CHAPTER 4

AGRO-BASED INDUSTRY

Introduction

Productive agricultural land in the eastern plain of the district has helped the area to develop agro-based industry, in which the basic raw material is directly drawn from the agricultural field. So, this industry is highly concentrated in agriculturally rich police stations like Barddhaman, Kalna, Aushgram, Galsi, Memari, Katwa, Raira, Jamalpur and Kanksa. Most of the agro-based industrial units produce agricultural food-products.

This industry accounts for above 1/3 of the district's total number of industrial units but absorbs only 3% of the district's total number of industrial workers. According to the classification of Annual Survey of Industries, agro-based industry of Barddhaman district is divided into four groups:

(a) Agricultural Food Products
(b) Agricultural Non-Food Products
(c) Beverages
(d) Cotton Products

Sketch 1.1 shows the percentage share of different types of agro-based industries in the district.

Agricultural Food Products

About 95% of the district's total number of agro-based industrial units is under agricultural food and non-food products (Table-1). The growth and development of the food processing industry is entirely dependent on the growing pattern of rice mills, as paddy is the principal foodgrain of the district. Rice mills occupy a major position in this industry, through it is supplemented by flour mills and oil mills.
TABLE - 1

Percentage share of industrial units in agro-based industrial sector

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</thead>
<tbody>
<tr>
<td>State Dairy</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.85</td>
<td>0.69</td>
<td>0.67</td>
</tr>
<tr>
<td>Rice Mills</td>
<td>91.86</td>
<td>83.50</td>
<td>78.33</td>
<td>77.97</td>
<td>76.55</td>
<td>77.33</td>
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<tr>
<td>Flour Mills</td>
<td>0.00</td>
<td>0.00</td>
<td>1.67</td>
<td>1.59</td>
<td>2.76</td>
<td>2.00</td>
</tr>
<tr>
<td>Oil Mills</td>
<td>0.00</td>
<td>6.19</td>
<td>10.00</td>
<td>9.67</td>
<td>12.72</td>
<td>12.00</td>
</tr>
<tr>
<td>Others</td>
<td>2.33</td>
<td>5.16</td>
<td>5.00</td>
<td>5.92</td>
<td>3.45</td>
<td>2.67</td>
</tr>
<tr>
<td>Agricultural Food &amp; Non-food Products</td>
<td>94.19</td>
<td>94.85</td>
<td>95.00</td>
<td>96.00</td>
<td>96.17</td>
<td>94.67</td>
</tr>
<tr>
<td>Beverages</td>
<td>4.65</td>
<td>4.15</td>
<td>4.17</td>
<td>2.00</td>
<td>1.83</td>
<td>3.33</td>
</tr>
<tr>
<td>Cotton</td>
<td>1.16</td>
<td>1.00</td>
<td>0.83</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
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Rice Mills

The registered rice mills account for about 83% of the district's total number of units in agricultural food-processing and absorb 88% of their workers at present. These mills are concentrated in Barddhaman, Kalna, Aushgram, Galsi, Kaksa, Raina, Memari, Katwa, jamalpur, Khandaghoosh and also are scattered less significantly in some other police stations (Sketch 1.2). The industrial importance of these police stations are studied below.

At present, Barddhaman stands ahead of all other police stations, in the number of rice mill units (Table 1 in the appendix). Nearby 40% of district's total number of rice mills was concentrated here in 1960. A certain growth of rice mills (25%) and their manpower (25%) was marked during 1960-65. At that time 1/4th of the area's total number of units were closed.
Sketch 1.2 Concentration of Rice mills (Bardhaman district, 1960-82)

- One industrial unit

(permanently and temporarily) causing unemployment to 14% of the area's total workers. But this situation was compensated by the establishment of some new units. This compensatory situation was repeated in the following years* though no growth of rice mills was seen then. No growth of rice mills workers was also recorded during 1975-80 owing to the absence of any new unit and permanent closure of six rice mills in 1975. During 1980, about 20% of the rice mills was new and this eventually led to 10% growth of rice mills. The present picture clearly shows that the percentage share of rice mills and their average employment capacities remain constant compared to the base year. The total picture of the area is distorted sometimes due to the closure of some units. But the establishment of new units, the opening of some temporarily closed units and the presence of some existing units help the area to stand ahead of other areas.

Kalna stands second (Table-1 in the appendix) in the concentration of rice mills from 1975 onward. It was in this position in 1960. But in 1965, about 50% of the area's total number of rice mills was permanently closed (sketch 1.3) causing unemployment to 60% workers of the area. But the new establishments in the same year and in the following year helped the area to remain in its position. During 1975, no new industrial unit was found and only a few have come up at present. The area has suffered either from temporary or permanent closure of rice mills all through the period.

Aushgram is a third leading police station (Table 1 in the appendix) in concentration of rice mills. Now the employment capacity has decreased to a considerable extent. A growth in industrial employment was noticed between 1960-70. This period was followed by a declining curve in employment

* Old units increased their capacities in 1975.
** New establishments were made by Marwaris - A report from field survey.
§ Non-registered husking mills were in operation and the local farmers were benefitted. So, the condition of rice mills had gone down in Kalna, Katwa and Aushgram police stations - A report from field survey.
CLOSED RICE MILLS IN SOME POLICE STATIONS OF BARDDHAMAN DISTRICT

Sketch 1:3

PERCENTAGE SHARE OF OIL MILLS

Sketch 1:4
capacity and stagnation in the number of rice mills as a large number of rice mills were closed particularly in 1965 and in 1975 (Sketch 1.3).

In Katwa the employment capacity as well as the number of rice mills have gone down to some extent.

In Raina, Jamalpur, Galsi and Memari, the rice mill units have increased, though their employment capacities have not. All these police stations did not see the growth of industry particularly in 1975. On the other hand, the growth was noticed up to 1970 which was followed by a declining curve in 1975. Such a decline was somewhat compensated in the following years.

In Kanksa and Khandaghosh, rice mills developed from 1970. A marked growth of industrial units is noticed from 1980 in Kanksa. But the position is insignificant.

Jamuria is the only police station which was benefitted by the establishment of three new rice mills in 1975. This helped to absorb nearly 70% of the area's total number of workers.

Rice mills of Barbani, Raniganj and Durgapur are not significant (Table-1 in the appendix) as most of these areas have one unit, each with a small employment capacity and some of these were permanently closed from 1975.

Size

In general the size of a rice mill is very small and the employment capacity of a particular unit fluctuates every year. Thus, a factory belonging to a particular class in one particular year may change its size class in the next year. Most of the rice mills belong to size class I and II. In Barddhaman

* Smallest and small - both these two types of units are found.
most of the existing factories are in size class II. Nearly 95% of the areas total number of rice mills reduced their employment capacities all though the period. Such a decline in employment capacity was noticed especially in 1980* and this led to a reducement from size class II to I. This type of change in size class is also seen from 1975 or from 1980 in the police stations of Aushgram, Kalna, Galsi and Katwa. The new establishments in these years had small employment capacities causing increase in the number of factories in size class I. At present, 98.4% rice mills belongs to size Class-I.

Oil Mills

The oil mills are concentrated in the police stations of Raniganj, Kulti, Aushgram and Barddhaman. About 12% of food processing industries is oil mills. At present, these can absorb only 4% of the total number of workers in the group. These mills produce mustard oil and the mustard is supplied from Raniganj, Kanksa, Jamuria and Barddhaman police stations. Oil mills were established from 1965 (Sketch 1.4).

Most of the oil mills are concentrated in Raniganj. At the beginning there was no oil mills in the district. Some new oil mills came into existence in Raniganj during 1965. Those could absorb about 70% of the areas total number of food processing workers at that time. Now the area has seen 140% growth of oil mills which is a district record in this industry.

In Kulti and Aushgram, oil mills were established from 1970 and 1975. But the number is not significant in this industry. Barddhaman which ranks first in the concentration of rice mills, has one oil mill established in 1965. The oil mill of Asansol came into existence in 1982.

* In 1980, most of the rice mills of Barddhaman police station adopted drier machine. A report from field survey.
Flour Mills

Wheat is the basic raw material to produce flour. Flour mills are found to be developed in Asansol and Durgapur from 1970. This industry is not statistically significant in labour concentration. Flour mills of Durgapur can absorb 70% of the area's total number of workers in food-processing industry, which accounts for only 3% of the district's total number of workers in the same industry. The flour mill of Asansol was the area's only food-processing industry up to 1980, which is closed at present.

Others

It includes different types of agricultural food-products like flour and oil mills or flour and rice mills etc., which are called mixed type. Most of these were established in 1960 or 1965. These mills are found in the police stations of Kulti, Raniganj and Galsi and these are in existence till today.

Beverages

The industrial units producing ice, distilled water and engaged in bottling and packaging, are concentrated in Asansol, Durgapur, Raniganj and Barddhaman police stations. About 3% of the agro-based industrial units is under this group and that can absorb above 13% of workers.

Asansol is superior in absorbing the manpower since 1960. Asansol Distillery was responsible for such superiority and now its employment capacity is decreased. The small units of other police stations are insignificant. Among these, the small existing units of Barddhaman and Raniganj were closed from 1975.
Cotton mills and Cotton products

This group of industry absorbs about 20% of the district's total number of agro-based industrial workers.

In Asansol the Dhakeswari Cotton mill was the only existing textile unit giving employment to 44% of the district's total number of agro-based industrial workers in 1960 (Sketch 1.1). Such a large industrial unit is hardly found in any other agro-based industry. But this unit was temporarily closed in 1965 and then permanently in 1970. So, the percentage share of textile industrial workers cannot be found from 1965 in sketch 1.1.

In Bardhaman one medium size cotton mill was established in 1970 and since then the manpower has grown by 87%. Some wearing apparel producing units are also found here from 1975.

Durgapur State Dairy *

It is the only registered dairy of the district established in 1975. Its employment capacity was decreased in 1980. Now it absorbs about 92% of the district's total number of workers.

Summary of Findings

Some relevant characteristic features of the district’s agro-based industry may be enumerated from the above-mentioned detailed analysis of the industrial situation:

1. Agro-based industry is highly concentrated in the eastern plain of the district mainly due to easy supply of raw materials from agricultural fields. The favourable geographical condition encourages the district's agricultural production. Attempts were made by IADP to produce HYV crop in

* Not an industrial unit & may be grouped in chapter 10
the district from 1962. These helped the growth of agricultural food-products in the district. It contains 95% of the total number of agro-based industrial units in the district. Paddy is the principal foodgrain and its production is responsible for the district's supremacy in rice milling. These mills account for 83% of the total amount of agricultural food-products, absorbing above 88% of the total number of workers in agricultural food-products' industry. Rice mills occupy a major position in agro-based industry.

2. Barddhaman police station ranked first in the district both in terms of industrial units and labour concentration in rice mills all through the period. At present, 41% of the district's total number of rice mills is concentrated in this area employing 40% of total number of rice mills workers. The area saw a marked growth during 1960-65 and 1975-80. The following periods (1965-75 and 1980-82) showed a deceleration in growth which is statistically significant. A great number of existing units are found in Barddhaman police station, most of which have reduced their employment capacities now. Thus the size of rice mills fluctuated between size class II and size class I.

3. In Aushgram, Kalna and Katwa closure of rice mills has been going on throughout the period. Only a few new units have come up in some years. Thus, these police stations have seen a gradual decline in the number of rice mills. The remaining police stations show an increasing rate to rice mills units, but their importance from the point of total number of rice mills in the district, is very low.
4. The district has experienced a temporal variation in the growth of rice mills. During 1965, 40% of the total number of rice mills was closed. Such a gap was somewhat filled in 1970 when 33% of the total number of rice mills was newly established. The situation again suffered a major slowdown in growth in 1975 as there was one new unit while 28% rice mills was closed.

5. Other types of agricultural/food products, like oil mills, flour mills and others, are developed particularly in the police stations of the west. Among these, most of the oil mills are found in Raniganj. The other police stations are less significant.

6. Other than agricultural food-products, beverage and cotton mills have some importance in the district. In Asansol these industries are developed. The large size cotton mill of Asansol was closed from 1965.