CHAPTER - 6

IMPACT OF AGRICULTURE ON SOCIO-ECONOMIC DEVELOPMENT
Impact of Agriculture on Socio-Economic Development:

After examining the levels of agricultural development and the levels of socio-economic development in the study area, it would be worthwhile to assess the impact of agriculture on socio-economic development in Tarai districts of Uttar Pradesh.

Agriculture can contribute significantly to overall development as it provides increased food surplus to the growing population, helps to expand the secondary and tertiary sectors, increases rural incomes and improves the welfare of the rural masses of any region. Agriculture contribute to overall development in following ways.

1) By increasing the agricultural production with the internal and external demands.

2) To transfer the resources, labour and capital from agriculture to other sector of economy.

3) Agricultural development helps in earning foreign exchange by export of agricultural products. The foreign currency obtained from the export can be used to import of capital goods needed to modernise
the economy.\textsuperscript{2}

4) By contributing to the process of industrialization either through supplying raw materials for the agro-based industries or through purchasing industrial goods.\textsuperscript{3}

5) Agricultural development also brings about social and cultural development as increased per capita income in rural areas invariably results in increased literacy and levels of education which are conducive for social transformation.

It is clear that increasing agricultural development makes important contribution to the socio-economic development and that within considerable limits at least. It is one of the pre-conditions, which must be established before a take off into self-sustained economic growth becomes possible. It is equally clear that social and economic change necessary to assimilate new industrial and technological development is possible through increased agricultural production.\textsuperscript{4}

In order to analyse the impact of agriculture on socio-economic development of the study area, the technique of regression has been used. The study of a
casual relationships between a dependent variable and one or more independent variables becomes more useful when the relationship is defined in terms of a mathematical form. These mathematical forms of the relationships are used in making predictions and also helps us in assessing the relative influence of each of the independent variables on the dependent variable.\(^5\)

The regression line in scatter diagram shows relationship between agricultural development and socio-economic development in Tarai districts of Uttar Pradesh.

In the diagram, X axis represents the agricultural development and Y axis indicates the socio-economic development in the region. Regression line is drawn, with the help of, \( Y = a + bx \).

where,

\[
b = \frac{\sum xy - \frac{\sum x \sum y}{n}}{\sum x^2 - \frac{(\sum x)^2}{n}}
\]

\[
a = \bar{y} - b \bar{x}.
\]

The Pearson's product movement correlation-coefficient has been used to analyse the actual relationship between agricultural development and socio-economic development in the study area. In the present
Figure 6.1
work Kerl Pearson’s coefficient of correlation has been worked out. It may be algebraically expressed as follows:  
\[ r = \frac{1}{n} \left( \frac{X - \bar{X}}{\delta_x} \right) \left( \frac{Y - \bar{Y}}{\delta_y} \right) \]

**Levels of Agricultural Development (1985-86):**

Figure 6.1, shows that there were five districts recording high level of agricultural development, three districts fell under medium level and four districts came under low level of agricultural development. The districts recording high level of development were Moradabad, Pilibhit, Rampur, Bijnore and Deoria, the score range of these districts were more than + 0.250. Medium level of agricultural development was recorded by Barielly, Gorakhpur, and Shahjahanpur districts. The score range of these districts varied between + 0.250 and - 0.250. The low level of agricultural development was identified in remaining four districts namely, Basti, Gonda, Kheri and Bahraich. The score range of these districts were less than - 0.250.

**Levels of Socio-Economic Development (1985-86):**

Figure 6.2, indicates that there were four districts showing high level of socio-economic development in
Figure 6.2

TARAI DISTRICTS OF UTTAR PRADESH
LEVELS OF OVERALL
SOCIO-ECONOMIC DEVELOPMENT
(1985-86)

INDEX VALUE
HIGH
0.25 & ABOVE
0.25 TO 0.25
0.25 & BELOW
MEDIUM
LOW

Kms
20 10 0 20 40
Tarai districts of Uttar Pradesh, while four districts came under medium category and remaining four districts were in low level of socio-economic development.

The districts of high level of socio-economic development were Bijnore, Barielly, Shahjahanpur and Kheri. The score range of these districts were more than +0.250. The districts of medium categories were Moradabad, Rampur, Pilibhit and Gorakhpur the score range of these districts were found between + 0.250 and - 0.250. Remaining four districts namely Deoria, Basti, Gonda and Bahraich concided with low level of socio-economic development.

Impact of agriculture on Socio-Economic development in 1985-86:

An examination of figure 6.3, reveals that agricultural development and level of socio-economic development generally decrease from west to east. This tendency was observed more strongly in the case of agricultural development than that of levels of socio-economic development. When the two maps were compared, it was found that, excluding a few exceptions, all districts of high levels of socio-economic development
TARAI DISTRICTS OF UTTAR PRADESH
(SCATTER DIAGRAM)
Relationship between Agricultural Development and Socio-Economic Development (1985-86)

Figure 6.3
were found in the districts of high agricultural development. Similarly, medium level of socio-economic concided with the medium level of agricultural development and majority of low level of socio-economic development were found in the districts of low level of agricultural development.

An examination of figure 6.3, reveals that out of twelve districts, five districts namely, Bijnore (1) Moradabad (2) Rampur (3) Pilibhit (6) Deoria (8) came under high level of agricultural development. All of these except, Deoria (8) also experienced high level of socio-economic development. The reason of being Deoria in low level of socio-economic development, despite having high agricultural productivity might be their backwardness in terms of health facilities, means of transportation and communication and backwardness in industrial sector. These districts have been neglected by the politicians and decision makers since a long time.

Four districts namely Barielly, Shahjahanpur, Gorakhpur and Basti came under category of medium level of agricultural development. Out of these districts Barielly and Shahjahanpur recorded high level of socio-economic development due to their high level of
industrialization, better health facilities and other infrastructural facilities, whereas Gorakhpur and Basti were identified under medium category of socio-economic development.

In the low level of agricultural development, there were three districts namely, Kheri (11) Gonda (12) and Bahraich. All these districts except Kheri also experienced low level of socio-economic development. Kheri in spite of being agriculturally less developed, experienced, moderate social and economic development, because of its highly developed transport and communication system, and moderate development in terms of education, industrialisation in moderate way.

In general a positive correlation between agricultural development and socio-economic development has been observed with some exceptions. The regression line in scatter diagram as well as coefficient of correlation show that a positive correlation between agricultural and socio-economic development exists in the study area. The value of coefficient of correlation is 0.21 which is also indication of positive correlation.
Levels of Agricultural Development (1995-96):

In the year 1995-96, there were only four districts recording high level of agricultural development, whereas five districts coincided with medium category and remaining four districts were found in low level of agricultural development.

Figure 6.4, shows that the agricultural development was found high in Moradabad, Rampur, Barielly and Gorakhpur, where the score range was more than to 0.250. A significant decrease in the development of agriculture was noticed in Bijnore district which shifted from high to medium level of agricultural development. Medium level of agricultural development was recorded in five districts namely Deoria, Bijnore, Pilibhit, Shahjahanpur and Basti where their score range between + 0.250 and - 0.250. The region of low level of agricultural development covered the districts of Kheri, Sidharth Nagar, Gonda and Bahraich with score range less than - 0.250.

Levels of Socio-Economic Development (1995-96):

Figure 6.5, shows that five districts were found under high, four under medium, and remaining four
Figure 6.5

TARA DISTRICTS OF UTTAR PRADESH
LEVELS OF OVERALL
SOCIO-ECONOMIC DEVELOPMENT
(1995-96)

INDEX VALUE
0.25 & ABOVE
0.25 TO 0.25
0.25 & BELOW

HIGH
MEDIUM
LOW

Kms
districts under low category of social and economic development.

The districts of high level of socio-economic development included Bijnore, Moradabad, Rampur, Barielly and Gorakhpur, with the score range above +0.25. The districts under medium level of socio-economic development were identified as Shahjahanpur, Pilibhit, Sidharth Nagar and Kheri and their score range varies between +0.25 and -0.25. The remaining four districts namely, Deoria, Basti, Gonda and Bahraich occupied the same position, as they were in low level of socio-economic development during 1985-86.

**Impact of agriculture on Socio-Economic development (1995-96):**

A deep insight of the figure 6.6 indicate that agricultural development and socio-economic development go hand in hand in the same direction decreasing from west to east in the study area as it was at previous point of time. More or less each category of agricultural development correspond to the same category of social and economical development with few exceptions.

An examination of figure 6.6 reveals that four
TARAI DISTRICTS OF UTTAR PRADESH

(SCATTER DIAGRAM)

Relationship between Agricultural Development and Socio-Economic Development (1995-96)

\[ Y = 0.1131 + 0.0762 \]

Figure 6.6
districts out of thirteen namely, Moradabad (2) Rampur (3) Barielly (4) and Gorakhpur (7) recorded high agricultural development, and all these four districts also coincided with high level of socio-economic development, which is fairly a clear indication of positive relationship or great impact of agriculture on socio-economic development in the study area. On the other hand five districts namely, Bijnore (1) Shahjahanpur (4) Pilibhit (6) Deoria (8) and Basti (9) came under medium category of agricultural development.

If one see the socio-economic development of these districts, only Bijnore improved its position and attained a high level of social and economic development. The position of Deoria and Basti deteriorated and they came down from medium level of agricultural development to low level of socio-economic development on the other hand, Kheri and Sidharth Nagar improve their position and moves upward from low level of agricultural development to high level of socio-economic development.

Out of thirteen districts of the region, eight districts have shown high positive correlation between agriculture and socio-economic development.
It may be concluded that in general, a positive correlation between levels of socio-economic development and agricultural development has been observed in the study. The coefficient of correlation (r) turns up as high as 0.51. This is significant at 99 percent level of confidence.

The findings of this analysis verify the hypothesis that the socio-economic development is a function of agricultural development. That is, higher level of socio-economic development are associated with the higher level of agricultural development and vice-versa in the study. In the Tarai districts of Uttar Pradesh, the socio-economic development appears to be an outcome of high productivity and agricultural development. Agriculture provides resource base for industrialization and urbanization. Town and cities have developed in the high productivity region or high level of agricultural development to function as market centers for surplus agricultural production. Industrialization in the region is generally agro based. Raw materials from agriculture such as sugarcane, food grains and oil seeds are processed in these industries. In order to distribute surplus agricultural industrial production, infrastructural
facilities like railways and roads have been developed in the region. Similarly higher agricultural incomes due to high productivity or higher agricultural development have resulted in the social development through increased education. On the contrary areas of low agricultural development suffer from the lack of urbanization, industrialization, infrastructural facilities and social development.
REFERENCE:


