.52 213.99 12.65 100.52

JAGANNATHPUR

PRODUCTIVITY PER ACRE=1264.45 TOTAL CROPPED AREA= 99419.00 TOTAL PRODUCTION= 1856713.00 TOTAL VALUE IN RUPEES= 74384688.00
PERCENT OF TOTAL CROPPED AREA:

3.31 45.09 3.29 45.93 0.0 0.15 0.02 0.85 0.96 0.0 0.40

YIELD AS PERCENT OF NATIONAL AVERAGE:

151.00 114.84 101.71 130.51 0.0 100.50 68.89 139.06 128.40 0.0 125.65

TAHIRPUR

PRODUCTIVITY PER ACRE= 751.29 TOTAL CROPPED AREA= 47008.00 TOTAL PRODUCTION= 887082.94 TOTAL VALUE IN RUPEES= 34960896.00
PERCENT OF TOTAL CROPPED AREA:

7.19 74.81 3.97 9.57 0.0 0.59 0.04 2.65 0.32 0.0 0.87

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 114.84 106.79 76.77 0.0 68.76 97.60 92.71 170.34 0.0 150.78

DHARMAPASSA

PRODUCTIVITY PER ACRE= 866.26 TOTAL CROPPED AREA= 92497.00 TOTAL PRODUCTION= 1697098.00 TOTAL VALUE IN RUPEES= 68143408.00
PERCENT OF TOTAL CROPPED AREA:

3.46 79.62 3.63 7.57 0.0 0.75 0.36 0.13 4.11 0.0 0.38

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 103.35 91.54 92.12 0.0 108.96 86.12 123.61 128.40 0.0 113.09

DERAI

PRODUCTIVITY PER ACRE= 790.47 TOTAL CROPPED AREA= 81253.00 TOTAL PRODUCTION= 1540435.00 TOTAL VALUE IN RUPEES= 60592672.00
PERCENT OF TOTAL CROPPED AREA:

0.14 83.97 4.92 8.55 0.0 0.22 0.01 1.47 0.12 0.0 0.62

YIELD AS PERCENT OF NATIONAL AVERAGE:

169.87 103.35 114.42 115.15 0.0 79.34 137.79 92.71 94.16 0.0 113.09

SULLA

PRODUCTIVITY PER ACRE=1011.04 TOTAL CROPPED AREA= 40722.00 TOTAL PRODUCTION= 1049051.00 TOTAL VALUE IN RUPEES= 4076984.00
PERCENT OF TOTAL CROPPED AREA:

0.07 89.35 7.32 0.51 0.0 0.83 0.12 0.69 0.44 0.0 0.66

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 137.80 119.50 111.31 0.0 84.63 68.89 46.35 128.40 0.0 62.83

JAMALGANJ

PRODUCTIVITY PER ACRE= 703.75 TOTAL CROPPED AREA= 59846.00 TOTAL PRODUCTION= 1064855.00 TOTAL VALUE IN RUPEES= 4129640.00
PERCENT OF TOTAL CROPPED AREA:

1.52 59.54 7.30 28.03 0.03 0.48 0.11 1.12 1.67 0.0 0.21

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 91.87 122.05 103.64 67.32 100.50 103.34 123.61 121.55 0.0 87.96

MOULVI BAZAR

PRODUCTIVITY PER ACRE= 969.03 TOTAL CROPPED AREA= 83592.00 TOTAL PRODUCTION= 1245928.00 TOTAL VALUE IN RUPEES= 4764956.00
PERCENT OF TOTAL CROPPED AREA:

37.54 8.13 1.08 50.70 0.0 0.74 0.07 0.24 1.08 0.05 0.37

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 91.87 96.62 107.48 0.0 137.52 160.75 154.52 128.40 10.54 125.65

RAJNAGAR

PRODUCTIVITY PER ACRE= 917.44 TOTAL CROPPED AREA= 54521.00 TOTAL PRODUCTION= 903695.44 TOTAL VALUE IN RUPEES= 3473588.00
PERCENT OF TOTAL CROPPED AREA:

37.05 21.95 6.51 28.30 0.0 0.52 0.08 0.52 4.04 0.46 0.57

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 114.84 101.71 99.80 0.0 121.65 97.60 77.26 122.40 7.36 188.48

KULAURA

PRODUCTIVITY PER ACRE= 802.37 TOTAL CROPPED AREA= 61513.00 TOTAL PRODUCTION= 984426.00 TOTAL VALUE IN RUPEES= 3783152.00
PERCENT OF TOTAL CROPPED AREA:

38.53 20.51 3.96 33.78 0.06 0.73 0.26 0.56 0.31 0.95 0.43

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 109.09 101.71 99.80 96.18 126.94 68.89 92.71 154.08 10.54 150.78

SREEMONGAL

PRODUCTIVITY PER ACRE= 716.44 TOTAL CROPPED AREA= 57462.00 TOTAL PRODUCTION= 900287.88 TOTAL VALUE IN RUPEES= 3374272.00
PERCENT OF TOTAL CROPPED AREA:

31.15 6.69 0.37 59.98 0.02 0.63 0.01 0.06 0.03 0.70 0.36

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 91.87 101.71 111.31 96.18 158.68 103.34 139.06 135.24 12.23 113.09

KAMALGANJ

PRODUCTIVITY PER ACRE= 911.60 TOTAL CROPPED AREA= 70435.00 TOTAL PRODUCTION= 1180776.00 TOTAL VALUE IN RUPEES= 4458200.00
PERCENT OF TOTAL CROPPED AREA:

25.56 2.70 0.65 68.86 0.01 0.53 0.01 0.45 0.00 0.85 0.38

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 103.35 101.71 122.83 76.94 126.94 80.37 92.71 171.20 11.60 113.09

BARLEKHA

PRODUCTIVITY PER ACRE= 667.30 TOTAL CROPPED AREA= 39767.00 TOTAL PRODUCTION= 539210.00 TOTAL VALUE IN RUPEES= 2041200.00
PERCENT OF TOTAL CROPPED AREA:

41.74 6.35 0.98 47.90 0.0 0.95 0.09 1.13 0.29 0.31 0.25

YIELD AS PERCENT OF NATIONAL AVERAGE:

133.81 97.61 106.79 99.80 0.0 89.92 103.34 154.52 171.20 15.81 138.22

CHANDIHA

PRODUCTIVITY PER ACRE= 946.33 TOTAL CROPPED AREA= 78012.00 TOTAL PRODUCTION= 1182791.00 TOTAL VALUE IN RUPEES= 44473120.00
PERCENT OF TOTAL CROPPED AREA:

37.88 0.01 0.50 52.73 0.13 0.64 0.41 0.18 7.41 0.04 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 91.87 114.42 107.48 115.41 95.21 103.34 139.06 122.40 84.34 87.96

DEBIDDAR

PRODUCTIVITY PER ACRE= 804.32 TOTAL CROPPED AREA= 87709.00 TOTAL PRODUCTION= 1446834.00 TOTAL VALUE IN RUPEES= 51453456.00
PERCENT OF TOTAL CROPPED AREA:

31.20 0.59 1.22 53.20 0.20 2.34 1.94 0.77 8.07 0.11 0.38

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 103.35 101.71 107.48 115.41 100.50 103.34 123.61 125.83 73.80 75.39

MURADNAGAR

PRODUCTIVITY PER ACRE= 951.79 TOTAL CROPPED AREA= 88034.00 TOTAL PRODUCTION= 1329421.00 TOTAL VALUE IN RUPEES= 50781536.00
PERCENT OF TOTAL CROPPED AREA:

27.26 0.62 2.02 61.15 0.31 0.48 2.62 0.68 4.66 0.00 0.19

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 109.09 114.42 107.48 105.79 84.63 114.82 139.06 119.84 73.80 87.96

DAUDKANDI

PRODUCTIVITY PER ACRE=1022.12 TOTAL CROPPED AREA= 107906.00 TOTAL PRODUCTION= 1975926.00 TOTAL VALUE IN RUPEES= 68933200.00
PERCENT OF TOTAL CROPPED AREA:

26.84 3.90 3.11 43.22 0.33 4.98 0.25 2.04 14.36 0.01 0.95

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 114.84 101.71 97.50 115.41 90.97 114.82 123.61 126.68 84.34 100.52

HOMNA

PRODUCTIVITY PER ACRE= 820.71 TOTAL CROPPED AREA= 49508.00 TOTAL PRODUCTION= 677443.50 TOTAL VALUE IN RUPEES= 24927600.00
PERCENT OF TOTAL CROPPED AREA:

16.00 4.13 0.51 56.05 1.26 0.20 4.45 1.79 15.04 0.06 0.48

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 114.84 127.13 99.80 115.41 84.63 109.08 123.61 107.00 73.80 87.96

KOTWALI

PRODUCTIVITY PER ACRE=1151.36 TOTAL CROPPED AREA= 83215.00 TOTAL PRODUCTION= 2052675.00 TOTAL VALUE IN RUPEES= 57030176.00
PERCENT OF TOTAL CROPPED AREA:

34.49 3.61 8.41 50.01 0.14 0.96 0.10 0.20 0.20 1.80 0.07

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 114.84 114.42 107.48 134.65 95.21 103.34 108.16 111.28 86.45 100.52

BURICHONG

PRODUCTIVITY PER ACRE= 965.07 TOTAL CROPPED AREA= 95729.00 TOTAL PRODUCTION= 1611324.00 TOTAL VALUE IN RUPEES= 55990944.00
PERCENT OF TOTAL CROPPED AREA:

27.92 0.98 3.45 49.74 0.53 0.42 0.86 0.83 14.83 0.34 0.10

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 103.35 101.71 107.48 115.41 89.92 114.82 139.06 124.12 84.56 87.96

CHOUDDAGRAM

PRODUCTIVITY PER ACRE= 867.69 TOTAL CROPPED AREA= 136520.00 TOTAL PRODUCTION= 1958844.00 TOTAL VALUE IN RUPEES= 72229616.00
PERCENT OF TOTAL CROPPED AREA:

41.34 2.36 3.48 51.28 0.21 0.37 0.33 0.05 0.29 0.22 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 109.09 88.99 92.12 96.18 84.63 97.60 123.61 119.84 73.80 75.39
LAKSAM

PRODUCTIVITY PER ACRE= 946.24 TOTAL CROPPED AREA= 141159.00 TOTAL PRODUCTION= 2226136.00 TOTAL VALUE IN RUPEES= 80952144.00
PERCENT OF TOTAL CROPPED AREA:

27.46 0.59 1.61 65.24 0.18 0.19 0.22 0.11 4.08 0.26 0.06

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 114.84 96.62 107.48 125.03 84.63 103.34 108.16 117.27 84.34 87.96
BARURA

PRODUCTIVITY PER ACRE= 908.95 TOTAL CROPPED AREA= 101822.00 TOTAL PRODUCTION= 1691503.00 TOTAL VALUE IN RUPEES= 56051600.00
PERCENT OF TOTAL CROPPED AREA:

31.92 0.04 0.65 54.88 0.07 0.29 0.23 0.23 11.03 0.67 0.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 103.35 88.99 107.48 105.79 88.86 91.86 92.71 128.40 84.34 75.39
CHANDPUR

PRODUCTIVITY PER ACRE= 954.81 TOTAL CROPPED AREA= 83982.00 TOTAL PRODUCTION= 1344114.00 TOTAL VALUE IN RUPEES= 45805728.00
PERCENT OF TOTAL CROPPED AREA:

37.75 4.47 1.97 44.52 0.71 0.26 0.43 0.30 9.40 0.11 0.07

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 97.61 96.62 115.15 134.65 84.63 109.08 108.16 115.56 94.85 87.96
FARIDGANJ

PRODUCTIVITY PER ACRE= 892.13 TOTAL CROPPED AREA= 66856.00 TOTAL PRODUCTION= 1017742.44 TOTAL VALUE IN RUPEES= 36839520.00
PERCENT OF TOTAL CROPPED AREA:

24.88 1.46 3.83 58.36 0.10 0.07 1.82 0.28 8.97 0.22 0.00

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 109.09 99.16 99.80 163.50 89.92 109.08 123.61 117.27 84.34 75.39
MATLAB BAZAR

PRODUCTIVITY PER ACRE=1049.45 TOTAL CROPPED AREA= 73923.00 TOTAL PRODUCTION= 1405886.00 TOTAL VALUE IN RUPEES= 48185312.00
PERCENT OF TOTAL CROPPED AREA:

25.70 3.89 3.00 47.48 0.20 5.48 1.39 1.08 11.66 0.01 0.10

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 103.35 94.08 105.17 173.12 95.21 114.82 108.16 117.27 94.85 87.96
HAJIGANJ

PRODUCTIVITY PER ACRE= 966.61 TOTAL CROPPED AREA= 94769.00 TOTAL PRODUCTION= 1526269.00 TOTAL VALUE IN RUPEES= 57613008.00
PERCENT OF TOTAL CROPPED AREA:

26.27 3.17 5.38 53.99 0.27 0.63 0.27 0.42 9.55 0.02 0.03

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 114.84 101.71 107.48 153.88 84.63 103.34 139.06 124.12 84.34 87.96
KACHUA

PRODUCTIVITY PER ACRE= 925.89 TOTAL CROPPED AREA= 64316.00 TOTAL PRODUCTION= 1021218.94 TOTAL VALUE IN RUPEES= 36533520.00
PERCENT OF TOTAL CROPPED AREA:

38.09 1.36 0.62 48.23 0.12 0.82 1.72 0.12 8.68 0.21 0.03

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 97.61 88.99 107.48 125.03 69.92 109.08 108.16 122.40 84.34 100.52
BRAHMANBARIA

PRODUCTIVITY PER ACRE=1038.19 TOTAL CROPPED AREA= 139437.00 TOTAL PRODUCTION= 2366087.00 TOTAL VALUE IN RUPEES= 85359312.00
PERCENT OF TOTAL CROPPED AREA:

22.90 9.10 6.34 46.14 3.30 0.39 0.55 1.31 9.83 0.00 0.14

YIELD AS PERCENT OF NATIONAL AVERAGE:

146.28 103.35 101.71 112.85 125.03 89.92 109.08 108.16 134.39 94.85 100.52

SARAIL

PRODUCTIVITY PER ACRE=1263.25 TOTAL CROPPED AREA= 75237.00 TOTAL PRODUCTION= 1545308.00 TOTAL VALUE IN RUPEES= 59231904.00
PERCENT OF TOTAL CROPPED AREA:

16.95 12.23 21.04 29.50 1.46 0.33 1.52 3.99 12.43 0.0 0.55

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 109.09 106.79 107.48 115.41 95.21 126.30 154.52 124.12 0.0 75.39

NASIRNAGAR

PRODUCTIVITY PER ACRE=1058.05 TOTAL CROPPED AREA= 92784.00 TOTAL PRODUCTION= 1590172.00 TOTAL VALUE IN RUPEES= 60975312.00
PERCENT OF TOTAL CROPPED AREA:

4.20 20.08 6.38 59.16 0.64 0.54 0.56 1.78 6.46 0.0 0.19

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 114.84 101.71 107.48 76.94 89.92 114.82 108.16 125.83 0.0 87.96

NABINAGAR

PRODUCTIVITY PER ACRE= 994.15 TOTAL CROPPED AREA= 124288.00 TOTAL PRODUCTION= 2022723.00 TOTAL VALUE IN RUPEES= 76746160.00
PERCENT OF TOTAL CROPPED AREA:

11.53 6.18 7.78 57.44 2.27 0.24 1.30 2.55 10.64 0.0 0.07

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 120.58 94.08 105.17 115.41 84.63 114.82 139.06 134.39 0.0 100.52

KASBA

PRODUCTIVITY PER ACRE=1007.37 TOTAL CROPPED AREA= 84550.00 TOTAL PRODUCTION= 1371229.00 TOTAL VALUE IN RUPEES= 52253248.00
PERCENT OF TOTAL CROPPED AREA:

27.29 4.71 7.43 48.12 1.15 0.53 0.19 1.77 8.34 0.01 0.46

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 97.61 101.71 99.80 105.79 95.21 114.82 139.06 125.83 84.34 87.96

BANCHARAMPUR

PRODUCTIVITY PER ACRE= 999.61 TOTAL CROPPED AREA= 54762.00 TOTAL PRODUCTION= 892494.44 TOTAL VALUE IN RUPEES= 33883120.00
PERCENT OF TOTAL CROPPED AREA:

13.45 9.25 2.48 56.24 0.82 1.37 0.88 5.00 9.07 0.03 1.42

YIELD AS PERCENT OF NATIONAL AVERAGE:

141.56 103.35 101.71 112.85 153.88 95.21 137.79 108.16 124.12 94.85 87.96

SUDHARAM

PRODUCTIVITY PER ACRE= 596.16 TOTAL CROPPED AREA= 149498.00 TOTAL PRODUCTION= 1730915.00 TOTAL VALUE IN RUPEES= 65732896.00
PERCENT OF TOTAL CROPPED AREA:

30.10 0.65 0.06 67.49 0.04 0.17 0.35 0.01 1.03 0.05 0.00

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 45.93 86.45 95.96 62.52 137.52 68.89 46.35 111.28 63.26 62.83

COMPANIGONJ

PRODUCTIVITY PER ACRE= 713.32 TOTAL CROPPED AREA= 37959.00 TOTAL PRODUCTION= 476346.44 TOTAL VALUE IN RUPEES= 18172496.00
PERCENT OF TOTAL CROPPED AREA:

31.86 4.05 0.81 59.55 0.04 0.08 1.39 0.05 0.08 0.08 0.0

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 57.42 81.37 103.64 67.32 95.21 80.37 61.81 89.02 73.80 0.0

HATIYA

PRODUCTIVITY PER ACRE= 600.47 TOTAL CROPPED AREA= 137508.00 TOTAL PRODUCTION= 1706156.00 TOTAL VALUE IN RUPEES= 66055456.00
PERCENT OF TOTAL CROPPED AREA:

18.18 0.03 0.0 81.45 0.01 0.01 0.17 0.00 0.06 0.05 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

84.94 51.68 63.57 99.80 67.32 137.52 74.61 46.35 85.60 64.52 50.26

RANGATI

PRODUCTIVITY PER ACRE= 617.02 TOTAL CROPPED AREA= 136696.00 TOTAL PRODUCTION= 1852126.00 TOTAL VALUE IN RUPEES= 65382752.00
PERCENT OF TOTAL CROPPED AREA:

18.33 0.05 0.0 79.78 0.01 0.04 0.63 0.11 0.59 0.45 0.02

YIELD AS PERCENT OF NATIONAL AVERAGE:

103.81 63.16 0.0 95.96 52.90 147.04 80.37 46.35 85.60 64.73 62.83

LAKSHMIPUR

PRODUCTIVITY PER ACRE= 645.85 TOTAL CROPPED AREA= 107935.00 TOTAL PRODUCTION= 1641904.00 TOTAL VALUE IN RUPEES= 50882720.00
PERCENT OF TOTAL CROPPED AREA:

27.52 0.42 0.03 66.22 0.07 1.11 0.86 0.19 2.78 0.76 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 45.93 88.99 95.96 91.37 148.10 91.86 46.35 119.84 73.80 75.39

RAIPUR

PRODUCTIVITY PER ACRE= 854.49 TOTAL CROPPED AREA= 51543.00 TOTAL PRODUCTION= 757592.50 TOTAL VALUE IN RUPEES= 27526832.00
PERCENT OF TOTAL CROPPED AREA:

23.72 0.90 1.06 62.18 0.09 0.10 1.95 0.10 5.70 0.17 0.03

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 80.39 81.37 103.64 72.13 148.10 80.37 77.26 136.96 82.24 62.83

BEGUMGONJ

PRODUCTIVITY PER ACRE= 917.68 TOTAL CROPPED AREA= 87944.00 TOTAL PRODUCTION= 1385472.00 TOTAL VALUE IN RUPEES= 48038480.00
PERCENT OF TOTAL CROPPED AREA:

22.76 3.24 13.93 51.93 0.03 0.09 0.63 0.03 6.92 0.45 0.0

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 114.84 76.28 95.96 52.90 105.78 68.89 46.35 94.16 80.13 0.0

SENBAG

PRODUCTIVITY PER ACRE= 764.23 TOTAL CROPPED AREA= 55055.00 TOTAL PRODUCTION= 685797.00 TOTAL VALUE IN RUPEES= 22481240.00
PERCENT OF TOTAL CROPPED AREA:

39.55 3.35 0.16 55.68 0.03 0.11 0.26 0.01 0.81 0.04 0.00

YIELD AS PERCENT OF NATIONAL AVERAGE:

94.37 103.35 76.28 103.64 72.13 111.07 57.41 46.35 85.60 63.26 50.26

RAMGONJ

PRODUCTIVITY PER ACRE= 899.46 TOTAL CROPPED AREA= 76717.00 TOTAL PRODUCTION= 1095995.00 TOTAL VALUE IN RUPEES= 40550560.00
PERCENT OF TOTAL CROPPED AREA:

33.95 2.67 6.72 52.40 0.05 0.03 0.08 0.22 3.68 0.20 0.0

YIELD AS PERCENT OF NATIONAL AVERAGE:

113.25 68.90 66.11 99.80 81.75 111.07 68.89 77.26 136.96 74.43 0.0

FENI

PRODUCTIVITY PER ACRE= 765.62 TOTAL CROPPED AREA= 121026.00 TOTAL PRODUCTION= 1409892.00 TOTAL VALUE IN RUPEES= 53072352.00
PERCENT OF TOTAL CROPPED AREA:

17.64 0.14 2.17 48.29 0.34 0.21 0.98 0.03 0.13 0.06 0.01

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 45.93 83.91 105.17 62.52 112.13 68.89 61.81 102.72 63.26 62.83

SONAGAZI

PRODUCTIVITY PER ACRE= 656.82 TOTAL CROPPED AREA= 57840.00 TOTAL PRODUCTION= 663654.69 TOTAL VALUE IN RUPEES= 25327080.00
PERCENT OF TOTAL CROPPED AREA:

40.66 0.15 1.06 56.89 0.03 0.04 1.01 0.04 0.04 0.07 0.00

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 45.93 101.71 99.80 62.52 116.36 74.64 77.26 93.30 75.91 62.83

CHHAGALNAIYA

PRODUCTIVITY PER ACRE=1142.05 TOTAL CROPPED AREA= 61877.00 TOTAL PRODUCTION= 1302835.00 TOTAL VALUE IN RUPEES= 36805600.00
PERCENT OF TOTAL CROPPED AREA:

31.27 4.31 12.11 48.80 0.05 1.29 0.31 0.23 0.02 1.60 0.01

YIELD AS PERCENT OF NATIONAL AVERAGE:

89.66 54.55 88.99 95.96 81.75 136.46 74.63 61.81 85.60 74.22 62.83

PARSHURAM

PRODUCTIVITY PER ACRE= 906.79 TOTAL CROPPED AREA= 46027.00 TOTAL PRODUCTION= 1225637.00 TOTAL VALUE IN RUPEES= 25142624.00
PERCENT OF TOTAL CROPPED AREA:

38.02 1.40 3.74 49.25 0.03 2.72 1.08 0.05 0.0 3.69 0.01

YIELD AS PERCENT OF NATIONAL AVERAGE:

75.50 45.93 86.45 99.80 81.75 137.52 80.37 77.26 0.0 69.56 75.39

DOUBLEMOORING

PRODUCTIVITY PER ACRE= 914.95 TOTAL CROPPED AREA= 5004.00 TOTAL PRODUCTION= 111528.94 TOTAL VALUE IN RUPEES= 3783799.00
PERCENT OF TOTAL CROPPED AREA:

38.77 0.10 5.20 51.96 0.0 3.50 0.32 0.0 0.0 0.12 0.04

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 114.84 81.37 134.34 0.0 185.12 80.37 0.0 0.0 105.43 62.83

PANCHLAISH

PRODUCTIVITY PER ACRE=1321.68 TOTAL CROPPED AREA= 9839.00 TOTAL PRODUCTION= 208632.94 TOTAL VALUE IN RUPEES= 7604667.00
PERCENT OF TOTAL CROPPED AREA:

35.47 7.72 15.25 39.68 0.0 1.63 0.15 0.0 0.0 0.10 0.0

YIELD AS PERCENT OF NATIONAL AVERAGE:

117.02 126.32 81.37 138.18 67.32 169.26 126.30 0.0 0.0 97.00 0.0

RATHAZARI

PRODUCTIVITY PER ACRE=1369.17 TOTAL CROPPED AREA= 55886.00 TOTAL PRODUCTION= 1086664.00 TOTAL VALUE IN RUPEES= 40918448.00
PERCENT OF TOTAL CROPPED AREA:

37.40 12.92 6.10 42.94 0.03 0.27 0.08 0.06 0.0 0.12 0.09

YIELD AS PERCENT OF NATIONAL AVERAGE:

136.84 126.32 81.37 145.86 0.0 158.68 63.15 77.26 0.0 118.06 87.96

SANDWIP

PRODUCTIVITY PER ACRE= 861.27 TOTAL CROPPED AREA= 115775.00 TOTAL PRODUCTION= 1971491.00 TOTAL VALUE IN RUPEES= 74412912.00
PERCENT OF TOTAL CROPPED AREA:

20.56 0.0 0.0 78.17 0.0 0.13 0.40 0.11 0.46 0.17 0.0

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 0.0 0.0 134.34 0.0 163.97 103.34 61.81 21.40 68.53 0.0

SITAKUNDU

PRODUCTIVITY PER ACRE=1078.20 TOTAL CROPPED AREA= 71674.00 TOTAL PRODUCTION= 2303508.00 TOTAL VALUE IN RUPEES= 45222096.00
PERCENT OF TOTAL CROPPED AREA:

37.67 0.92 2.63 54.81 0.03 0.23 0.70 0.17 0.04 2.79 0.01

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 103.35 81.37 145.86 105.79 174.54 103.34 92.71 11.98 118.06 62.83

MIRSARAI

PRODUCTIVITY PER ACRE=1041.47 TOTAL CROPPED AREA= 38776.00 TOTAL PRODUCTION= 853022.88 TOTAL VALUE IN RUPEES= 27266464.00
PERCENT OF TOTAL CROPPED AREA:

31.20 0.12 0.17 66.51 0.04 0.41 0.77 0.04 0.01 0.71 0.02

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 97.61 82.89 153.54 115.41 169.26 86.12 46.35 142.95 120.15 100.52
FATIKCHHARI

PRODUCTIVITY PER ACRE= 853.54 TOTAL CROPPED AREA= 70291.00 TOTAL PRODUCTION= 2178397.00 TOTAL VALUE IN RUPEES= 48384180.00
PERCENT OF TOTAL CROPPED AREA:

25.75 14.87 3.57 52.16 0.02 0.22 0.60 0.28 0.07 2.39 0.07

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 97.61 88.99 135.80 0.0 163.97 164.19 77.26 11.13 126.52 125.65
RAOJAN

PRODUCTIVITY PER ACRE=1113.19 TOTAL CROPPED AREA= 49266.00 TOTAL PRODUCTION= 1007091.50 TOTAL VALUE IN RUPEES= 36961584.00
PERCENT OF TOTAL CROPPED AREA:

25.88 6.41 16.42 50.45 0.0 0.31 0.08 0.05 0.0 0.31 0.07

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 103.35 71.19 145.86 0.0 163.97 122.86 92.71 0.0 94.85 87.96
RANGUNIA

PRODUCTIVITY PER ACRE=1003.67 TOTAL CROPPED AREA= 59717.00 TOTAL PRODUCTION= 1187563.00 TOTAL VALUE IN RUPEES= 45406208.00
PERCENT OF TOTAL CROPPED AREA:

14.23 2.15 26.07 56.94 0.0 0.25 0.08 0.16 0.0 0.08 0.05

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 120.58 76.28 122.83 0.0 158.68 91.86 92.71 0.0 100.16 100.52
ANWARA

PRODUCTIVITY PER ACRE= 830.93 TOTAL CROPPED AREA= 38729.00 TOTAL PRODUCTION= 657377.94 TOTAL VALUE IN RUPEES= 27042800.00
PERCENT OF TOTAL CROPPED AREA:

34.73 7.84 9.96 46.99 0.0 0.28 0.17 0.00 0.0 0.01 0.01

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 103.35 88.99 138.18 0.0 116.36 91.86 77.26 0.0 84.34 87.96
BANSKHALI

PRODUCTIVITY PER ACRE= 787.23 TOTAL CROPPED AREA= 69774.00 TOTAL PRODUCTION= 1143367.00 TOTAL VALUE IN RUPEES= 43593856.00
PERCENT OF TOTAL CROPPED AREA:

39.99 9.72 2.46 47.38 0.0 0.21 0.01 0.02 0.0 0.09 0.13

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 103.35 76.28 134.34 0.0 158.68 68.89 92.71 0.0 84.34 100.52
BOALKHALI

PRODUCTIVITY PER ACRE=1072.92 TOTAL CROPPED AREA= 21474.00 TOTAL PRODUCTION= 449675.94 TOTAL VALUE IN RUPEES= 17066656.00
PERCENT OF TOTAL CROPPED AREA:

22.45 9.17 18.63 48.43 0.0 0.70 0.33 0.0 0.0 0.07 0.23

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 114.84 78.82 145.86 76.94 158.68 91.86 0.0 0.0 84.34 87.96
PATIYA

PRODUCTIVITY PER ACRE=1221.90 TOTAL CROPPED AREA= 90091.00 TOTAL PRODUCTION= 1736927.00 TOTAL VALUE IN RUPEES= 66314752.00
PERCENT OF TOTAL CROPPED AREA:

35.69 11.08 9.92 41.95 0.01 0.18 0.56 0.38 0.0 0.09 0.16

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 114.84 83.91 157.38 0.0 169.26 91.86 92.71 0.0 105.43 138.22
SATKANIA

PRODUCTIVITY PER ACRE= 814.16 TOTAL CROPPED AREA= 85454.00 TOTAL PRODUCTION= 1932869.00 TOTAL VALUE IN RUPEES= 55058736.00
PERCENT OF TOTAL CROPPED AREA:

30.07 11.41 5.98 50.44 0.0 0.20 0.13 0.04 0.0 1.17 0.56

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 103.35 82.64 122.83 0.0 185.12 111.34 46.35 0.0 115.97 100.52
COXS BAZAR

PRODUCTIVITY PER ACRE= 879.23 TOTAL CROPPED AREA= 27199.00 TOTAL PRODUCTION= 581942.94 TOTAL VALUE IN RUPEES= 20260160.00
PERCENT OF TOTAL CROPPED AREA:

16.91 7.24 19.71 54.05 0.0 0.40 0.03 0.0 0.0 0.55 1.10

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 103.35 86.45 115.15 0.0 116.36 80.37 0.0 0.0 101.21 125.65
CHAKARIA

PRODUCTIVITY PER ACRE= 828.96 TOTAL CROPPED AREA= 73948.00 TOTAL PRODUCTION= 1262852.00 TOTAL VALUE IN RUPEES= 47050330.00
PERCENT OF TOTAL CROPPED AREA:

11.49 0.81 4.01 82.02 0.0 0.20 0.23 0.10 0.0 0.12 1.02

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 114.84 81.37 122.83 0.0 158.68 103.34 77.26 0.0 122.30 113.09
KUTUBDIA

PRODUCTIVITY PER ACRE= 692.95 TOTAL CROPPED AREA= 19675.00 TOTAL PRODUCTION= 250719.94 TOTAL VALUE IN RUPEES= 5800507.00
PERCENT OF TOTAL CROPPED AREA:

38.88 0.0 0.0 60.99 0.0 0.13 0.0 0.0 0.0 0.0 0.0

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 57.42 71.19 99.80 0.0 26.45 0.0 0.0 0.0 0.0 0.0
RAMU

PRODUCTIVITY PER ACRE=1019.29 TOTAL CROPPED AREA= 27679.00 TOTAL PRODUCTION= 699567.94 TOTAL VALUE IN RUPEES= 21054410.00
PERCENT OF TOTAL CROPPED AREA:

7.59 8.62 16.55 64.34 0.0 0.47 0.14 0.13 0.03 1.05 1.08

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 114.84 91.54 115.15 0.0 137.52 103.34 123.61 34.24 126.52 100.52
MOISHKHALI

PRODUCTIVITY PER ACRE= 931.03 TOTAL CROPPED AREA= 32502.00 TOTAL PRODUCTION= 559594.88 TOTAL VALUE IN RUPEES= 21161072.00
PERCENT OF TOTAL CROPPED AREA:

17.54 2.87 23.84 55.07 0.0 0.38 0.0 0.0 0.08 0.08 0.14

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 109.09 71.19 95.96 0.0 132.23 0.0 0.0 20.54 126.52 100.52
TEKNAAF

PRODUCTIVITY PER ACRE= 550.72 TOTAL CROPPED AREA= 19403.00 TOTAL PRODUCTION= 273674.94 TOTAL VALUE IN RUPEES= 10476190.00
PERCENT OF TOTAL CROPPED AREA:

5.67 0.38 2.02 89.49 0.0 0.67 0.10 1.03 0.0 0.03 0.62

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 68.90 81.37 99.80 0.0 137.52 160.75 92.71 0.0 63.26 87.96
UKHIYA

PRODUCTIVITY PER ACRE= 892.55 TOTAL CROPPED AREA= 17272.00 TOTAL PRODUCTION= 464281.44 TOTAL VALUE IN RUPEES= 12432317.00
PERCENT OF TOTAL CROPPED AREA:

6.66 5.79 14.76 69.17 0.0 0.72 0.43 0.32 0.0 1.55 0.55

YIELD AS PERCENT OF NATIONAL AVERAGE:

116.08 109.09 86.45 111.31 0.0 132.23 91.86 61.81 0.0 118.06 100.52
RANGAMATI

PRODUCTIVITY PER ACRE= 959.92 TOTAL CROPPED AREA= 13006.00 TOTAL PRODUCTION= 231047.06 TOTAL VALUE IN RUPEES= 6610129.00
PERCENT OF TOTAL CROPPED AREA:

41.61 24.70 4.35 26.37 0.0 1.50 0.06 0.72 0.41 0.08 0.19

YIELD AS PERCENT OF NATIONAL AVERAGE:

124.57 114.84 73.74 122.83 0.0 95.21 80.37 108.16 52.21 110.70 109.32

CHANDRAGHONA

PRODUCTIVITY PER ACRE=1209.77 TOTAL CROPPED AREA= 29137.00 TOTAL PRODUCTION= 576616.00 TOTAL VALUE IN RUPEES= 19802810.00
PERCENT OF TOTAL CROPPED AREA:

66.24 3.81 3.57 23.06 0.0 0.63 0.03 1.81 0.0 0.57 0.28

YIELD AS PERCENT OF NATIONAL AVERAGE:

151.00 120.58 122.05 115.15 0.0 105.78 103.34 108.16 0.0 90.88 62.83

SUBALONG

PRODUCTIVITY PER ACRE= 978.14 TOTAL CROPPED AREA= 9553.00 TOTAL PRODUCTION= 151970.00 TOTAL VALUE IN RUPEES= 5657691.00
PERCENT OF TOTAL CROPPED AREA:

79.66 11.09 2.21 5.65 0.02 0.31 0.0 0.89 0.05 0.12 0.0

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 109.09 99.16 107.48 96.18 89.92 0.0 139.06 42.80 118.06 0.0

BAGHAICHHARI

PRODUCTIVITY PER ACRE=2008.69 TOTAL CROPPED AREA= 13625.00 TOTAL PRODUCTION= 357758.94 TOTAL VALUE IN RUPEES= 12056539.00
PERCENT OF TOTAL CROPPED AREA:

32.81 24.68 18.44 19.43 0.01 2.24 0.19 1.14 0.59 0.46 0.0

YIELD AS PERCENT OF NATIONAL AVERAGE:

122.69 126.32 96.62 138.18 96.18 158.68 91.86 108.16 112.13 111.76 0.0

LANGADU

PRODUCTIVITY PER ACRE=1501.94 TOTAL CROPPED AREA= 4743.00 TOTAL PRODUCTION= 105538.00 TOTAL VALUE IN RUPEES= 4047571.00
PERCENT OF TOTAL CROPPED AREA:

27.41 51.19 16.34 2.70 0.0 1.16 0.0 0.74 0.17 0.02 0.27

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 114.84 99.16 130.51 0.0 104.74 0.0 139.06 107.00 84.34 113.09

RAMGARH

PRODUCTIVITY PER ACRE=1467.67 TOTAL CROPPED AREA= 20975.00 TOTAL PRODUCTION= 405758.56 TOTAL VALUE IN RUPEES= 15016788.00
PERCENT OF TOTAL CROPPED AREA:

14.78 7.20 1.84 59.88 0.0 0.26 0.42 14.56 0.11 0.31 0.62

YIELD AS PERCENT OF NATIONAL AVERAGE:

188.75 126.32 94.08 138.18 0.0 105.78 137.79 139.06 29.10 111.76 150.78

KHAGRACHHARI

PRODUCTIVITY PER ACRE=1306.73 TOTAL CROPPED AREA= 29313.00 TOTAL PRODUCTION= 642034.38 TOTAL VALUE IN RUPEES= 20017568.00
PERCENT OF TOTAL CROPPED AREA:

21.80 25.50 7.08 36.31 0.0 0.55 0.29 7.38 0.31 0.78 0.0

YIELD AS PERCENT OF NATIONAL AVERAGE:

132.12 114.84 96.62 122.83 0.0 84.63 80.37 139.06 80.46 110.70 0.0

DIGHINALA

PRODUCTIVITY PER ACRE=1476.48 TOTAL CROPPED AREA= 17155.00 TOTAL PRODUCTION= 378778.19 TOTAL VALUE IN RUPEES= 14229802.00
PERCENT OF TOTAL CROPPED AREA:

35.08 11.45 6.49 42.12 0.0 0.24 0.10 3.50 0.29 0.30 0.43

YIELD AS PERCENT OF NATIONAL AVERAGE:

217.06 120.58 94.08 138.18 0.0 105.78 80.37 123.61 49.65 73.80 100.52

RUMA

PRODUCTIVITY PER ACRE=1198.07 TOTAL CROPPED AREA= 27605.00 TOTAL PRODUCTION= 493070.00 TOTAL VALUE IN RUPEES= 18873640.00
PERCENT OF TOTAL CROPPED AREA:

83.32 0.0 0.0 14.53 0.0 0.25 0.0 0.71 0.0 0.47 0.72

YIELD AS PERCENT OF NATIONAL AVERAGE:

	169.87	0.0	0.0	0.0	0.0	121.65	0.0	92.71	0.0	110.70	100.52
LAMA											
PRODUCTIVITY PER ACRE= 965.83 TOTAL CROPPED AREA= 22641.00 TOTAL PRODUCTION= 422824.88 TOTAL VALUE IN RUPEES= 1341500.00											
PERCENT OF TOTAL CROPPED AREA:											
	71.82	5.63	4.45	11.35	0.00	1.17	0.46	3.58	0.01	0.66	0.97
YIELD AS PERCENT OF NATIONAL AVERAGE:											
	141.56	126.32	94.08	0.0	96.18	84.63	103.34	123.61	64.20	118.08	101.78
NAKHYONGCHARI											
PRODUCTIVITY PER ACRE= 786.90 TOTAL CROPPED AREA= 6202.00 TOTAL PRODUCTION= 143429.00 TOTAL VALUE IN RUPEES= 5042333.00											
PERCENT OF TOTAL CROPPED AREA:											
	10.61	3.88	4.44	76.20	0.0	0.49	0.0	3.29	0.0	0.45	0.61
YIELD AS PERCENT OF NATIONAL AVERAGE:											
	151.00	109.09	96.62	107.48	0.0	95.21	0.0	123.61	0.0	84.34	94.24
BANDARBAN											
PRODUCTIVITY PER ACRE=1157.45 TOTAL CROPPED AREA= 45508.00 TOTAL PRODUCTION= 745778.19 TOTAL VALUE IN RUPEES= 27669424.00											
PERCENT OF TOTAL CROPPED AREA:											
	59.75	2.31	1.22	32.08	0.0	1.34	0.04	2.37	0.0	0.08	0.81
YIELD AS PERCENT OF NATIONAL AVERAGE:											
	132.12	109.09	91.54	122.83	0.0	105.78	88.41	108.16	0.0	111.76	94.24
BANGLADESH				29079616.000							

Appendix-B

Monthly Average Wholesale Prices of Selected Crops in Bangladesh (1969-70)

(In Rupees)

Month	Rice[1]	Wheat[2]	Jute	Sugar-cane[3]	Rape & Mustard	Tobacco	Potato	Pulses[4]
July	40.19	23.00	28.69	3.00	47.44	138.75	28.75	21.48
August	40.65	23.00	29.03	3.00	50.00	139.00	32.92	22.66
September	43.62	23.00	28.35	3.00	54.76	135.00	32.32	25.76
October	43.61	23.00	28.71	3.00	56.64	135.00	32.39	25.68
November	39.91	23.00	29.67	3.00	57.05	135.00	32.05	25.65
December	34.05	23.00	30.35	3.00	56.04	134.38	27.12	25.46
January	34.98	23.00	30.01	3.00	47.42	129.50	13.96	25.23
February	35.69	23.00	31.10	3.00	45.33	127.50	11.28	24.07
March	38.60	23.00	32.67	3.00	49.41	116.50	11.69	21.55
April	40.27	23.00	34.16	3.00	49.44	114.63	14.55	21.60
May	-	23.00	35.05	3.00	-	112.50	-	-
June	-	23.00	33.16	3.00	-	-	-	-
Annual Average	39.16	23.00	30.91	3.00	51.35	128.90	23.67	23.91

1. Average wholesale price of four selected rice(coarse).
2. Wheat monthly price was not available, estimated from weekly open market prices of different market places.
3. Price of sugar-cane at factory gate fixed by the Government.
4. Masur (pulses) prices are considered here.

\- Not available

Sources: Wholesale Price Series of Important Farm Products in East Pakistan; Agricultural Marketing Directorate, Dept. of Agr., Govt. of E. Pak., and Bangladesh Agriculture in Statistics; Ministry of Agriculture, Govt. of Bangladesh.

APPENDIX - C

Cropping Intensity Index for 411 thanas of Bangladesh (1969-70)

The ratio of gross cropped area to net cropped area

APPENDIX - D

Percent production of selected crops by value

THANA	AUS	BORO	T.AMN BORO	A.AMN	WHEAT	POTATO	PULSES	MUSTARD	JUTE	SUGARCANE	TOBACCO
KOTWALI	17.62	0.01	0.18	53.88	0.29	15.57	0.89	2.92	2.13	4.14	2.58
BIROL	25.45	0.44	0.42	56.48	0.12	0.01	0.33	3.16	0.70	0.77	0.10
BOCHAGONJ	17.28	0.06	0.36	34.59	0.01	1.12	0.16	1.55	0.37	44.49	0.01
KAHAROLE	12.69	0.04	0.01	67.08	0.04	1.70	0.48	1.04	1.39	14.76	0.17
BIRGONJ	17.34	0.47	1.04	46.71	0.88	3.39	0.80	8.40	6.03	11.91	1.02
KHANSHAMA	24.66	0.01	0.13	61.57	0.19	4.01	0.44	2.90	4.04	1.10	0.35
CHIRIRBANDER	42.07	0.0	3.87	44.26	0.32	2.91	0.29	0.32	2.36	3.36	0.25
PARBATIPUR	24.38	0.05	1.23	52.72	0.27	11.32	0.17	0.85	0.87	8.05	0.08
PHULBARI	22.66	0.43	2.47	66.55	0.08	3.75	0.16	1.75	0.34	1.76	0.04
NAWABGONJ	20.73	2.29	2.04	49.10	0.06	1.35	0.92	6.83	0.89	15.59	0.22
HAKIMPUR	4.04	0.50	0.45	91.29	0.01	0.52	0.25	0.41	0.71	1.03	0.18
GHORAGHAT	17.48	0.13	0.97	69.65	0.03	3.08	0.11	3.25	0.83	4.34	0.13
THAKURGAON	47.14	0.07	0.89	29.90	0.36	6.79	0.10	2.03	2.61	9.71	0.40
PIRGONJ	27.40	0.07	1.91	35.54	0.11	2.27	0.38	2.62	3.46	26.11	0.13
HARIPUR	22.32	0.65	0.17	70.33	0.19	1.83	1.07	3.15	0.18	0.01	0.11
RANISANKAIL	24.93	0.16	0.70	66.88	0.59	0.89	0.18	3.61	0.43	1.56	0.07
BALIADANGI	25.47	0.0	0.05	60.98	0.76	1.63	0.06	1.86	1.37	7.49	0.33
ATWARI	12.48	0.06	1.16	71.25	0.67	2.26	0.07	0.85	5.21	5.93	0.06
TETULIA	21.26	0.0	0.0	63.79	0.01	2.62	0.02	1.19	4.61	6.15	0.35
PANCHAGARH	13.19	0.01	0.20	76.75	0.01	3.80	0.13	0.80	0.30	4.53	0.28
BODA	21.54	0.0	0.00	52.04	0.02	13.34	0.31	1.46	4.27	6.79	0.24
DEBIGONJ	27.76	0.24	0.23	61.07	0.07	4.38	0.28	1.33	2.15	0.83	1.66
KOTWALI	21.15	0.81	2.33	46.91	0.17	12.73	0.27	6.18	6.89	0.91	1.66
KAWNIA	23.69	0.63	1.56	44.34	0.25	2.85	0.19	1.57	2.64	1.20	21.09
GANGACHARA	27.58	0.30	1.26	58.53	0.11	4.30	0.20	1.28	5.44	0.50	0.49
MITHAPUKUR	25.95	0.21	2.26	48.15	0.26	6.37	0.94	3.05	7.33	5.36	0.13
PIRGONJ	18.65	1.59	1.25	56.18	0.05	8.76	0.45	1.56	4.06	6.90	0.34
PIRGACHA	31.97	2.39	1.76	46.67	0.13	2.38	0.50	1.73	7.19	2.39	2.89
BADARGONJ	14.23	0.85	0.04	32.83	0.12	3.65	0.25	1.40	2.79	8.72	35.12
KALIGONJ	33.43	2.15	0.75	50.98	0.06	4.95	0.05	0.52	2.56	1.05	3.50
HATIBANDA	33.66	0.19	0.59	38.37	0.28	4.22	0.16	2.26	2.49	0.11	17.66
PATGRAM	7.08	0.16	0.04	19.40	0.10	1.31	0.11	1.17	0.54	0.01	70.09
GAIBANDHA	33.52	1.14	3.82	48.30	0.12	1.53	0.15	0.28	9.69	1.10	0.35
PALASHBARI	30.82	0.86	1.10	36.93	0.21	3.74	0.48	1.06	10.85	13.69	0.25
GABINDAGONJ	23.85	2.41	3.37	40.49	0.10	4.66	0.36	0.27	8.28	10.09	0.13
SHAGHATA	20.56	7.68	9.05	45.67	0.10	4.49	1.04	0.26	9.61	1.36	0.19
SUNDARGONJ	33.33	0.60	0.44	51.80	0.10	2.50	0.35	0.42	8.92	1.28	0.26

SADULLAPUR	33.42	0.64	2.34	48.80	0.22	2.48	0.11	0.45	8.35	2.88	0.61
FULCHARI	29.91	0.63	1.14	45.66	0.04	1.39	1.46	1.00	16.50	1.00	0.68
KURIGRAM	33.39	1.09	2.98	46.80	0.28	4.53	0.29	0.37	8.10	0.03	0.25
ULIPUR	33.69	0.45	0.13	48.24	0.63	2.75	0.62	2.26	10.67	0.03	0.53
CHILMARI	34.38	2.16	0.47	44.41	0.34	1.88	0.97	1.05	12.53	0.71	1.10
RAUMARI	40.74	1.85	0.26	28.95	2.90	0.52	4.13	5.77	13.15	1.04	0.47
BHURUNGAMARI	27.98	8.15	10.02	39.14	0.19	0.85	0.31	1.75	10.81	0.02	0.79
NAGESHWARI	38.01	1.77	1.29	50.70	0.91	0.45	0.20	2.06	4.33	0.06	0.22
LALMONIRHAT	27.65	1.40	2.74	37.08	0.69	0.69	0.52	2.27	7.84	13.04	0.09
FULBARI	34.71	0.65	0.83	52.37	0.12	1.01	0.17	1.45	6.69	1.52	0.49
NILPHAMARI	28.10	0.21	0.48	46.18	0.15	0.97	0.11	0.49	8.51	0.49	14.30
SAIDPUR	17.86	0.0	3.01	63.00	0.12	3.15	0.14	2.61	6.01	0.92	3.18
DIMLA	20.48	0.11	0.48	61.85	0.10	3.04	0.09	1.61	7.56	0.83	3.84
DOMAR	28.67	0.01	0.07	59.75	0.19	1.32	0.11	0.47	2.82	3.42	3.17
JALDHAKA	25.05	0.37	1.19	56.62	0.09	1.40	0.07	0.69	5.47	0.18	8.88
KISHORGONJ	30.36	0.11	0.89	48.25	0.13	0.75	0.10	0.55	4.19	1.29	13.38
PANCHBIBI	11.93	0.10	0.35	58.04	0.21	1.12	0.38	1.38	2.58	23.82	0.07
JOYPURHAT	11.80	0.11	0.50	40.40	0.16	20.02	1.96	1.66	8.64	14.56	0.17
KHETLAL	11.84	0.24	0.44	69.13	0.03	15.32	0.02	0.35	1.24	1.31	0.08
ADAMDIGHI	14.45	2.79	1.51	63.58	0.14	9.69	0.18	0.21	1.15	6.21	0.10
DUBCHANCHIA	13.35	0.39	3.40	72.05	0.02	7.87	0.05	0.13	2.33	0.35	0.04
KAHALU	10.93	0.15	2.68	80.29	0.01	2.07	0.08	0.11	1.16	2.40	0.12
BOGRA	16.52	3.03	2.81	48.68	0.52	18.73	0.41	1.62	4.83	2.61	0.23
GAIBALI	24.70	2.94	6.02	45.89	0.27	3.63	2.14	1.45	9.36	3.48	0.12
SHIBGONJ	21.78	0.43	2.73	45.89	0.51	11.44	0.65	2.13	4.16	10.23	0.04
SARIAKANDI	22.54	5.72	2.56	52.46	1.61	0.88	1.93	2.14	9.54	0.48	0.14
SHERPUR	21.60	8.11	2.77	62.77	0.07	1.77	0.27	1.05	1.37	0.16	0.06
DHUNOT	36.75	17.11	1.55	28.96	0.29	2.51	1.56	0.82	8.76	1.56	0.14
NANDIGRAM	8.22	0.70	1.25	87.11	0.0	2.21	0.0	0.31	0.19	0.0	0.0
BOALIA	84.15	1.68	0.0	0.0	0.15	6.36	1.70	5.52	0.44	0.0	0.0
PABA	13.31	1.43	0.0	19.60	4.16	1.32	2.45	1.03	0.65	56.01	0.04
TANORE	10.50	2.76	0.61	85.23	0.46	0.19	0.10	0.06	0.05	0.0	0.03
MOHANPUR	14.86	9.89	2.42	55.36	1.46	7.07	3.19	2.06	2.03	1.43	0.02
GAGMARA	18.87	5.63	0.81	37.31	1.53	25.08	1.86	1.81	7.03	0.0	0.07
DURGAPUR	36.62	3.44	0.55	42.65	1.63	3.55	2.13	4.98	2.08	2.09	0.29
PUTHIA	29.62	1.04	0.49	27.95	1.35	1.80	1.42	0.52	2.25	33.43	0.12
GODAGARI	52.96	2.58	0.0	37.09	0.34	0.43	0.97	2.39	0.22	2.93	0.07
CHARGHAT	22.33	0.66	0.3	31.76	1.80	2.04	1.09	0.31	1.94	38.02	0.05
NAWABGANJ	38.50	2.74	0.46	35.97	1.66	0.90	7.11	7.15	2.69	2.47	0.34
BHOLAHAT	18.35	23.76	23.46	25.76	0.19	0.45	3.52	4.32	0.07	0.0	0.12

NACHOLE	8.30	2.32	0.58	82.17	0.29	0.37	0.99	4.64	0.05	0.05	0.24
SHIBGONJ	24.10	1.41	0.26	58.39	0.71	0.30	1.57	0.80	0.93	11.51	0.01
GOMASTAPUR	16.86	8.16	0.0	67.49	0.10	0.38	2.17	3.98	0.09	0.13	0.64
PORSHA	8.20	6.34	3.43	79.85	0.06	0.35	0.11	1.21	0.04	0.04	0.37
NAOGAON	17.32	36.46	0.0	32.92	0.05	7.61	0.20	1.11	2.22	1.92	0.18
BADALGACHI	14.96	1.55	0.0	49.27	1.23	8.48	1.25	1.44	2.91	18.53	0.37
NIAMATPUR	13.10	2.97	0.0	82.19	0.01	0.0	0.07	1.58	0.03	0.0	0.05
MANDA	8.73	7.39	7.04	60.80	2.50	1.85	0.97	1.64	2.45	6.28	0.15
MAHADEVPUR	11.29	1.98	0.81	70.13	0.55	0.38	0.72	2.23	5.52	6.25	0.12
ATRAI	7.01	7.47	0.0	70.02	4.52	6.62	0.88	1.03	0.89	0.0	1.57
RANINAGAR	7.05	7.43	6.70	70.69	0.64	3.53	1.33	0.76	0.63	0.04	1.20
DAMOIRHAT	13.09	2.51	1.08	62.82	0.17	5.66	0.42	1.29	0.76	12.23	0.06
PATNITALA	8.68	0.90	0.75	79.11	0.15	4.84	0.70	0.97	0.24	3.63	0.03
NATORE	9.40	4.71	4.33	51.98	2.90	2.41	1.67	0.86	6.17	15.29	0.07
BAGATIPARA	9.30	2.59	0.20	14.89	1.19	0.38	2.01	0.40	4.26	64.72	0.07
LALPUR	26.42	1.50	0.0	20.17	0.53	0.08	3.22	0.22	2.74	45.10	0.02
BARAIGRAM	22.13	2.15	0.81	41.86	2.35	1.31	1.40	2.14	5.17	20.60	0.08
GURUDASPUR	16.57	2.94	0.44	67.65	2.55	0.53	2.29	1.65	3.83	1.35	0.20
SINGRA	6.39	2.67	0.76	86.71	0.65	0.35	0.78	0.30	1.28	0.09	0.03
PABNA	32.90	0.02	0.05	31.98	1.81	0.74	6.48	2.80	7.39	15.57	0.25
ATGHARIA	10.73	0.57	26.28	40.92	2.76	0.59	2.32	0.84	6.45	8.45	0.11
ISHURDI	44.12	0.22	0.06	21.47	2.21	2.32	3.38	1.57	4.31	20.20	0.14
CHATMOHAR	14.94	2.73	3.24	54.64	3.34	1.69	5.10	2.23	10.14	1.05	0.90
FARIDPUR	6.07	3.04	13.62	60.81	3.16	0.61	6.58	0.88	4.66	0.27	0.29
SUNTHIA	10.77	1.34	3.06	50.36	4.40	0.78	6.28	2.84	10.39	9.01	0.77
BERA	8.91	14.25	0.38	39.59	7.75	1.86	7.98	3.46	8.65	6.07	1.11
SUJANAGAR	21.20	5.03	0.10	35.85	5.11	0.41	5.30	2.30	12.08	12.42	0.19
SIRAJGONJ	35.84	0.07	0.0	44.62	1.26	1.66	1.97	1.37	6.93	5.93	0.36
KAZIPUR	30.17	1.29	0.07	41.72	1.82	1.26	0.73	2.14	14.79	5.74	0.28
RAIGONJ	25.57	0.65	2.45	49.74	0.81	1.32	2.18	1.49	11.82	3.54	0.43
TARASH	6.38	0.22	0.07	89.50	0.75	0.26	0.44	0.53	1.70	0.07	0.09
ULLAPARA	36.27	0.64	0.08	51.44	2.66	0.53	1.07	1.24	5.66	0.25	0.16
KAMARKHOND	38.14	0.47	0.03	23.77	1.95	2.06	2.49	2.23	24.36	4.35	0.15
BELKUCHI	37.62	0.67	0.0	39.04	2.47	4.47	2.89	0.42	11.93	0.18	0.30
CHOUHALI	30.09	0.88	0.0	47.89	2.49	1.35	1.48	1.96	13.40	0.24	0.22
SHAZADPUR	30.57	1.45	2.97	38.26	3.40	3.36	3.83	2.73	12.57	0.03	0.83
KUSHTIA	37.93	0.62	0.64	26.77	4.93	0.57	4.89	1.28	4.18	17.51	0.68
KHOKSHA	41.00	0.0	0.72	19.20	2.53	0.17	3.19	3.30	11.01	16.76	0.12
KUMARKHALI	34.11	0.01	0.0	41.33	1.11	2.11	2.14	0.87	6.63	11.17	0.52
MIRPUR	35.76	0.10	0.08	17.83	5.11	0.53	4.75	1.23	6.01	27.93	0.68

BHERAMARA	35.87	0.01	0.02	11.90	1.83	1.41	12.77	5.86	1.09	28.13	1.11
DAULATPUR	62.08	0.79	0.36	5.73	2.13	3.22	4.39	1.41	4.87	14.30	0.73
CHUADANGA	41.82	0.12	1.18	21.45	1.87	0.67	5.84	2.92	2.57	21.52	0.05
ALAMDANGA	50.38	0.03	0.15	5.97	1.96	1.64	2.38	1.25	1.26	34.93	0.05
DAMURHUDA	43.05	0.61	1.44	19.22	1.70	0.14	3.80	4.22	4.27	21.08	0.47
JIBANNAGAR	28.91	0.30	1.14	23.67	1.55	0.78	3.71	1.99	5.89	31.98	0.08
MEHERPUR	42.97	0.90	1.46	26.20	2.87	0.34	7.17	1.83	11.48	4.70	0.09
GANGNI	36.71	0.22	0.56	27.97	2.38	0.80	5.38	2.10	4.94	18.75	0.19
KOTWALI	39.24	0.52	3.26	43.08	0.34	1.72	0.99	1.25	6.62	2.37	0.61
SHARSHA	25.87	0.40	13.43	41.14	0.26	3.16	5.43	3.30	2.58	3.88	0.55
JHIKARGACHHA	38.38	0.32	8.81	27.50	0.90	1.51	6.11	1.55	11.50	2.94	0.48
AVOYNAGAR	26.86	0.01	0.07	65.63	0.02	0.53	0.28	1.64	4.24	0.04	0.67
BAGHERPARA	36.98	0.34	3.18	50.41	0.12	0.48	1.33	3.77	2.16	0.70	0.53
MANIRAMPUR	33.63	0.08	1.76	54.03	0.15	0.68	0.55	0.76	8.03	0.88	0.26
KESHABPUR	42.39	0.15	1.23	43.91	0.12	0.79	1.52	2.50	0.64	0.22	0.52
JHENAIDAH	47.02	0.03	0.08	38.89	0.80	0.30	2.90	2.35	6.07	1.16	0.40
SHAILKUPA	27.94	0.13	2.81	48.16	1.38	0.57	0.41	0.84	6.13	11.19	0.42
HARINAKUNDA	42.33	0.14	0.0	32.61	0.94	0.29	1.15	0.83	5.64	15.31	0.76
KALIGONJ	44.65	0.04	0.39	36.63	0.14	0.33	1.32	0.07	3.95	11.96	0.52
COAT CHANDPUR	12.03	0.06	0.74	40.65	0.18	0.32	5.24	1.98	0.92	36.88	1.07
MAHESHPUR	41.00	0.07	3.83	49.35	0.17	0.33	0.59	2.79	0.82	0.78	0.37
MAGURA	37.88	0.31	3.14	44.29	0.29	0.12	0.77	0.94	8.48	3.40	0.38
SREERAMPUR	29.06	0.55	10.57	33.53	1.77	0.35	3.11	0.92	15.58	3.21	1.35
SHALIKA	45.26	0.71	2.97	39.54	0.29	0.30	0.37	3.73	5.64	0.42	0.76
MOHAMMADPUR	24.94	0.49	2.97	49.43	0.25	0.47	1.05	0.77	13.99	5.01	0.03
NARAIL	36.38	0.77	2.35	51.18	0.60	1.77	0.85	1.34	4.05	0.13	0.59
KALIA	15.41	8.81	3.01	54.01	0.41	0.65	2.61	2.94	10.18	1.19	0.77
LOHAGARA	28.72	0.50	1.02	45.39	0.56	0.44	2.19	4.29	14.43	1.56	0.70
KHULNA	11.92	3.92	0.0	70.55	0.20	6.09	1.11	1.88	3.30	0.77	0.26
BATIAGHATA	1.61	0.44	0.0	93.82	0.01	2.45	0.01	0.20	0.29	0.99	0.18
DAULATPUR	13.40	2.93	0.0	73.31	0.07	3.55	0.71	2.96	1.09	0.76	1.23
FULTALA	27.33	0.06	0.0	60.14	0.05	6.52	1.90	2.32	0.23	1.02	0.42
TEROKHADA	8.75	47.76	0.0	29.92	0.06	0.26	0.71	1.14	3.53	7.45	0.40
DUMURIA	30.87	2.74	0.0	37.31	0.07	11.59	1.07	6.76	8.06	0.77	0.76
DACOPE	0.15	0.0	0.0	97.65	0.00	1.76	0.0	0.14	0.11	0.04	0.14
PAIKGACHHA	1.50	0.0	0.0	96.02	0.00	0.50	0.15	0.44	0.60	0.53	0.25
BAGERHAT	3.46	19.55	0.0	68.80	0.03	5.87	0.15	0.27	0.86	0.81	0.21
FAKIRHAT	11.32	2.03	0.0	77.38	0.01	6.79	0.67	0.95	0.29	0.40	0.15
MOLLAHAT	29.62	30.76	0.0	26.47	0.01	2.59	0.51	0.65	5.15	1.90	2.33
KACHUA	1.82	4.97	0.0	86.61	0.01	2.71	0.02	0.15	0.46	2.56	0.68

SARANKHOLA	0.17	0.22	0.0	96.53	0.0	0.78	1.45	0.08	0.09	0.56	0.12
RAMPAL	0.09	0.05	0.0	97.91	0.00	0.43	0.02	0.10	0.31	0.47	0.01
MORRELGONJ	1.85	0.10	0.0	95.52	0.01	0.62	0.43	0.05	0.03	1.20	0.20
SATKHIRA	10.83	0.01	0.0	74.23	0.01	4.89	0.26	0.74	7.96	1.03	0.05
KALAROA	27.58	0.09	0.3	32.00	0.18	16.77	3.29	4.06	8.43	7.46	0.15
KALIGONJ	1.51	0.0	0.0	91.26	0.04	4.00	0.09	0.29	1.64	0.99	0.18
TALA	18.38	0.19	0.0	47.82	0.01	12.12	0.46	1.37	5.26	13.98	0.41
DEBHATA	1.26	0.0	0.0	86.63	0.07	9.96	0.15	0.65	0.99	0.24	0.06
ASSASUNI	0.50	0.08	0.0	97.39	0.01	1.21	0.05	0.20	0.26	0.18	0.12
SAYAMNAGAR	0.16	0.0	0.0	98.12	0.00	1.48	0.00	0.16	0.02	0.0	0.07
KOTWALI	26.21	2.66	9.07	55.10	0.01	0.73	0.87	0.24	1.48	2.93	0.70
JHALAKATHI	23.80	0.23	14.38	51.62	0.00	2.24	0.55	0.11	2.05	4.46	0.56
RAJAPUR	19.49	0.0	5.86	68.96	0.0	1.93	1.05	0.08	0.05	1.33	1.25
NALCHITY	14.24	1.83	7.28	70.77	0.00	1.00	1.30	0.29	0.19	2.19	0.91
BAKERGONJ	30.40	0.16	7.11	57.53	0.00	0.87	0.96	0.45	0.31	1.56	0.63
CHARAMADDI	24.76	0.32	5.51	57.89	0.01	0.10	1.59	0.06	7.98	0.77	1.00
GOURNADI	39.06	0.38	6.93	39.61	0.02	0.80	1.33	0.44	8.28	2.76	0.41
UJIRPUR	45.58	1.01	1.94	41.45	0.00	0.36	0.52	0.24	6.37	2.22	0.40
BABUGONJ	23.29	0.33	12.36	40.32	0.01	10.99	1.97	0.45	1.46	7.88	0.95
MULADI	22.61	0.54	2.54	61.30	0.01	0.45	0.97	0.14	3.39	7.51	0.55
HIZLA	44.65	3.60	1.72	44.30	0.00	0.33	0.43	0.08	2.52	1.90	0.46
MEHENDIGONJ	34.15	2.37	1.35	55.00	0.00	0.34	0.50	0.13	3.17	2.56	0.40
PIROJPUR	9.44	0.01	18.52	67.96	0.01	1.36	0.35	0.08	0.03	1.19	1.05
SWARUPKATHI	39.36	0.20	2.73	52.65	0.00	0.66	0.37	0.04	0.02	2.92	1.04
BANARIPARA	34.30	3.17	2.02	52.09	0.01	2.47	0.38	1.40	0.14	3.95	1.07
NAZIRPUR	40.07	1.91	4.47	45.84	0.01	1.82	0.67	0.13	2.33	1.74	1.02
BHANDARIA	14.25	0.11	8.69	72.30	0.01	0.91	0.27	0.12	0.03	2.04	1.27
KATHALIA	13.40	0.0	1.97	80.04	0.00	0.16	0.48	0.07	0.00	2.96	0.91
MATHBARIA	6.74	0.19	41.57	50.11	0.01	0.14	0.20	0.02	0.07	0.70	0.26
KOWKHALI	13.77	0.94	4.87	76.56	0.0	1.44	0.46	0.07	0.03	1.25	0.61
BHOLA	17.77	0.54	6.81	65.09	0.01	1.35	0.79	0.05	0.42	6.85	0.31
DAULATKHAN	39.64	0.0	5.97	46.95	0.00	0.29	0.87	0.07	0.24	5.81	0.17
BORHANUDDIN	33.23	0.17	8.96	54.60	0.01	0.38	0.55	0.03	0.06	1.72	0.29
TAJMUDDIN	15.23	0.0	0.80	80.76	0.00	0.41	1.03	0.05	0.10	1.48	0.14
LALMOHAN	58.05	0.36	1.44	36.03	0.00	1.89	0.47	0.05	0.05	1.28	0.37
CHARFESSION	12.45	0.27	0.36	86.14	0.00	0.10	0.36	0.01	0.0	0.24	0.07
PATUAKHALI	1.75	0.01	1.47	93.85	0.01	0.96	0.52	0.07	0.19	0.74	0.44
BAUPHAL	3.24	0.26	6.67	85.99	0.00	0.09	0.78	0.10	0.49	0.94	1.43
GALACHIPA	13.15	2.07	1.81	78.64	0.00	0.14	0.89	0.07	0.44	1.62	1.17
MIRZAGONJ	19.65	0.05	5.17	72.80	0.00	0.14	0.67	0.04	0.20	0.71	0.58

BARGUNA	13.44	0.0	19.09	64.48	0.01	0.21	0.38	0.08	0.05	1.57	0.70
AMTALI	6.28	0.15	10.67	80.63	0.00	0.07	0.41	0.07	0.01	1.20	0.29
BAMNA	2.69	0.24	14.63	76.22	0.00	0.73	3.22	0.09	0.38	0.19	1.60
PATHARGHATA	9.51	0.26	18.85	43.09	0.01	1.35	2.63	0.26	0.16	7.44	16.44
BETAGI	12.84	0.0	4.94	71.24	0.00	0.22	1.17	0.07	0.27	8.34	0.92
KHEPUPARA	0.46	0.0	4.12	93.95	0.0	0.11	0.50	0.08	0.05	0.06	0.66
KOTWALI	27.90	0.37	0.75	38.12	4.34	0.91	3.54	1.72	15.21	6.85	0.27
CHAR BHADRASHAN	42.35	0.93	0.0	38.59	0.44	0.82	2.60	0.66	4.70	7.36	1.54
SADARPUR	25.01	0.93	1.72	47.73	1.93	0.36	4.50	2.21	10.05	4.97	0.58
BHANGA	24.59	0.87	19.52	40.21	2.99	0.11	1.70	2.80	4.14	2.67	0.41
NAGARKANDA	34.01	1.60	6.24	45.06	1.65	0.06	1.01	0.97	8.72	0.32	0.35
ALFADANGA	21.93	1.12	1.19	51.12	1.96	0.91	4.30	4.29	8.05	2.76	2.36
BOALMARI	23.21	0.23	1.95	32.27	4.63	0.31	4.21	1.30	19.63	11.37	0.87
RAJBARI	28.96	0.26	1.22	40.74	4.18	2.12	2.85	1.03	6.68	10.79	1.18
GOALUNDAGHAT	35.74	16.47	0.0	18.53	6.67	0.52	7.67	3.44	5.72	4.87	0.37
PANGSHA	9.66	0.70	0.57	36.69	3.99	1.92	3.20	1.37	14.01	26.39	1.49
BALIAKANDI	36.10	0.00	0.28	15.92	3.57	2.18	2.18	1.74	26.44	11.07	0.52
MUKSUDPUR	30.55	0.52	5.96	49.59	0.76	0.02	1.02	1.26	8.95	0.64	0.72
GOPALGONJ	24.53	0.49	0.37	67.32	0.82	0.10	0.51	2.12	1.67	1.05	1.00
KOTWALIPARA	28.02	3.22	2.93	63.35	0.06	0.35	0.11	0.13	0.97	0.07	0.81
KASIANI	13.52	0.30	1.58	73.72	1.06	0.71	1.03	1.16	2.90	3.50	0.52
RAJOIR	22.13	0.05	8.25	44.23	1.48	0.04	1.78	0.95	12.21	8.50	0.36
KALKINI	25.18	0.06	6.63	44.18	0.10	0.13	1.35	0.81	5.01	16.40	0.14
GOSHAIRHAT	19.21	1.92	0.0	67.53	0.07	0.04	1.17	0.42	4.29	5.18	0.16
BHEDARGONJ	27.79	6.13	0.20	46.13	0.69	0.29	3.33	3.27	8.04	4.01	0.13
NARIA	42.08	2.37	0.62	32.02	1.01	0.30	3.51	1.78	10.66	5.28	0.36
JANJIRA	32.55	5.19	0.0	35.38	0.39	0.57	5.62	1.76	14.06	3.40	1.08
MADARIPUR	16.51	0.44	2.67	47.69	2.70	0.41	2.22	0.75	22.26	3.52	0.82
SHIBCHAR	26.86	0.34	0.55	51.77	0.86	0.55	4.75	4.34	7.61	1.45	0.93
PALONG	32.67	0.09	1.86	40.94	0.31	0.39	2.16	2.14	8.67	10.57	0.19
TEJGAON	1.91	17.61	63.00	11.50	0.14	2.22	0.42	0.88	1.80	0.16	0.36
KERANIGONJ	16.68	1.64	7.95	41.70	0.50	1.42	3.25	3.57	20.38	2.31	0.60
NAWABGONJ	16.47	13.96	1.80	45.09	0.32	1.55	3.66	2.95	12.21	1.35	0.63
DOHAR	23.10	3.39	0.98	40.24	0.61	0.41	3.22	4.06	20.60	3.09	0.30
SHEEPUR	29.94	2.85	7.52	50.99	0.08	0.06	0.03	1.35	1.58	5.51	0.08
KAPASIA	16.42	12.95	9.24	46.82	0.18	0.28	0.83	1.38	9.29	2.14	0.48
KALIGONJ	17.90	14.16	6.80	41.58	0.24	0.32	0.37	1.89	11.82	4.65	0.27
JOYDEBPUR	23.85	9.25	4.91	57.76	0.16	0.25	0.06	0.84	1.25	1.61	0.05
SAVAR	35.95	12.70	29.97	7.17	0.33	1.56	1.46	1.55	4.34	4.07	0.90
DHAMRAI	33.17	1.76	8.93	38.50	0.30	1.60	2.52	1.06	9.58	2.27	0.30

KALIAKAIR	8.86	11.01	13.78	51.37	0.49	3.29	1.37	2.19	9.54	0.87	0.23
MUNSHIGONJ	3.63	0.51	3.09	15.16	0.17	71.73	0.47	0.31	1.95	2.87	0.12
LOHAJANG	12.45	0.54	1.60	35.61	0.36	37.35	0.27	0.96	10.65	0.15	0.05
SRINAGAR	2.84	16.93	14.73	45.76	0.21	11.64	1.49	0.67	4.96	0.25	0.12
SIRAJDIKHAN	7.79	1.98	3.96	36.83	0.25	40.14	0.18	1.38	5.65	1.72	0.22
TONGIBARI	2.17	0.09	1.88	10.26	0.08	82.13	0.13	0.31	2.00	0.91	0.05
GAZARIA	14.15	10.87	3.93	25.92	0.63	2.06	0.85	28.54	10.92	1.71	0.43
MANIKGONJ	21.42	2.10	1.96	55.42	0.78	2.47	2.59	4.83	7.52	0.82	0.10
SATURIA	16.68	0.73	0.53	59.70	0.42	0.41	1.52	8.36	11.34	0.20	0.12
SINGAIR	39.70	0.55	0.46	44.54	0.27	1.04	5.15	2.13	2.75	2.91	0.50
HARIRAMPUR	13.24	3.66	0.26	74.43	0.33	1.77	1.10	1.45	3.23	0.04	0.48
SHIBALAYA	17.50	2.38	0.06	59.36	1.13	3.36	4.16	3.25	7.11	0.69	1.00
DAULATPUR	33.45	1.22	0.49	55.71	0.29	1.06	1.12	0.71	4.40	1.38	0.16
GHEOR	27.06	0.81	0.15	61.99	0.33	1.08	2.21	0.21	5.53	0.44	0.19
NARAYANGANJ	3.11	2.04	32.39	31.82	1.60	7.14	0.86	8.73	11.01	0.80	0.51
ARAIHAZAR	20.00	5.57	2.25	53.37	0.51	2.92	1.38	1.39	11.86	0.56	0.19
RUPGANJ	4.03	6.44	18.43	63.70	0.16	1.49	0.44	0.70	4.22	0.29	0.11
BAIDERBAZAAR	10.88	3.11	12.69	42.49	0.53	14.52	1.55	1.29	11.43	1.17	0.34
FATULLA	21.10	2.95	45.34	8.76	0.96	4.03	1.51	2.53	1.93	10.52	0.39
NARSHINGDI	13.83	8.90	6.40	54.41	0.52	2.12	0.73	0.91	9.31	2.37	0.51
RAIPURA	16.03	5.91	14.88	47.97	0.29	1.24	0.72	1.37	11.07	0.18	0.34
SHIBPUR	27.42	5.13	8.08	38.25	0.29	3.53	0.67	1.56	12.69	2.13	0.25
MONOHARDI	25.30	4.19	5.48	45.01	0.17	0.50	0.49	1.08	12.03	5.47	0.28
TANGAIL	26.44	1.69	2.55	34.92	0.68	3.16	1.92	3.12	19.20	6.08	0.23
BASAIL	16.20	9.96	7.81	54.95	0.03	1.15	1.23	1.04	6.61	0.85	0.17
GHATAIL	17.10	8.57	15.57	38.93	0.25	0.74	2.22	2.28	14.11	0.13	0.10
KALIHATI	20.95	4.27	15.58	45.67	0.17	0.58	1.68	0.81	9.80	0.08	0.40
NAGARPUR	28.96	0.35	1.22	45.92	0.91	1.23	3.47	1.82	14.50	1.08	0.54
MIRZAPUR	17.67	3.12	7.48	56.16	0.03	0.47	1.30	1.09	8.29	3.20	1.17
GOPALPUR	15.79	7.51	8.85	40.76	0.14	2.29	1.39	1.60	13.81	1.34	0.52
MADHUPUR	37.23	24.13	11.02	4.24	0.04	1.78	1.00	5.37	14.54	0.0	0.65
KOTWALI	31.25	8.67	1.55	43.13	0.03	1.41	2.63	0.86	9.14	1.06	0.28
MUKTAGACHA	24.88	6.65	0.18	52.40	0.03	1.51	0.35	0.90	12.83	0.17	0.11
FULBARIA	23.84	10.77	2.98	44.02	0.07	0.67	0.65	1.01	11.37	4.16	0.46
TRISHAL	29.32	8.70	3.34	44.93	0.03	1.99	0.43	1.22	9.38	0.40	0.26
DHALUKA	17.28	21.49	11.22	34.52	0.01	0.40	0.44	1.92	12.50	0.12	0.12
GAFFARGAON	17.64	12.75	16.41	34.29	0.01	3.96	0.91	0.53	11.66	1.49	0.34
NANDAIL	26.59	13.16	2.91	41.74	0.07	1.91	1.79	0.77	9.14	1.71	0.20
ISHWARGONJ	17.10	7.29	0.37	55.51	0.05	6.23	0.53	0.68	8.88	1.99	1.36
GOURIPUR	16.92	5.91	0.39	59.88	0.02	3.42	0.15	0.38	10.78	1.47	0.70

PHULPUR	22.59	4.95	4.16	56.72	0.04	2.30	0.45	1.41	5.84	0.78	0.76
HALUAGHAT	19.04	10.86	8.31	55.06	0.01	1.20	0.25	0.41	3.96	0.24	0.15
JAMALPUR	21.77	5.74	4.44	44.91	0.09	1.79	0.76	0.24	15.75	4.02	0.48
ISLAMPUR	22.06	5.68	4.39	22.98	0.08	1.29	0.92	0.72	16.98	24.47	0.44
SHERPUR	30.45	6.39	0.53	43.07	0.04	2.08	1.92	0.56	10.84	1.47	2.00
SREEBORDI	26.58	6.26	0.47	49.05	0.14	0.97	0.82	0.67	12.96	1.04	0.25
SARSHABARI	16.51	6.42	4.73	40.89	0.03	1.74	1.79	1.37	24.77	1.36	0.39
NALITABARI	21.57	13.18	2.45	59.60	0.01	1.09	0.08	1.56	0.19	0.14	0.14
NAKILA	28.99	9.90	0.78	40.07	0.02	4.10	0.44	1.39	6.96	0.57	0.77
NELANDAH	15.19	5.44	11.17	40.20	0.08	1.88	1.01	1.24	14.25	7.07	1.07
NADARGANJ	18.30	6.93	1.70	52.63	0.04	0.86	1.43	1.92	15.24	0.52	0.45
DEWANGANJ	26.90	1.94	0.32	39.34	1.32	1.90	4.18	3.03	3.98	16.63	0.47
KISHORGONJ	14.66	10.23	0.41	49.13	0.22	2.00	0.24	0.24	13.26	8.85	0.77
HUSSAINPUR	16.41	9.49	7.73	40.33	0.02	1.88	0.27	0.44	16.09	6.93	0.40
PAKUNDIA	22.09	7.59	3.12	35.66	0.08	7.35	0.69	0.22	7.47	15.27	0.47
KARIMGANJ	12.37	32.64	0.88	26.86	0.08	1.53	0.55	3.19	19.78	1.54	0.57
TARAIL	2.70	59.77	0.83	28.24	0.01	0.82	0.29	3.93	1.88	0.16	1.36
BAJITPUR	10.76	25.23	14.14	39.84	0.11	0.81	0.21	0.80	7.76	0.11	0.23
KULIARCHAR	7.50	16.42	26.96	37.38	0.22	3.56	0.47	1.04	4.87	1.09	0.48
KATHIADIA	11.98	16.84	4.67	55.48	0.18	4.97	0.23	0.46	4.46	0.41	0.33
AUSTAGRAM	0.24	54.40	33.16	8.35	0.02	0.53	0.05	0.29	2.26	0.01	0.70
BHAIRAB	9.22	17.81	18.24	33.31	0.10	4.88	0.41	6.41	8.38	0.0	1.24
NIKLI	0.79	80.23	9.03	4.73	0.02	0.56	0.12	1.34	2.86	0.0	0.33
ITNA	0.26	65.73	23.49	8.11	0.01	0.50	0.32	0.72	0.71	0.0	0.15
NETROKONA	13.62	14.56	14.47	42.70	0.00	1.60	0.22	1.98	9.52	0.02	1.31
PURBADHOLA	10.47	18.85	11.02	49.58	0.01	0.77	0.42	0.45	7.66	0.20	0.56
DURGAPUR	12.72	9.96	6.36	65.83	0.00	0.47	0.05	0.23	2.90	1.05	0.44
BERHATTA	9.83	27.12	1.67	51.65	0.0	0.55	0.28	2.32	6.36	0.0	0.23
MOHANGANJ	3.33	54.92	11.88	20.67	0.00	0.33	0.04	2.91	5.74	0.0	0.19
ATPARA	11.53	41.75	7.84	25.47	0.00	1.40	0.85	1.23	9.70	0.0	0.22
KENDUA	22.75	13.15	0.49	47.93	0.00	1.27	0.81	1.28	12.06	0.06	0.20
KALIAJURI	0.02	68.03	26.70	0.47	0.0	0.23	0.01	3.62	0.46	0.0	0.45
MADAN	6.01	48.55	14.35	22.64	0.0	0.72	0.41	1.85	5.13	0.0	0.34
KALMAKANDA	9.77	28.57	4.42	51.31	0.02	0.66	0.13	2.03	2.16	0.51	0.44
KOTWALI	14.78	24.65	0.90	56.28	0.0	3.16	0.01	0.04	0.0	0.0	0.17
GOWAINGHAT	5.34	7.69	1.56	81.70	0.01	1.55	0.09	1.51	0.04	0.01	0.48
BALAGANJ	7.64	31.71	2.08	52.60	0.01	1.07	0.00	0.67	1.93	0.0	0.28
TAJPUR	14.50	20.33	0.02	57.59	0.0	0.41	0.0	0.31	0.40	0.0	0.43
BISWANATH	24.01	15.75	1.23	53.83	0.0	4.34	0.02	0.17	0.01	0.0	0.65
FENCHUGANJ	3.70	49.51	2.62	28.02	0.0	14.25	0.04	0.80	0.34	0.00	0.71

GOPALGANJ	21.77	47.57	2.55	21.83	0.00	5.31	0.03	0.26	0.42	0.0	0.24
JAINTIAPUR	25.04	1.09	1.09	69.00	0.0	1.73	0.03	1.20	0.0	0.0	0.22
KANAIGHAT	12.23	1.89	0.39	79.89	0.0	5.41	0.01	0.07	0.0	0.0	0.11
ZAKIGANJ	24.92	8.24	0.47	64.39	0.0	1.55	0.00	0.31	0.0	0.0	0.12
BEANIBAZAR	8.44	5.88	3.95	80.57	0.0	0.63	0.03	0.23	0.03	0.0	0.25
HABIGANJ	24.45	5.37	2.01	57.11	0.00	8.45	0.05	0.70	1.63	0.09	0.14
MADHABPUR	29.98	3.96	2.06	55.53	0.01	2.47	0.13	0.43	4.66	0.01	0.79
CHUNARUGHAT	56.24	0.39	2.52	31.11	0.02	5.81	0.10	0.89	0.04	2.38	0.51
BAHUBAL	21.59	7.09	3.82	61.60	0.0	5.59	0.01	0.11	0.08	0.06	0.06
BANIACHONG	0.34	33.82	14.85	49.88	0.00	0.27	0.02	0.17	0.01	0.0	0.63
NABIGANJ	4.83	27.19	4.86	59.05	0.0	0.37	0.01	0.64	2.42	0.0	0.63
LAKHAI	2.16	20.03	20.58	47.85	0.08	1.14	0.30	1.00	5.62	0.00	1.24
AJMIRIGANJ	0.46	42.77	16.43	39.16	0.01	0.48	0.01	0.14	0.39	0.0	0.16
SUNAMGANJ	7.14	51.94	7.13	30.30	0.0	1.86	0.02	0.44	0.16	0.01	1.00
CHHATAK	31.87	14.82	1.06	50.26	0.01	0.65	0.00	0.92	0.07	0.02	0.31
JAGANNATHPUR	2.77	47.20	6.89	40.87	0.0	0.46	0.00	0.53	0.59	0.0	0.69
TAHIRPUR	3.03	78.77	8.77	5.04	0.0	1.21	0.01	1.10	0.26	0.0	1.81
DHARMAPASSA	1.92	79.69	7.26	5.05	0.0	2.58	0.09	0.08	2.70	0.0	0.62
DERAI	0.13	79.37	11.62	6.73	0.0	0.53	0.00	0.61	0.05	0.0	0.96
SULLA	0.03	83.89	13.45	0.29	0.0	1.58	0.02	0.11	0.20	0.0	0.43
JAMALGANJ	0.95	54.07	19.89	21.48	0.01	1.57	0.03	0.67	1.06	0.0	0.27
MOULVI BAZAR	33.53	8.94	2.81	48.76	0.0	3.97	0.04	0.22	0.08	0.01	0.84
RAJNAGAR	27.33	26.99	16.01	22.61	0.0	2.23	0.03	0.21	2.80	0.08	1.73
KULAURA	30.24	25.48	10.36	28.72	0.02	3.44	0.06	0.29	0.29	0.24	0.86
SREEMONGAL	29.08	7.14	1.00	57.99	0.01	3.79	0.01	0.05	0.03	0.21	0.70
KAMALGANJ	23.71	3.01	1.62	68.15	0.00	2.37	0.00	0.22	0.00	0.22	0.69
BARLEKHA	35.03	8.23	3.14	47.51	0.0	3.74	0.04	1.13	0.35	0.14	0.69
CHANDINA	39.03	0.01	1.56	50.71	0.06	2.40	0.15	0.14	5.75	0.08	0.10
DEBIDDAR	29.14	0.70	3.25	49.68	0.09	8.95	0.71	0.54	6.25	0.20	0.50
MURADNAGAR	27.76	0.80	6.16	58.12	0.13	1.58	1.09	0.55	3.49	0.01	0.30
DAUDKANDI	24.68	4.79	7.62	33.65	0.14	15.87	0.09	1.31	10.29	0.03	1.53
HOMNA	17.42	6.43	1.99	56.67	0.69	0.76	2.01	1.46	11.54	0.17	0.87
KOTWALI	27.59	4.12	21.63	40.01	0.07	2.99	0.03	0.11	0.12	3.24	0.11
BURICHONG	28.04	1.18	9.23	46.62	0.25	1.44	0.35	0.66	11.37	0.71	0.16
CHOUDDAGRAM	39.78	3.32	9.02	45.55	0.09	1.31	0.13	0.04	0.24	0.43	0.09
LAKSAM	28.12	0.81	4.18	62.37	0.09	0.63	0.08	0.07	3.02	0.53	0.09
BARURA	31.77	0.05	1.62	54.62	0.03	1.06	0.08	0.13	9.29	1.24	0.12
CHANDPUR	37.39	5.02	4.95	44.09	0.39	0.84	0.17	0.18	6.62	0.26	0.10
FARIDGANJ	24.77	1.98	10.62	53.95	0.07	0.27	0.75	0.21	6.90	0.47	0.01
MATLAB BAZAR	23.16	4.20	6.67	39.08	0.13	17.91	0.51	0.60	7.58	0.03	0.14

HAJIGANJ	23.69	4.08	13.87	48.69	0.16	1.97	0.09	0.32	7.04	0.04	0.04
KACHUA	39.39	1.59	1.49	46.55	0.06	2.89	0.69	0.08	6.75	0.44	0.06
BRAHMANBARIA	21.69	10.01	15.49	41.44	1.54	1.22	0.20	0.73	7.44	0.00	0.23
SARAIL	11.80	11.55	43.96	20.54	0.51	0.90	0.51	2.60	7.07	0.0	0.54
NASIRNAGAR	3.76	23.94	15.21	49.36	0.18	1.66	0.20	0.97	4.47	0.0	0.26
NABINAGAR	10.97	8.23	18.25	49.90	1.02	0.74	0.50	1.91	8.37	0.0	0.12
KASBA	25.93	5.07	18.82	39.64	0.47	1.83	0.07	1.33	6.13	0.03	0.07
BANCHARAMPUR	12.88	10.63	6.33	52.79	0.49	4.76	0.41	2.93	6.63	0.06	2.08
SUDHARAM	21.51	0.46	0.19	75.37	0.01	1.20	0.11	0.00	0.94	0.19	0.00
COMPANIGUNJ	27.70	3.32	2.12	65.76	0.02	0.35	0.48	0.02	0.05	0.17	0.0
HATIYA	13.34	0.02	0.0	86.31	0.00	0.09	0.06	0.00	0.04	0.09	0.05
RAMGATI	16.50	0.04	0.0	81.64	0.00	0.28	0.22	0.04	0.38	0.07	0.02
LAKSHMIPUR	18.29	0.28	0.09	68.76	0.03	7.82	0.35	0.06	2.55	1.69	0.08
RAIPUR	24.35	0.93	2.48	61.55	0.03	0.60	0.61	0.05	8.98	0.38	0.04
BEGUMGUNJ	13.05	4.64	29.97	46.54	0.01	0.37	0.16	0.01	4.31	0.95	0.0
SENBAG	32.22	4.91	0.39	61.24	0.01	0.56	0.07	0.00	0.52	0.07	0.00
RAMGONJ	30.16	2.37	12.92	50.42	0.02	0.15	0.02	0.11	3.44	0.39	0.0
FENI	33.53	0.10	6.30	58.20	0.11	1.19	0.32	0.02	0.11	0.12	0.01
SONAGAZI	29.09	0.11	3.80	66.14	0.01	0.26	0.16	0.03	0.03	0.18	0.01
CHHAGALNAIYA	19.56	2.69	27.91	40.16	0.02	6.64	0.08	0.08	0.01	2.84	0.01
PARSHURAM	21.81	0.80	9.11	45.90	0.01	15.30	0.33	0.03	0.0	6.69	0.02
DOUBLEMOORING	24.70	0.10	8.61	47.09	0.0	19.16	0.07	0.0	0.0	0.24	0.03
PANCHLAISH	22.28	8.61	24.72	36.19	0.0	7.97	0.05	0.0	0.0	0.18	0.0
HATHAZARI	29.00	15.20	10.45	43.64	0.0	1.30	0.01	0.02	0.0	0.27	0.11
SANDWIP	15.41	0.0	0.0	83.35	0.0	0.76	0.13	0.03	0.06	0.26	0.0
MIRSARAI	26.42	0.95	4.80	59.39	0.01	1.31	0.22	0.08	0.00	6.83	0.01
SITAKUNDU	21.36	0.11	0.31	74.02	0.02	2.22	0.20	0.01	0.00	1.73	0.02
FATIKCHHARI	18.02	14.38	7.10	52.52	0.0	1.18	0.30	0.10	0.00	6.26	0.13
RAOJAN	16.80	0.09	24.26	50.58	0.0	1.56	0.03	0.02	0.0	0.57	0.09
RANGUNIA	9.02	2.32	40.28	46.92	0.0	1.17	0.02	0.06	0.0	0.14	0.07
ANWARA	23.96	7.92	19.55	47.44	0.0	1.06	0.05	0.00	0.0	0.02	0.01
BANSKHALI	30.83	10.96	4.63	51.97	0.0	1.22	0.00	0.01	0.0	0.17	0.21
BOALKHALI	13.60	9.04	28.45	45.34	0.0	3.12	0.08	0.0	0.0	0.11	0.26
PATIYA	23.35	11.79	17.42	45.75	0.0	0.91	0.15	0.16	0.0	0.18	0.30
SATKANIA	22.24	12.35	11.68	48.52	0.0	1.30	0.04	0.01	0.0	2.96	0.89
COXS BAZAR	10.93	6.85	35.21	42.61	0.0	1.41	0.01	0.0	0.0	1.07	1.91
CHAKARIA	8.55	0.98	7.76	79.35	0.0	1.11	0.08	0.04	0.0	0.31	1.82
KUTUBDIA	37.57	0.0	0.0	62.28	0.0	0.15	0.0	0.0	0.0	0.0	0.0
RAHU	4.80	8.87	30.67	49.69	0.0	1.90	0.04	0.07	0.00	2.48	1.47
MOISHKHALI	12.97	3.28	40.15	41.41	0.0	1.75	0.0	0.0	0.01	0.21	0.22

TEKNAAF	5.06	0.33	4.69	84.37	0.0	1.82	0.06	0.59	0.0	0.65	1.03
UKHIYA	4.46	5.98	27.11	54.57	0.0	2.97	0.12	0.09	0.0	3.72	0.79
RANGAMATI	32.49	29.23	7.47	24.96	0.0	4.82	0.02	0.39	0.12	0.18	0.33
CHANDRAGHONA	61.07	4.61	9.87	19.93	0.0	2.21	0.01	0.96	0.0	1.08	0.27
SUBALONG	73.22	13.83	5.66	5.20	0.01	1.06	0.0	0.69	0.01	0.32	0.0
BAGHAICHHARI	18.87	24.03	31.00	15.48	0.00	8.98	0.04	0.46	0.27	0.86	0.0
LANGADU	17.61	46.98	29.24	2.11	0.0	3.18	0.0	0.40	0.08	0.03	0.37
RAMGARH	16.17	8.67	3.72	58.96	0.0	0.87	0.17	9.40	0.02	0.69	1.34
KHAGRACHHARI	16.83	28.12	14.83	32.04	0.0	1.46	0.07	4.80	0.13	1.73	0.0
DIGHINALA	38.09	11.35	11.34	35.79	0.0	0.70	0.02	1.73	0.06	0.38	0.54
RUMA	96.08	0.0	0.0	0.0	0.0	1.13	0.0	0.36	0.0	1.21	1.22
LAMA	71.19	8.18	10.65	0.0	0.00	3.74	0.17	2.48	0.00	1.88	1.70
NAKHYONGCHARI	10.81	4.69	10.74	67.95	0.0	1.69	0.0	2.20	0.0	0.95	0.96
BANDARBAN	53.49	2.81	2.80	32.82	0.0	5.18	0.01	1.39	0.0	0.22	1.28

APPENDIX - E

Print out of Stepwise Regression Analysis (BMDP Computer Package Program).

STEP NO. 0

MULTIPLE R 0.0
MULTIPLE R-SQUARE 0.0
ADJUSTED R-SQUARE 0.0
STD. ERROR OF EST. 0.2730

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	0.0	0	0.0	0.0
RESIDUAL	30.560318	410	0.7453734E-01	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT		6.655)					

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
VAR2	2	0.03667	1.00000	0.55	1
VAR3	3	0.22723	1.00000	22.27	1
VAR4	4	0.41301	1.00000	84.11	1
VAR5	5	-0.28526	1.00000	36.23	1
VAR6	6	-0.13737	1.00000	7.87	1
VAR7	7	0.37225	1.00000	65.79	1
VAR8	8	-0.22552	1.00000	21.92	1
VAR9	9	-0.05279	1.00000	1.14	1
VAR10	10	0.02403	1.00000	0.24	1
VAR11	11	0.03241	1.00000	0.43	1
VAR12	12	0.17644	1.00000	13.14	1
VAR13	13	0.42508	1.00000	90.20	1
VAR14	14	0.27942	1.00000	34.64	1
VAR15	15	0.17517	1.00000	12.95	1
VAR16	16	0.51726	1.00000	149.41	1
VAR17	17	-0.11348	1.00000	5.34	1
VAR18	18	0.33019	1.00000	50.05	1
VAR19	19	0.09497	1.00000	3.72	1
VAR20	20	0.13694	1.00000	7.70	1
VAR21	21	-0.00801	1.00000	0.03	1
VAR22	22	-0.11765	1.00000	5.74	1
VAR23	23	-0.05056	1.00000	1.05	1
VAR24	24	0.58573	1.00000	213.61	1

STEP NO. 1
VARIABLE ENTERED 24 VAR24

MULTIPLE R 0.5857
MULTIPLE R-SQUARE 0.3431
ADJUSTED R-SQUARE 0.3415
STD. ERROR OF EST. 0.2216

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	10.484731	1	10.48473	213.61
RESIDUAL	20.075592	409	0.4908457E-01	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT		5.714)					
VAR24	24	0.618	0.042	0.586	1.00000	213.61	1

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
VAR2	2	-0.23767	0.86432	24.43	1
VAR3	3	0.40737	0.97186	81.18	1
VAR4	4	0.62800	0.99936	157.71	1
VAR5	5	-0.15706	0.92257	10.32	1
VAR6	6	-0.20460	0.99767	17.83	1
VAR7	7	0.41581	0.99625	85.29	1
VAR8	8	-0.31969	0.99679	46.44	1
VAR9	9	-0.10267	0.99732	4.35	1
VAR10	10	-0.18202	0.92012	13.98	1

VAR11	11	0.05088	0.99977	1.06	1
VAR12	12	0.16666	0.99473	11.51	1
VAR13	13	0.51619	0.99987	148.20	1
VAR14	14	0.20213	0.95872	17.38	1
VAR15	15	0.14196	0.99925	8.39	1
VAR16	16	0.62228	0.99950	257.83	1
VAR17	17	-0.21309	0.99007	19.41	1
VAR18	18	0.43498	0.99857	95.21	1
VAR19	19	0.02094	0.98220	0.18	1
VAR20	20	0.04815	0.97232	0.95	1
VAR21	21	-0.11214	0.98041	5.20	1
VAR22	22	-0.25789	0.97694	29.07	1
VAR23	23	-0.07687	0.99960	2.43	1

STEP NO. 2
VARIABLE ENTERED 16 VAR16

MULTIPLE R 0.7730
MULTIPLE R-SQUARE 0.5975
ADJUSTED R-SQUARE 0.5955
STD. ERROR OF EST. 0.1736

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	18.258545	2	9.129272	302.78
RESIDUAL	12.301783	408	0.3015143E-01	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT)		4.927)					
VAR16	16	0.008	0.001	0.504	0.99951	257.83	1
VAR24	24	0.607	0.033	0.575	0.99951	334.37	1

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
VAR2	2	-0.33584	0.86293	51.74	1
VAR3	3	0.42576	0.95712	90.11	1
VAR4	4	0.45088	0.90388	103.85	1
VAR5	5	-0.09023	0.90448	3.34	1
VAR6	6	-0.22636	0.99571	21.98	1
VAR7	7	0.51346	0.99575	145.72	1
VAR8	8	-0.34685	0.99061	55.66	1
VAR9	9	-0.12570	0.99727	6.53	1
VAR10	10	-0.21465	0.91965	19.66	1
VAR11	11	0.17376	0.98160	12.67	1
VAR12	12	0.20935	0.99472	18.66	1
VAR13	13	0.28418	0.72393	35.76	1
VAR14	14	0.09222	0.91586	3.49	1
VAR15	15	0.05793	0.96513	1.37	1
VAR17	17	-0.07266	0.92618	2.16	1
VAR18	18	0.26335	0.84307	30.33	1
VAR19	19	0.03435	0.98211	0.48	1
VAR20	20	0.09935	0.97013	4.06	1
VAR21	21	0.02685	0.93504	0.29	1
VAR22	22	-0.25224	0.96743	27.65	1
VAR23	23	-0.01455	0.98851	0.09	1

STEP NO. 3
VARIABLE ENTERED 7 VAR7

MULTIPLE R 0.8388
MULTIPLE R-SQUARE 0.7036
ADJUSTED R-SQUARE 0.7014
STD. ERROR OF EST. 0.1492

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	21.501770	3	7.167256	322.02
RESIDUAL	9.0585537	407	0.2225689E-01	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT)		4.938)					
VAR7	7	0.042	0.003	0.326	0.99575	145.72	1
VAR16	16	0.008	0.001	0.497	0.99900	339.04	1
VAR24	24	0.586	0.029	0.555	0.99582	420.69	1

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
VAR2	2	-0.32019	0.84986	46.38	1
VAR3	3	0.50892	0.95670	141.91	1
VAR4	4	0.52222	0.90386	152.24	1
VAR5	5	-0.09568	0.90425	3.75	1
VAR6	6	-0.23782	0.99380	24.34	1
VAR8	8	-0.35668	0.98405	59.18	1

VAR9	9	-0.15271	0.99717	9.69	1
VAR10	10	-0.28736	0.91619	36.54	1
VAR11	11	0.18696	0.98110	15.03	1
VAR12	12	0.25487	0.99439	28.20	1
VAR13	13	0.33984	0.72378	53.01	1
VAR14	14	0.11423	0.91574	5.37	1
VAR15	15	0.04981	0.96428	1.01	1
VAR17	17	-0.13805	0.91896	7.89	1
VAR18	18	0.14966	0.78060	9.30	1
VAR19	19	-0.02160	0.97173	0.19	1
VAR20	20	0.12206	0.97002	6.14	1
VAR21	21	0.04009	0.93564	0.65	1
VAR22	22	-0.26443	0.96502	30.52	1
VAR23	23	0.00877	0.98668	0.03	1

STEP NO. 4
VARIABLE ENTERED 4 VAR4

MULTIPLE R 0.8857
MULTIPLE R-SQUARE 0.7844
ADJUSTED R-SQUARE 0.7823
STD. ERROR OF EST. 0.1274

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	23.972168	4	5.993042	369.33
RESIDUAL	6.5881634	406	0.1622700E-01	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT		5.025)					
VAR4	4	0.019	0.002	0.299	0.90386	152.24	1
VAR7	7	0.042	0.003	0.325	0.99572	197.99	1
VAR16	16	0.006	0.000	0.405	0.90366	278.83	1
VAR24	24	0.596	0.024	0.564	0.99466	596.70	1

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
VAR2	2	-0.22742	0.79507	22.09	1
VAR3	3	0.41811	0.85253	85.80	1
VAR5	5	-0.00324	0.87560	0.00	1
VAR6	6	-0.21010	0.98076	18.70	1
VAR8	8	-0.33491	0.96432	51.16	1
VAR9	9	-0.16012	0.99620	10.66	1
VAR10	10	-0.27643	0.90682	33.51	1
VAR11	11	0.28336	0.97155	35.36	1
VAR12	12	0.31492	0.99372	44.59	1
VAR13	13	0.39395	0.72374	74.40	1
VAR14	14	0.08718	0.91034	3.10	1
VAR15	15	0.01267	0.95889	0.06	1
VAR17	17	-0.10302	0.91032	4.34	1
VAR18	18	0.16246	0.78024	10.98	1
VAR19	19	0.00483	0.96937	0.01	1
VAR20	20	0.21987	0.95544	20.57	1
VAR21	21	0.16151	0.90446	10.85	1
VAR22	22	-0.26267	0.95904	30.01	1
VAR23	23	0.07649	0.97530	2.38	1

STEP NO. 5
VARIABLE ENTERED 3 VAR3

MULTIPLE R 0.9067
MULTIPLE R-SQUARE 0.8221
ADJUSTED R-SQUARE 0.8199
STD. ERROR OF EST. 0.1159

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	25.123901	5	5.024780	374.33
RESIDUAL	5.4364252	405	0.1342327E-01	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT		4.961)					
VAR3	3	0.004	0.000	0.210	0.85253	85.80	1
VAR4	4	0.014	0.001	0.228	0.90544	95.06	1
VAR7	7	0.042	0.003	0.330	0.99513	246.21	1
VAR16	16	0.006	0.000	0.401	0.90339	331.04	1
VAR24	24	0.631	0.023	0.598	0.98645	785.90	1

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
VAR2	2	-0.13026	0.73645	6.97	1
VAR5	5	0.20502	0.72600	17.73	1
VAR6	6	-0.17830	0.96715	13.27	1
VAR8	8	-0.30524	0.94409	41.51	1
VAR9	9	-0.19027	0.99529	15.18	1
VAR10	10	-0.29723	0.90660	39.15	1
VAR11	11	0.36869	0.95808	63.56	1

VAR12	12	0.34943	0.99368	56.19	1
VAR13	13	0.44475	0.72333	99.62	1
VAR14	14	-0.00040	0.87044	0.00	1
VAR15	15	-0.02324	0.95266	0.22	1
VAR17	17	0.00095	0.85416	0.00	1
VAR18	18	0.23327	0.76994	23.25	1
VAR19	19	-0.02005	0.96644	0.16	1
VAR20	20	0.16575	0.92748	11.41	1
VAR21	21	0.08925	0.86966	3.24	1
VAR22	22	-0.07611	0.73407	2.35	1
VAR23	23	0.08028	0.97523	2.62	1

STEP NO. 6
VARIABLE ENTERED 13 VAR13

MULTIPLE R 0.9259
MULTIPLE R-SQUARE 0.8573
ADJUSTED R-SQUARE 0.8562
STD. ERROR OF EST. 0.1039

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	26.199234	6	4.366539	404.61
RESIDUAL	4.3610868	404	0.1079477E-01	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT		4.905)					
VAR3	3	0.004	0.000	0.215	0.85205	111.59	1
VAR4	4	0.014	0.001	0.225	0.80526	114.97	1
VAR7	7	0.043	0.002	0.332	0.99491	311.36	1
VAR13	13	0.002	0.000	0.221	0.72333	99.62	1
VAR16	16	0.005	0.000	0.286	0.67269	156.36	1
VAR24	24	0.632	0.020	0.598	0.96644	979.21	1

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
VAR2	2	-0.15567	0.73614	10.01	1
VAR5	5	0.18117	0.71905	13.68	1
VAR6	6	-0.16127	0.96140	10.76	1
VAR8	8	-0.25877	0.91582	28.92	1
VAR9	9	-0.21426	0.99528	19.39	1
VAR10	10	-0.24787	0.87819	26.38	1
VAR11	11	0.42011	0.95781	86.37	1
VAR12	12	0.39768	0.99346	75.71	1
VAR14	14	0.02945	0.86730	0.35	1
VAR15	15	-0.01705	0.95235	0.12	1
VAR17	17	-0.02041	0.85257	0.17	1
VAR18	18	0.21922	0.76443	20.35	1
VAR19	19	0.02862	0.95630	0.33	1
VAR20	20	0.10072	0.89976	4.13	1
VAR21	21	0.05832	0.86358	1.38	1
VAR22	22	-0.03813	0.72828	0.59	1
VAR23	23	0.06220	0.97223	1.57	1

STEP NO. 7
VARIABLE ENTERED 11 VAR11

MULTIPLE R 0.9394
MULTIPLE R-SQUARE 0.8825
ADJUSTED R-SQUARE 0.8804
STD. ERROR OF EST. 0.0944

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	26.968933	7	3.852704	432.32
RESIDUAL	3.5913849	403	0.8911625E-02	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT		4.844)					
VAR3	3	0.005	0.000	0.236	0.84016	159.84	1
VAR4	4	0.014	0.001	0.234	0.80285	151.10	1
VAR7	7	0.042	0.002	0.329	0.99450	369.69	1
VAR11	11	0.015	0.002	0.162	0.95781	86.37	1
VAR13	13	0.002	0.000	0.224	0.72312	124.11	1
VAR16	16	0.005	0.000	0.300	0.66878	206.98	1
VAR24	24	0.638	0.018	0.604	0.96513	1208.20	1

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
VAR2	2	-0.23857	0.72176	24.26	1
VAR5	5	0.40292	0.61770	77.91	1
VAR6	6	-0.32925	0.87741	48.86	1
VAR8	8	-0.45005	0.82855	102.10	1
VAR9	9	-0.25857	0.99300	28.80	1
VAR10	10	-0.27510	0.87818	32.91	1
VAR12	12	0.44616	0.99317	99.91	1
VAR14	14	0.02093	0.86676	0.18	1
VAR15	15	0.02173	0.94509	0.19	1
VAR17	17	-0.08299	0.83834	2.79	1
VAR18	18	0.24434	0.76441	25.62	1
VAR19	19	0.03024	0.95629	0.37	1

. VAR20	20	0.10184	0.89940	4.21	1
. VAR21	21	0.04944	0.86269	0.98	1
. VAR22	22	-0.11242	0.71204	5.15	1
. VAR23	23	0.04013	0.96855	0.65	1

STEP NO. 8
VARIABLE ENTERED 8 VAR8

MULTIPLE R 0.9520
MULTIPLE R-SQUARE 0.9063
ADJUSTED R-SQUARE 0.9044
STD. ERROR OF EST. 0.0844

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	27.696320	8	3.462040	485.95
RESIDUAL	2.8639812	402	0.7124331E-02	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT)		4.872)					
VAR3	3	0.004	0.000	0.215	0.82801	164.41	1
VAR4	4	0.014	0.001	0.222	0.79854	168.25	1
VAR7	7	0.040	0.002	0.314	0.98440	415.21	1
VAR8	8	-0.013	0.001	-0.169	0.82855	102.10	1
VAR11	11	0.020	0.002	0.213	0.86654	169.15	1
VAR13	13	0.002	0.000	0.191	0.70062	109.88	1
VAR16	16	0.005	0.000	0.316	0.66315	287.29	1
VAR24	24	0.646	0.016	0.612	0.96269	1545.84	1

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
. VAR2	2	-0.21818	0.71464	20.04	1
. VAR5	5	0.23612	0.47194	23.68	1
. VAR6	6	-0.07548	0.54739	2.30	1
. VAR9	9	-0.16113	0.92255	10.69	1
. VAR10	10	-0.19209	0.82700	15.36	1
. VAR12	12	0.47061	0.98969	114.08	1
. VAR14	14	0.02990	0.86661	0.36	1
. VAR15	15	0.05193	0.94227	1.08	1
. VAR17	17	-0.00679	0.81379	0.02	1
. VAR18	18	0.22013	0.75537	20.42	1
. VAR19	19	0.00455	0.95305	0.01	1
. VAR20	20	0.09269	0.89778	3.48	1
. VAR21	21	0.09819	0.85656	3.90	1
. VAR22	22	-0.00712	0.67235	0.02	1
. VAR23	23	0.09477	0.95925	3.63	1

STEP NO. 9
VARIABLE ENTERED 12 VAR12

MULTIPLE R 0.9628
MULTIPLE R-SQUARE 0.9270
ADJUSTED R-SQUARE 0.9254
STD. ERROR OF EST. 0.0746

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	28.330627	9	3.147847	566.13
RESIDUAL	2.2296724	401	0.5560279E-02	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT)		4.879)					
VAR3	3	0.005	0.000	0.218	0.82781	215.40	1
VAR4	4	0.014	0.001	0.226	0.79793	224.16	1
VAR7	7	0.041	0.002	0.317	0.98384	543.56	1
VAR8	8	-0.013	0.001	-0.160	0.82565	116.33	1
VAR11	11	0.020	0.001	0.213	0.86653	216.07	1
VAR12	12	0.017	0.002	0.145	0.98969	114.08	1
VAR13	13	0.002	0.000	0.196	0.70016	147.26	1
VAR16	16	0.005	0.000	0.314	0.66284	359.22	1
VAR24	24	0.635	0.015	0.601	0.95779	1901.82	1

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
. VAR2	2	-0.21349	0.71170	19.10	1
. VAR5	5	0.31978	0.46767	45.56	1
. VAR6	6	-0.08351	0.54738	2.81	1
. VAR9	9	-0.19660	0.92192	16.08	1
. VAR10	10	-0.18734	0.82427	14.55	1
. VAR14	14	-0.01802	0.85843	0.13	1
. VAR15	15	0.04140	0.94126	0.69	1
. VAR17	17	-0.01109	0.81376	0.05	1
. VAR18	18	0.21355	0.75185	19.11	1
. VAR19	19	-0.03384	0.94798	0.46	1
. VAR20	20	0.05087	0.88842	1.04	1
. VAR21	21	0.11431	0.85654	5.30	1
. VAR22	22	-0.01751	0.67214	0.12	1
. VAR23	23	0.02388	0.93556	0.23	1

STEP NO. 10
VARIABLE ENTERED 5 VAR5

MULTIPLE R 0.9667

MULTIPLE R-SQUARE 0.9345
ADJUSTED R-SQUARE 0.9329
STD. ERROR OF EST. 0.0707

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	28.558640	10	2.855864	570.70
RESIDUAL	2.0016642	400	0.5004160E-02	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT)		4.678)					
VAR3	3	0.006	0.000	0.282	0.56731	275.35	1
VAR4	4	0.015	0.001	0.237	0.78705	271.00	1
VAR5	5	0.002	0.000	0.126	0.46767	45.56	1
VAR7	7	0.042	0.002	0.324	0.97735	627.14	1
VAR8	8	-0.008	0.001	-0.107	0.62696	43.51	1
VAR11	11	0.022	0.001	0.238	0.80756	279.52	1
VAR12	12	0.018	0.002	0.153	0.98074	140.41	1
VAR13	13	0.002	0.000	0.194	0.70007	161.65	1
VAR16	16	0.005	0.000	0.328	0.65199	427.58	1
VAR24	24	0.679	0.015	0.643	0.77926	1969.43	1

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
VAR2	2	0.11007	0.20590	4.89	1
VAR6	6	-0.04422	0.53795	0.78	1
VAR9	9	-0.13032	0.86884	6.89	1
VAR10	10	-0.06239	0.68032	1.56	1
VAR14	14	0.07478	0.79599	2.24	1
VAR15	15	0.11283	0.90428	5.15	1
VAR17	17	-0.00277	0.81319	0.00	1
VAR18	18	0.20946	0.75012	18.31	1
VAR19	19	-0.04812	0.94671	0.93	1
VAR20	20	0.05570	0.88839	1.24	1
VAR21	21	0.12693	0.85624	6.53	1
VAR22	22	0.01745	0.66457	0.12	1
VAR23	23	0.00826	0.93320	0.03	1

STEP NO. 11
VARIABLE ENTERED 18 VAR18

MULTIPLE R 0.9682
MULTIPLE R-SQUARE 0.9374
ADJUSTED R-SQUARE 0.9356
STD. ERROR OF EST. 0.0693

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	28.646469	11	2.604224	542.93
RESIDUAL	1.9138451	399	0.4796602E-02	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT)		4.668)					
VAR3	3	0.006	0.000	0.287	0.56391	296.85	1
VAR4	4	0.014	0.001	0.234	0.78455	273.79	1
VAR5	5	0.002	0.000	0.123	0.46660	44.65	1
VAR7	7	0.040	0.002	0.309	0.90682	551.74	1
VAR8	8	-0.008	0.001	-0.102	0.62404	41.34	1
VAR11	11	0.022	0.001	0.236	0.80630	285.42	1
VAR12	12	0.017	0.001	0.149	0.97557	130.31	1
VAR13	13	0.002	0.000	0.190	0.69703	160.68	1
VAR16	16	0.005	0.000	0.306	0.58793	350.25	1
VAR18	18	0.000	0.000	0.062	0.75012	18.31	1
VAR24	24	0.683	0.015	0.647	0.77655	2070.40	1

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
VAR2	2	0.08226	0.20154	2.71	1
VAR6	6	-0.01843	0.52945	0.14	1
VAR9	9	-0.10920	0.85718	4.80	1
VAR10	10	-0.04444	0.67466	0.79	1
VAR14	14	0.07694	0.79599	2.37	1
VAR15	15	0.14675	0.88663	8.76	1
VAR17	17	0.02719	0.79749	0.29	1
VAR19	19	-0.05751	0.94530	1.32	1
VAR20	20	0.05584	0.88836	1.24	1
VAR21	21	0.15133	0.84816	9.33	1
VAR22	22	-0.00766	0.65519	0.02	1
VAR23	23	-0.01154	0.92511	0.05	1

STEP NO. 12
VARIABLE ENTERED 21 VAR21

MULTIPLE R 0.9689
MULTIPLE R-SQUARE 0.9388
ADJUSTED R-SQUARE 0.9370
STD. ERROR OF EST. 0.0685

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	28.690292	12	2.390858	508.85
RESIDUAL	1.8700190	398	0.4698537E-02	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT)		4.640)					
VAR3	3	0.006	0.000	0.279	0.54986	279.15	1
VAR4	4	0.015	0.001	0.244	0.74358	280.11	1

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
VAR2	2	0.10416	0.19808	4.35	1
VAR6	6	-0.04463	0.51491	0.79	1

VAR5	5	0.002	0.000	0.123	0.46651	46.16	1	VAR9	9	-0.10211	0.85453	4.16	1
VAR7	7	0.040	0.002	0.308	0.90628	559.40	1	VAR10	10	-0.06731	0.66114	1.81	1
VAR8	8	-0.008	0.001	-0.105	0.62197	44.37	1	VAR14	14	0.06604	0.79110	1.74	1
VAR11	11	0.022	0.001	0.236	0.80629	291.02	1	VAR15	15	0.13453	0.87863	7.32	1
VAR12	12	0.017	0.001	0.149	0.97557	141.22	1	VAR17	17	-0.01063	0.72764	0.14	1
VAR13	13	0.002	0.000	0.185	0.68941	154.21	1	VAR19	19	-0.07207	0.93784	2.07	1
VAR16	16	0.005	0.000	0.313	0.57545	366.82	1	VAR20	20	0.02667	0.85346	0.28	1
VAR18	18	0.001	0.000	0.066	0.74305	21.15	1	VAR22	22	0.01971	0.63458	0.15	1
VAR21	21	0.000	0.000	0.041	0.84816	9.33	1	VAR23	23	-0.03188	0.90943	0.40	1
VAR24	24	0.676	0.015	0.641	0.75985	2027.60	1						

STEP NO. 13
VARIABLE ENTERED 15 VAR15

MULTIPLE R 0.9695
MULTIPLE R-SQUARE 0.9399
ADJUSTED R-SQUARE 0.9379
STD. ERROR OF EST. 0.0680

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	28.724136	13	2.209549	477.73
RESIDUAL	1.8361721	397	0.4625116E-02	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT)		4.615)					
VAR3	3	0.006	0.000	0.283	0.54681	288.81	1
VAR4	4	0.015	0.001	0.242	0.74165	287.23	1
VAR5	5	0.002	0.000	0.133	0.44912	52.42	1
VAR7	7	0.039	0.002	0.306	0.90318	558.83	1
VAR8	8	-0.008	0.001	-0.102	0.61939	42.58	1
VAR11	11	0.023	0.001	0.241	0.78888	302.94	1
VAR12	12	0.017	0.001	0.148	0.97498	141.79	1
VAR13	13	0.002	0.000	0.186	0.68937	157.14	1
VAR15	15	0.000	0.000	0.036	0.87863	7.32	1
VAR16	16	0.005	0.000	0.307	0.56520	352.32	1
VAR18	18	0.001	0.000	0.071	0.73036	24.50	1
VAR21	21	0.000	0.000	0.038	0.84052	7.88	1
VAR24	24	0.677	0.015	0.641	0.75976	2062.21	1

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
VAR2	2	0.12022	0.19585	5.81	1
VAR6	6	-0.03718	0.51316	0.56	1
VAR9	9	-0.10975	0.85253	4.83	1
VAR10	10	-0.08510	0.65133	2.89	1
VAR14	14	0.03828	0.75432	0.58	1
VAR17	17	-0.02228	0.72717	0.20	1
VAR19	19	-0.08189	0.93374	2.67	1
VAR20	20	0.02765	0.85344	0.30	1
VAR22	22	0.02302	0.63425	0.21	1
VAR23	23	-0.02270	0.90495	0.20	1

STEP NO. 14
VARIABLE ENTERED 2 VAR2

MULTIPLE R 0.9699
MULTIPLE R-SQUARE 0.9408
ADJUSTED R-SQUARE 0.9387
STD. ERROR OF EST. 0.0676

ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	28.750671	14	2.053619	449.39
RESIDUAL	1.8096323	396	0.4569776E-02	

VARIABLES IN EQUATION

VARIABLE		COEFFICIENT	STD. ERROR OF COEFF	STD REG COEFF	TOLERANCE	F TO REMOVE	LEVEL
(Y-INTERCEPT)		4.514)					
VAR2	2	0.001	0.001	0.067	0.19585	5.81	1
VAR3	3	0.007	0.001	0.333	0.21230	157.20	1
VAR4	4	0.016	0.001	0.259	0.59465	267.00	1
VAR5	5	0.003	0.000	0.203	0.12567	34.79	1
VAR7	7	0.041	0.002	0.318	0.77808	527.65	1
VAR8	8	-0.006	0.001	-0.079	0.44977	18.78	1
VAR11	11	0.023	0.001	0.249	0.74402	309.04	1
VAR12	12	0.018	0.001	0.157	0.90301	148.44	1
VAR13	13	0.002	0.000	0.182	0.68321	151.95	1
VAR15	15	0.000	0.000	0.039	0.86872	8.77	1
VAR16	16	0.005	0.000	0.309	0.56375	360.30	1
VAR18	18	0.001	0.000	0.067	0.71991	21.67	1
VAR21	21	0.000	0.000	0.042	0.82818	9.58	1
VAR24	24	0.677	0.015	0.641	0.75969	2089.04	1

VARIABLES NOT IN EQUATION

VARIABLE		PARTIAL CORR.	TOLERANCE	F TO ENTER	LEVEL
VAR6	6	-0.00116	0.46695	0.00	1
VAR9	9	-0.05584	0.62326	1.24	1
VAR10	10	0.05176	0.12742	1.06	1
VAR14	14	0.04506	0.75219	0.80	1
VAR17	17	-0.00390	0.71003	0.01	1
VAR19	19	-0.06065	0.90023	1.46	1
VAR20	20	0.03259	0.85214	0.42	1
VAR22	22	0.02063	0.63396	0.17	1
VAR23	23	-0.02211	0.90492	0.19	1

* * * * * F-LEVELS(4.000, 3.900) OR TOLERANCE INSUFFICIENT FOR FURTHER STEPPING

STEPWISE REGRESSION COEFFICIENTS

STEP	VARIABLES	0 Y-INTCPT	2 VAR2	3 VAR3	4 VAR4	5 VAR5	6 VAR6	7 VAR7	8 VAR8	9 VAR9	10 VAR10
0		6.6553*	0.0007	0.0047	0.0256	-0.0040	-0.0198	0.0478	-0.0176	-0.0054	0.0010
1		5.7139*	-0.0039	0.0069	0.0265	-0.0018	-0.0239	0.0434	-0.0203	-0.0086	-0.0065
2		4.9270*	-0.0044	0.0057	0.0186	-0.0008	-0.0207	0.0420	-0.0173	-0.0082	-0.0060
3		4.9380*	-0.0036	0.0059	0.0185	-0.0008	-0.0187	0.0420*	-0.0153	-0.0086	-0.0069
4		5.0254*	-0.0023	0.0044	0.0185*	-0.0000	-0.0142	0.0418*	-0.0124	-0.0077	-0.0057
5		4.9608*	-0.0012	0.0044*	0.0141*	0.0014	-0.0110	0.0424*	-0.0104	-0.0083	-0.0056
6		4.9052*	-0.0013	0.0045*	0.0139*	0.0011	-0.0089	0.0427*	-0.0080	-0.0084	-0.0042
7		4.8437*	-0.0018	0.0049*	0.0145*	0.0024	-0.0173	0.0423*	-0.0133	-0.0092	-0.0043
8		4.8723*	-0.0015	0.0045*	0.0137*	0.0015	-0.0045	0.0403*	-0.0133*	-0.0053	-0.0027
9		4.8794*	-0.0013	0.0045*	0.0140*	0.0018	-0.0044	0.0407*	-0.0125*	-0.0057	-0.0024
10		4.6784*	0.0012	0.0058*	0.0147*	0.0018*	-0.0022	0.0417*	-0.0083*	-0.0037	-0.0008
11		4.6680*	0.0009	0.0060*	0.0145*	0.0017*	-0.0009	0.0397*	-0.0080*	-0.0030	-0.0006
12		4.6405*	0.0011	0.0058*	0.0151*	0.0017*	-0.0022	0.0396*	-0.0082*	-0.0028	-0.0009
13		4.6146*	0.0013	0.0059*	0.0150*	0.0018*	-0.0018	0.0393*	-0.0080*	-0.0030	-0.0011
14		4.5136*	0.0013*	0.0069*	0.0160*	0.0028*	-0.0001	0.0409*	-0.0062*	-0.0018	0.0015

NOTE-
1) REGRESSION COEFFICIENTS FOR VARIABLES IN THE EQUATION ARE INDICATED BY AN ASTERISK
2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP

STEPWISE REGRESSION COEFFICIENTS

STEP	VARIABLES	11 VAR11	12 VAR12	13 VAR13	14 VAR14	15 VAR15	16 VAR16	17 VAR17	18 VAR18	19 VAR19	20 VAR20
0		0.0030	0.0205	0.0046	0.0026	0.0014	0.0082	-0.0007	0.0026	0.0011	0.0014
1		0.0039	0.0156	0.0045	0.0016	0.0009	0.0080	-0.0011	0.0027	0.0002	0.0004
2		0.0105	0.0155	0.0023	0.0006	0.0003	0.0080*	-0.0003	0.0014	0.0003	0.0007
3		0.0098	0.0162	0.0024	0.0006	0.0002	0.0079*	-0.0005	0.0007	-0.0001	0.0007
4		0.0125	0.0170	0.0023	0.0004	0.0000	0.0065*	-0.0003	0.0007	0.0000	0.0011
5		0.0149	0.0172	0.0024	-0.0000	-0.0001	0.0064*	0.0000	0.0009	-0.0001	0.0007
6		0.0152	0.0175	0.0024*	0.0001	-0.0001	0.0046*	-0.0001	0.0007	0.0001	0.0004
7		0.0152*	0.0178	0.0024*	0.0001	0.0001	0.0048*	-0.0002	0.0007	0.0001	0.0004
8		0.0200*	0.0168	0.0021*	0.0001	0.0001	0.0051*	-0.0000	0.0006	0.0000	0.0003
9		0.0200*	0.0168*	0.0021*	-0.0000	0.0001	0.0050*	-0.0000	0.0005	-0.0001	0.0001
10		0.0224*	0.0178*	0.0021*	0.0002	0.0002	0.0052*	-0.0000	0.0005	-0.0001	0.0002
11		0.0222*	0.0173*	0.0021*	0.0002	0.0003	0.0049*	0.0001	0.0005*	-0.0002	0.0002
12		0.0221*	0.0173*	0.0020*	0.0002	0.0003	0.0050*	-0.0000	0.0005*	-0.0002	0.0001
13		0.0227*	0.0172*	0.0020*	0.0001	0.0003*	0.0049*	-0.0000	0.0006*	-0.0002	0.0001
14		0.0234*	0.0182*	0.0020*	0.0001	0.0003*	0.0049*	-0.0000	0.0005*	-0.0002	0.0001

NOTE-
1) REGRESSION COEFFICIENTS FOR VARIABLES IN THE EQUATION ARE INDICATED BY AN ASTERISK
2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP

STEPWISE REGRESSION COEFFICIENTS

STEP	VARIABLES	21 VAR21	22 VAR22	23 VAR23	24 VAR24
0		-0.0001	-0.0008	-0.0004	0.6184
1		-0.0007	-0.0014	-0.0005	0.6184*
2		0.0001	-0.0011	-0.0001	0.6065*
3		0.0002	-0.0010	0.0000	0.5856*
4		0.0006	-0.0008	0.0003	0.5959*
5		0.0003	-0.0003	0.0003	0.6310*
6		0.0002	-0.0001	0.0002	0.6316*
7		0.0001	-0.0003	0.0001	0.6379*
8		0.0002	-0.0000	0.0003	0.6459*
9		0.0002	-0.0000	0.0001	0.6346*
10		0.0003	0.0000	0.0000	0.6792*
11		0.0003	-0.0000	-0.0000	0.6830*
12		0.0003*	0.0000	-0.0001	0.6762*
13		0.0003*	0.0000	-0.0001	0.6767*
14		0.0003*	0.0000	-0.0000	0.6770*

NOTE-
1) REGRESSION COEFFICIENTS FOR VARIABLES IN THE EQUATION ARE INDICATED BY AN ASTERISK
2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP

CORRELATION MATRIX OF REGRESSION COEFFICIENTS

		VAR2 2	VAR3 3	VAR4 4	VAR5 5	VAR7 7	VAR8 8	VAR11 11	VAR12 12	VAR13 13	VAR15 15
VAR2	2	1.0000									
VAR3	3	0.7821	1.0000								
VAR4	4	0.4452	0.2237	1.0000							
VAR5	5	0.8486	0.8445	0.4285	1.0000						
VAR7	7	0.3722	0.3192	0.1783	0.3539	1.0000					
VAR8	8	0.5233	0.6072	0.3074	0.6633	0.2755	1.0000				
VAR11	11	0.2384	0.3125	0.1497	0.3477	0.0671	0.0238	1.0000			
VAR12	12	0.2717	0.2468	0.1576	0.2772	0.1467	0.2165	0.0851	1.0000		
VAR13	13	-0.0946	-0.0471	-0.0617	-0.0845	0.0110	0.0770	-0.0569	0.0018	1.0000	
VAR15	15	0.1062	0.1292	0.0019	0.1917	-0.0145	0.1102	0.1672	0.0054	-0.0028	1.0000
VAR16	16	0.0507	0.0321	-0.1053	0.0998	0.0784	-0.0194	0.1200	0.0304	-0.4658	-0.1271
VAR18	18	-0.1196	-0.0504	-0.0077	-0.1119	-0.2975	-0.0034	-0.0475	-0.1040	-0.0616	0.1163
VAR21	21	0.1212	-0.0065	0.2602	0.1004	0.0279	0.0098	0.0122	0.0355	-0.1150	-0.0809
VAR24	24	0.0092	0.2446	-0.0069	0.2274	-0.0270	0.1588	0.1499	-0.0248	0.0000	0.0118

		VAR16 16	VAR18 18	VAR21 21	VAR24 24
VAR16	16	1.0000			
VAR18	18	-0.3103	1.0000		
VAR21	21	0.1612	0.0677	1.0000	
VAR24	24	-0.0064	0.0434	-0.1448	1.0000

SUMMARY TABLE

STEP NO.	VARIABLE ENTERED	REMOVED	MULTIPLE R	RSQ	INCREASE IN RSQ	F-TO-ENTER	F-TO-REMOVE	NUMBER OF INDEPENDENT VARIABLES INCLUDED
1	24 VAR24		0.5857	0.3431	0.3431	213.6053		1
2	16 VAR16		0.7730	0.5975	0.2544	257.8254		2
3	7 VAR7		0.8308	0.7036	0.1061	146.7180		3
4	4 VAR4		0.8857	0.7844	0.0808	152.2393		4
5	3 VAR3		0.9067	0.8221	0.0377	85.8016		5
6	13 VAR13		0.9259	0.8573	0.0352	99.6166		6
7	11 VAR11		0.9394	0.8825	0.0252	86.3705		7
8	8 VAR8		0.9520	0.9063	0.0238	102.1012		8
9	12 VAR12		0.9628	0.9270	0.0208	114.0785		9
10	5 VAR5		0.9667	0.9345	0.0075	45.5637		10
11	18 VAR18		0.9682	0.9374	0.0029	18.3084		11
12	21 VAR21		0.9689	0.9388	0.0014	9.3276		12
13	15 VAR15		0.9695	0.9399	0.0011	7.3177		13
14	2 VAR2		0.9699	0.9408	0.0009	5.8074		14

REFERENCES

Ahmad, N. (1968): An Economic Geography of East Patkstan, Oxford University Press, London, p. 378.

_____ (1976): A New Economic Geography of Bangladesh, Vikas Publishing House Pvt. Ltd., New Delhi, p. 249.

Ahmed, R. (1978): The Variability of some Water Balance Parameters of the Premonsoon Season in Bangladesh, Unpublished Master's Thesis, University of Windsor.

Alamgir, M. (1975): Some aspects of Bangladesh agriculture: Review of performance and evaluation of policies, The Bangladesh Development Studies, V. 3(3), pp. 261-300.

Baker, O.E. (1926-32): Agricultural regions of North America; Economic Geography, V.2,460-93; 3,50-86, 309-39, 445-65; 4, 44-73, 399-433; 5, 36-69; 6, 166-191, 278-309; 7, 109-153, 326-364; 8, 326-377.

Bassett, K.A., and Chorley, R.J. (1971): An experiment; in terrain filtering, Area, V. 3(2), pp. 78-91.

Bhatia, S.S. (1965): A new measure of agricultural efficiency in Uttar Pradesh, India; Economic Geography, V. 41, pp. 244-260.

Bose, S.R. (1974): The strategy of agricultural development in Bangladesh; Robinson, E.A.G. (ed), The Economic Development of Bangladesh, Within a Socialist Framework, Proceedings of a Conference held by The International Economic Association, Dacca, The Mac Millan Press Ltd., London, pp. 141-155.

Brinkmann, T. (1930): Entwicklungslinien und Entwicklungsmoglichkeiten der Landwirtschaftlichen Erzeugung Argentiniens; Berichte Uber Landwirtschaft, V. 13.

Brookfield, H.C., and Doreen, H. (1971): Melanesia, a Geographical Interpretation of an Island World; London, Methuen.

Buck, J.L. (1937): Land Utilization in China; University of Nanking. Reproduced by the Council of Economic and Cultural Affairs, Inc., New York.

Busch, E. (1936): Die Landbauzonen im deutschen Lebensraum, Stuttgart, Ulmer.

Chakravarti, A.K. (1976): The impact of the high-yielding varieties program on foodgrain production in India; The Canadian Geographer, V. XX(2), pp. 199-223.

Chen, L.C., and Chaudhury, R.H. (1975): Demographic change and food production in Bangladesh, 1960-74; Population and Development Review, V.1(2), pp. 201-227.

Chorley, R.J., and Haggett, P. (1965): Trend surface mapping in geographical research; Transactions, Institute of British Geographers, V. 37, pp. 47-67.

Clark, C., and Haswell, M. (1964): The Economics of Subsistence Agriculture, London, pp. 51-52.

Clark, W.A.V. (1967): The use of residuals from regression in geographical research; New Zealand Geographer, V. 23, pp. 64-67.

Dayal, E. (1978): A measure of cropping intensity; Professional Geographer, xxx(3), Asso. Ame. Geogr., pp. 289-296.

Dutt, A.K., and Gupta, R.S. (1969): An assessment of agricultural development in West Bengal; The Journal of Tropical Geography.

Elahi, M.K. (1965): Efficiency of agriculture in West Pakistan; Pakistan Geographical Review, V.20(2), pp. 77-116.

Enyedi, G.Y. (1964): Applied Geography in Hungary, Budapest.

Ginsburg, N.S. (1963): The Pattern of Asia, Englewood Cliffs, N.J.: Prentice Hall.

Goodson, J.B. (1938): The appraisal of agricultural productivity; Travaux de la Section III b, Geographie Economique, V. II of Computes Rendus du Congres International de Geographie (Leiden: E.J. Brill).

The Government of Bangladesh: Agricultural Production Levels in Bangladesh, Bureau of Statistics, Ministry of Planning, 1976.

_____ : The First Five Year Plan, 1973-1978, Planning Commission of The Govt. of Bangladesh.

_____ : Statistical Digest of Bangladesh, No.8, 1972, Bangladesh Bureau of Statistics, Dacca.

_____ : Bangladesh Agriculture in Statistics, Ministry of Agriculture, Dacca, Series No. 1, 1973.

_____ : Bangladesh Population Census - 1974, Bulletin-2, Census Commission, Ministry of Home Affairs, Dacca.

The Govt. of Bangladesh and FAO/UNDP Mission, (1977): Nutrition, Working Paper-III, Dacca, pp. 1-39.

Grant, F. (1961): A problem in the analysis of geophysical data: Geophysics, V. 22, pp. 309-344.

Gregor, H.F. (1970): Geography of Agriculture: Themes in Research; Prentice-Hall, Inc., New Jursey.

Hagood, M.T. (1943): Statistical methods for delineation of regions, applied to data on agriculture and population; Social Forces, V. 21, pp. 288-97.

Henshall, J.D. (1966): The demographic factor in the structure of agriculture in Barbados; Trans. Inst. Br. Geogrs. V.38, pp. 183-195.

Henshall, J.D., and King L.J. (1966): Some structural characteristics of peasant agriculture in Barbados, Economic Geography, V.42 (1), 74-84.

Hossain, M. (1974): Farm size and productivity in Bangladesh agriculture: a case study of Phulpur Farms; The Bangladesh Economic Review, V.2(1), pp. 469-500.

International Bank for Reconstruction and Development (IBRD); (1972): The Regional Development Potentials and Constraints, Technical Report No. 1 and 2, V. II.

Islam, M.A. (1965): Crop combination regions in East Pakistan; Oriental Geographer, V.9, pp. 1-16.

Jabbar, M.A. (1977): Relative productive efficiency of different tensure classes in selected areas of Bangladesh; The Bangladesh Development Studies, V.5(1), pp. 17-50.

Kendall, M.G.,(1939): The geographical districation of crop productivity in England: Journal of the Royal Statistical Society, V. 102, pp. 21-48.

King, L.J. (1969): The analysis of spatial form and its relation to geographic theory; Annals Asso. Ame. Geogr., V.59, pp. 573-595.

Klayman, M.L. (1960): International Index Numbers of Food and Agricultural Production: FAO Monthly Bulletin of Agriculture and Statistics, V.9(3), pp. 12-14 and 290-330.

Kostrowicki, J., (1964): The geographical typology of agriculture in Poland, Geographia Polonica, V.1, pp. 111-146.

_____ (1966): On the study of agricultural typology, Annals of the AAG., V.56, pp. 70-78.

_____ (1970A): Types of agriculture in Poland: a preliminary attempt at a typological classification, Geographia Polonica, V. 19.

_____ (1970B): Land use studies as a basis of agricultural typology of East Central Europe, Geographia Polonica, 19, pp. 263-279.

_____ (1970C): Agricultural typology: summary of the activities of the IGU Commission for the years 1964-68; Geographia Polonica, 19, pp. 11-29.

_____ (1973) : The typology of world agriculture: a preliminary scheme ; in Reeds, L.G., (ed.) Agricultural Typology and Land Use, Proceedings Agricultural Typology Commission's Meeting at McMaster University, Hamilton, Canada, pp. 2-52.

_____ (1974): The Typology of World Agriculture: Principles, Methods and Model Types, (Memeographed), Warszawa, p. 74,

Krumbein, W.C. (1959): Trend surface analysis of contour type maps with Irregular control point spacing; Journal Geophysical Research, V.64, pp. 823-834.

Laut, P. (1968): Agricultural Geography, Vol. 1, Melbourne: Thomas Nelson.

Mandeville, A.N., and Rodda, J.C. (1970): A contribution to the objective assessment of areal rainfall amounts; Journal of Hydrology, New Zealand, V.9, pp. 281-291.

Mellor, J.W. (1968): Developing Rural India, Ithaca: Cornell University Press.

Moran, P.A. (1948): The interpretation of statistical maps; Jounral of the Royal Statistical Society, V.10, pp. 243-251.

Morgan, W.B., nand Munton, R.J.G. (1971): Agricultural Geography; Methuen & Co. Ltd., London.

Morrison, B.M. (1972): Region of High Agricultural Productivity and their Socio-Economic Bases in Bangladesh; Unpublished Working Paper presented to the Bengal Studies Conference, St, Michael College, University of Toronto.

Muller, P.O. (1973): Trend surfaces of American Agrigultural patterns: A macro-Thünian analysis; Economic Geography, V.49(3), pp. 229-243.

Myrdal, G. (1968): Asian Drama, New York: Pantheon.

Nordbeck, S. (1962): The location of areal data for computer processing; Lund Studies in Geography, (C), 2. p. 41.

Peterson, J.A., and Robinson, G.F. (1969): Trend surface mapping of cirque floor levels; Nature, V.222, pp. 75-76.

Rahim, S.A., and Islam, M.S. (1974): The institutional framework of agricultural development in Bangladesh; Robinson, E.A.G. (ed), The Economic Development of Bangladesh, Within a Socialist Framework, Proceedings of a Conference held by The International Economic Association, Dacca, The MacMillan Press Ltd., London, pp. 165-175.

Rao, C.R. (1972): Data Base of Indian Economy; V.1, Statistical Publishing Society, Calcutta.

Rashid, H. (1967): East Pakistan: A Systematic Regional Geography and its Development Planning Aspects; Sh. Ghulam Ali & Sons (2nd ed.).

Robinson, A.H., and Bryson, R.A. (1957): A method for describing quantitatively the correspondence of geographical distributions; Annals of the AAG, V.47, pp. 379-391.

Robinson, G., Peterson, J.A., and Anderson, P.M. (1971): Trend surface analysis of corrie altitudes in Scotland; Scott. Geogr. Mag., V.87, pp. 142-146.

Robinson, A.H., Lindberg, J.B., and Brinkman, L.W. (1961): A correlation and regression analysis applied to rural farm densities in the Great Plains; Annals of the AAG, V.51, pp. 211-221.

Sengupta, P., (ed.) 1970: Census Atlas; V.1. Part IX. Delhi.

Shafi, M. (1960): Measurement of agricultural efficiency in Uttar Pradesh; Economic Geography, V. 36(4), pp. 296-305.

_____ (1972): A new approach to the delimitation of food productivity regions in India; Proceedings IGU Conference, Montreal, pp. 756-757.

Stamp, L.D. (1940): Land for Tomorrow; Indiana University, Bloomington, pp. 99.

_____ (1960): Our Developing World; London.

Stebelsky, I. (1964): An Analysis of Agricultural Production and Land Productivity Gradients in the Soviet Union in 1953; Unpublished Master's Thesis, University of Toronto.

Stryker, J.D. (1976): Population density, agricultural technology, and land utilization in a village economy; American Economic Review, V.66, pp. 347-358.

Studensky, G. (1927): Die Grundideen und Methoden der Landwirtschaftlichen Geographie; Weltwirtschaftliches Archiv, V. 25, pp. 185.

Tarrant, J.R. (1969): Some spatial variations in Irish agriculture; Tijdschrift Voor Econ. en Soc. Geographie, V.60(4), pp. 228-237.

_____ (1970): Comments on the use of trend surface analysis in the study of erosion surfaces; Trans. Inst. Br. Geogr., V. 51, pp. 221-222.

Taylor, P.J. (1977): Quantitative Methods in Geography: An Introduction to Spatial Analysis: Houghton Mifflin Co., Boston.

Unwin, D.J. (1973): The distribution and orientation of cirques in Northern Snowdonia, Wales; Trans. Inst. Br. Geogr., V.58, pp. 85-97.

_____ (1975): An Introduction to Trend Surface Analysis; CATMOG Series No. 5, Institute of British Geographers, Geo Abstracts Ltd., University of East Anglia, Norwich.

Whittlesey, D. (1936): Major agricultural regions of the earth; Annals of the AAG, V. 26, pp. 199-240.

Zaman, M.R. (1973): Sharecropping and economic efficiency in Bangladesh; The Bangladesh Economic Review, V.1(2), pp. 149-172.

VITA AUCTORIS

1941 Born on April 29, in Dacca, Bangladesh.

1959 Matriculation Examination from Cheora B. F. High School, Comilla, Bangladesh.

1966 Higher Secondary Certificate from Jagannath College, Dacca, Bangladesh.

1969 Bachelor of Arts with Honours in Geography from the University of Dacca, Bangladesh.

1970 Master of Arts in Geography from the University of Dacca, Bangladesh.

1972 Joined as Cartographer in the Department of Geography, University of Dacca, Bangladesh.

1976 Joined as Lecturer in Geography, University of Dacca, Bangladesh.

1979 Graduated from the University of Windsor, Canada, with the Degree of Master of Arts in Geography.