Understanding the Growth and Prospects of Agro-Processing Industries in West Bengal

Executive Summary

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Introduction

It is being increasingly realized nowadays that the very capacity of the agricultural sector is not enough to absorb the growing labour force. On the other, the organized industry sector, due to its capital-intensive nature cannot offer much scope for absorption of additional labour force. Further, the environment of liberalization, privatization and globalization has thrown up newer challenges for employment. Obviously, all these have aggravated the un-employment and under-employment situation in India which underscore the need for alternative avenues for employment generation. This brings the development of agro-based industries into sharp focus. The growth in agro-based industries has a big potential to trigger development through adding value to the farmers' produce, generating employment opportunities and increasing farmers' income. This in turn motivates the farmers for better productivity and opens up possibilities of industrial development. The processed products also have a large export potential. However such potential is hardly exploited. This underscores the need for undertaking the study. In the state of West Bengal, the rapidly increasing production of vegetables and foods has created a vast potential for food processing industries. The state government of West Bengal has also been developing infrastructure for tapping the potential for food processing industries in the state. Despite all these, when we look at the Annual Survey of Industries data, agro-industry does not appear to be the dominant constituent of the industrial sector of West Bengal. As a whole, the strength of agro-based industry in the state of West Bengal is comparatively less than those of non-agro based industries. It is this trend in the growth of agro-based manufacturing enterprises calls for undertaking the study in West Bengal with the broad objective of studying the problems and prospects of agro-processing industries in the state.

Methodology and Data

The study is based on both secondary and primary data. For secondary data, the study draws upon the sources such as the quinquennial National Sample Survey data on unorganized manufacturing and Annual Survey of Industries data for the organized segment for the select years 1994-95 and 2000-01. In India, bulk of the units in agroprocessing sector are small and unregistered. Considering this, primary level data from

the selected agro-based enterprises are collected in order to capture the problems at the grass root level so that recommendation for policy formulation can be made for the promotion of agro-based industries. The primary data was collected from the selected processing units through canvassing structured schedule and questionnaire prepared for the purpose of the study. In selecting agro-processing units, the agro-based industries are classified into agro-food industries (or food-processing industries) and agro non-food industries. Thus, primary data are collected from the selected processing units chosen from both agro-food industries and agro-non-food industries. All together, 30 sample processing units are studied selecting at random proportionately spread over food and non-food processing segment of agro-based enterprises. Considering the dominance of food processing activity in the total number of agro-based industries, 18 processing units are selected within the group of food processing and the rest 12 are from non-food processing segment of agro-based enterprises. Again, the food-processing activities are broadly divided into three categories viz. primary food processing units mainly grain processing units; spice and horticultural products and livestock based processing units including fish processing. Similarly, non-food processing units are broadly divided into four categories namely, textile products, wood and its products, paper and its products, leather and its products. Primarily, for the selection of units, sample districts by industry groups are identified on the basis of the annual survey of industries data considering the concentration of units of activities. Finally, the dominant processing unit in the district is selected consulting data from District Industries Centre (DIC), which is the nodal agency in each district. Within the group of food processing units, the selected processing units are paddy processing, fruit (mango) processing and fish processing. For each selected processing enterprise, 6 units of different sizes namely OAMEs, NDMEs and DMEs with their distribution as 3:2:1 are covered. Within non-food processing segment of agro-based industry, for each selected processing unit, three units of different sizes namely OAMEs, NDMEs and DMEs in the ratio of 1:1:1 are selected.

Results

Status of Agro-based Industry in the State: Analysis based on Secondary Data

Given the structure of the Indian Economy, especially in view of the importance of agriculture in the national economy, agro-industry is expected to continue to be the dominant constituent of its industrial sector. However, as revealed by Annual Survey of Industries data, the strength of agro-based industry in the state is comparatively less than

Table-3.1 Nature and Composition of Agro-based Industries in the State of West Bengal

		Working Units(Nos)					
Sl. No	Industry	Organized Sector			Unorganized Sector		
		1994-95	2000-01	% Change	1994-95	2000-01	% Change
1	Manufacture of food products	965	1048	8.60	550607	562432*	2.15
		(17.25)	(17.20)		(28.84)	(20.48)	
2	Manufacture of beverages,	124	461	271.77	350937	844643**	140.68
	tobacco and tobacco products	(2.22)	(7.57)		(18.38)	(30.76)	
3	Food processing	1089	1509	38.57	901544	1407075	56.07
	industries(1+2)	(19.47)	(24.77)		(47.23)	(51.24)	
4	Manufacture of textile & its	322	350	8.70	258428	552602	113.83
	products	(5.76)	(5.75)		(13.54)	(20.12)	
5	Manufacture of wood and wood	220	227	3.18	326796	368717	12.83
	products, furniture and fixtures	(3.93)	(3.73)		(17.12)	(13.43)	
	Manufacture of paper & paper						
6	products, printing publishing	324	308	-4.94	39571	31074	-21.47
	& allied industries	(5.79)	(5.06)		(2.07)	(1.13)	
	Manufacture of leather and						
7	leather	136	225	65.44	10618	10453	-1.55
	and fur products(except repair)	(2.43)	(3.69)		(0.56)	(0.38)	
	Non-food processing						
8	industries	1002	1110	10.78	635414	962846	51.53
	(4 to 7)	(17.92)	(18.22)		(33.29)	(35.06)	
	Total agro-based industries						
9	(3+8)	2091	2619	25.25	1536957	2369921	54.20
		(37.39)	(42.99)		(80.51)	(86.30)	
	Total non-agro-based						
10	industries	3502	3473	-0.83	372027	376340	1.16
		(62.61)	(57.01)		(19.49)	(13.70)	
11	All industries (9+10)	5593	6092	8.92	1908984	2746261	43.86
		(100.00)	(100.00)		(100.00)	(100.00)	

Data Source: 1. Annual Survey of Industries (ASI) data for organised manufacturing

2. National Sample Survey (NSS) data for unorganised manufacturing

Note: The latest available NSS data for the unorganised segment is for the year 2000-01.

Figures in brackets indicate percentages

^{*}includes beverages also, **includes tobacco products

those of non-agro-based industries. In the year 2000-01, organised segment of agro-based industries shared 42.99 percent in terms of units of enterprises (Table -3.1). For their non-agro based industries counterpart, the figure stood at 57.01 percent. Within the group of agro-based industries, food-processing industries predominate with their relative share being 57.62 per cent in the total number of agro-based enterprises.

During the concerned period between 1994-95 and 2000-01 food-processing and non food-processing units witnessed varying degree of increase. Within the group of food-processing industries, manufacture of beverages, tobacco and tobacco products increased at a fairly high rate while in the non-food processing segment, leather based units recorded highest increase followed by the units manufacturing textile products. With relatively greater share of non-agro based manufacturing units, the organised segment of manufacturing witnessed a decline of 0.83 per cent in the number of non-agro based enterprises during the period between 1994-95 and 2000-01. In other words, the organised segment housing relatively larger sized enterprises is now tending to concentrate more and more on agro-based industrial enterprises witnessing varying degree of increase in the selected groups of enterprises during the concerned period.

Under the unorganised segment of manufacturing enterprises, the dominance of agro-based industries is featured prominently in the state. In 2000-01, as many as 86.30 per cent of the total manufacturing units in the unorganized segment is contributed by agro-based manufacturing enterprises. Moreover, unorganized sector is in the main represented by food-processing industries with their relative share in units being 59.37 per cent in the total agro-based industries. The growth profile of the manufacturing enterprises in the unorganized segment during the reference period between 1994-95 and 2000-01 reveals that while the number of agro-based industries increased at a fairly high rate with the percentage increase of 54.20 per cent, their non-agro based counterpart witnessed very small increase (percentage increase of 1.16 per cent) in the number of units. Within the group of agro-based manufacturing enterprises, food-processing and non-food processing enterprises recorded the varying degree of increase, the percentage increase being 56.07 per cent for food-processing industries and 51.53 per cent for nonfood industries. Clearly, food-processing industries have grown faster than the non-food processing industries in the unorganized segment of manufacturing enterprises. It follows that the unorganized sector is now tending to concentrate more and more on foodprocessing industries with 40.63 per cent share in units of its non-food processing counterpart. Overall, the changing trends observed in the unorganized segment, is that

agro-based industrial enterprises increased at a much faster rate than those of non-agro based industrial units. Within the group of agro-based enterprises, food-processing units increased their numerical strength appreciably. It was thus very similar to that observed in the organised segment in respect of compositional change of manufacturing enterprises during the reference period.

Analysis based on Primary Data

Profile of Sample Entrepreneurs of Agro-Processing Activities

The socio-economic profile of the sample entrepreneurs is analyzed by using the variables like social group, age, education, land-holding and previous experience. It can be seen that majority of the sample entrepreneurs belong to the category "others" i.e. other than SC & ST and OBC. It is only in the case of fish processing activity, majority of the entrepreneurs belong to SC & ST category. Entrepreneurs mostly belong to the middle age group of 25-45 years age, here again, with the exception of fish processing units where sample entrepreneurs belong to the age group of 45-60 years. Notably, none of the sample entrepreneurs was below 25 years.

The education of the entrepreneurs leaves a lot to be desired. The majority of the entrepreneurs have studied only up to middle level i.e. up to 10th standard. However, most of the entrepreneurs engaged in jute-based textile units are better educated having studied beyond 10th standard. Average education level of the entrepreneurs of food processing units is observed to be relatively low and they have learnt the processing activity traditionally.

As far as land holding is concerned, majority of the sample entrepreneurs engaged in food processing activity possessed some amount of land (less than 1ha) while entrepreneurs engaged in non-food processing activities, mostly do not possess land. Entrepreneurial households engaged in food processing activities have rural base and possess land combining both farm and non-farm activities. On the other hand, entrepreneurial households engaged in non-food processing activities are urban-based and do not possess land having the processing activity as the main occupation.

All the sample processing units covered under the study were existing ones. Thus it is found that all the sample entrepreneurs had previous experience/ knowledge ranging between 5 to 20 years. While majority of the entrepreneurs of the sample food processing units have learnt and followed the activity traditionally, majority of the entrepreneurs of non-food processing units was found received institutionalised training and gained working experience in carrying out the activity.

Getting employment is the major motivating factor behind choosing the food processing activity (83.33 per cent). The other equally important factor emerged was previous experience in the business activity which has motivated to carry on the activity traditionally (83.33 per cent). For non- food processing activities, the major factor which influenced the entrepreneurs to take up the activity was higher profit margin accruable from the activity (83.33 per cent).

The average size of the family of the sample entrepreneurs ranged between 4 and 5 for food processing enterprises while the same varied between 3 and 5 for non-food processing units. The average dependency ratio ranged between 30.00 per cent and 50.00 per cent for food processing industries. Dependency ratio is smaller for fish processing activity which indicates greater participation of the household members in the business activity. For non-food processing enterprises, dependency ratio varied between 17.00 per cent in the case of textile units and 61.00 per cent in the case of paper-based units. The average dependency ratio is found to be higher for non-food processing units (43.40 per cent) as compared to those of food processing units (38.88 per cent). Greater engagement of family labour in the food processing activity reduced the dependency level for the entrepreneurs of the food processing units. In majority of cases women are also the earning members in the entrepreneurs family of the food processing units.

Status of the Sample Units

Status of the units were ascertained in terms of year of existence, average age of the units and registration status. It was observed that all the sample-processing units covered under the study were existing ones and none of the sample units was set up new. As the proportion of existing units was high, the average age of the sample units was also high. It was observed that investors are not keen on registering their units with DIC. As observed, about 50 per cent of the total sample processing units was registered. Notably, OAME units are entirely unregistered.

The concerned activity is the main activity for all the non-food-processing units with only exception of OAME units manufacturing jute-based textile products. In the food-processing segment, for all the processing units other than OAME units of fruit processing, the concerned activity is seen to be the main activity. The average area of working place varied depending upon the requirement of the activity. The area of operation covered by the DME units of manufacturing enterprises is seen to be more than

the other category of manufacturing units. Further, a relatively lesser work area is covered by OAME units of manufacturing enterprises.

Production and Operation Cycle of the Activities

The level of utilization of the unit was assessed in terms of number of days worked in a month and that of number hours per day. As observed, the level of utilization/working of the units was influenced by availability of working capital and seasonality of the activity in terms of input availability and demand for output. For all the activities, it is seen that monthly working days ranged between 26 to 30 days. The difference is noted in the case of per year working days. Working days per year for food processing units are relatively less than those of non-food processing units. Low level of demand for the product and non-availability of raw materials adversely affected the number of working days in a year for the food-processing industries.

Depending on the time taken for processing of the input, the number of production cycles each unit completes is seen to be different. The normal feature, which has been observed is that the number of production cycles which a unit completes in a year differs with the type and size of activity. Notably within the category of food processing units, the number of cycles completed in a year increased with the size of the unit. Among the non-food processing activities covered under the study, all the activities have low duration of production cycles and thus the number of production cycles completed in a year is comparatively high for them as compared to their food-processing counterpart.

Sources of Raw Materials and Marketing Linkages of the Processed Product

The sample food processing units being relatively smaller units have the limited capacity to reach out to various markets. As observed, the food processing units as a whole have obtained raw materials from farmers directly (72.22 per cent) and they do not have strong linkages with input market. Non-food processing units however directly come in contact with the market through established trade/ market channel, having obtained raw materials from the input market. Further, it is observed that some of the units have reportedly procured raw materials from more than one source, the proportion of such units being 22 per cent for food processing units and 50 per cent for non-food processing units.

With regard to the produce sold by the processing units, the sample processing units are found to have linkage with various domestic markets stretching from the home district to various places all over India. It can be noticed that the unit owners (both food

and non-food) come in contact with the terminal markets located in other districts even in other states of India apart from having their linkage with the local output market. In case of food processing units, the participation of the units in the local product market is relatively more as compared to those of non-food processing units.

It can be observed that no processing unit in the sample except the fish-processing unit has involvement in the export market. For the fish processing units, 2 units out of the sample of 6 units are found to have participated in the export market, one unit each through domestic based export merchant and domestic based export agent. For the other categories of sample units, no unit in the sample has been found to have the capacity to export the produce and hence the entire output has been sold domestically. DME units of fish processing activity reported to have sold in the export market to the tune of about 80 per cent of their processed product.

Cost of Production

Costs involved in the production process consisted of two components viz. recurring fixed costs and recurring variable costs. Evidently, all the activities incurred some recurring fixed costs. Within the group of food processing units, investment in paddy processing unit has a very high fixed cost of Rs.424331.67 followed by fruit processing activity at Rs.264283.33 and fish processing unit at Rs.175091.67 per year. For the non-food processing units, annual recurring fixed cost was very minimum at Rs.4433.33 in case of units manufacturing textile (jute) products, followed by manufacturing units of wood-based products at Rs.66916.67, leather based products at Rs.106533.33 and paper-based products at Rs.244166.67. Heavy fixed cost incurred by the units manufacturing paper-based products was mainly on account of higher depreciation charges (due to higher investment in machinery), higher interest payment for the bank loan and other annual costs like insurance and tax payments. On the other, low depreciation cost due to capital saving nature of the investment, relatively lower loan amount and thereby interest payments, had contributed to keep the recurring fixed cost at very low level in the case of manufacturing units of textile (jute) products covered under the study.

As far as recurring variable cost is concerned, it can be seen that spending on raw materials is the major component of variable cost of the investment for all the processing activities. Notably, the share of this component is found to be relatively higher for the food processing industries. The percentage share varied from 55 per cent to 95 per cent in

case of food processing industries while the same varied from 67 per cent to 74 per cent in case of non-food processing industries. Within the group of food processing units, the proportion of cost on raw materials topped the list for the paddy-processing unit followed by the fish processing and fruit processing activities respectively. In general for all the processing units, proportion of cost on raw material is found to have declined with the increase in the size of the unit in the category.

Net Income from Investments

With regard to net income derived from the investment, it may be noted that all the activities gave positive net income being varied among the activities depending upon the size of the investment. This is uniformly observable in the case of food processing units. It may be seen that within the group of food processing units, paddy processing activity gave maximum net income at Rs.1,85,718 per year followed by fish processing activity at Rs.1,61,583 and fruit processing activity at Rs.1,45,666. Small investment in units like fruit processing yielded net income of smaller amount in comparison with other units in the food-processing category. For the group of non-food processing units, this particular pattern is not uniformly observed, although, paper-based processing units with maximum investment among non-food processing units accrued maximum net income of Rs.1,15,333 followed by wood-based processing units at Rs.89,583, leather-based processing units at Rs.74,133 and jute-based textile units at Rs.68,800. For all the processing activities (food and non-food), net income increased with the size of the unit.

Employment Generation

Employment generation by the processing units covered under the study showed wide variation. In the food-processing category of enterprises, maximum employment generation from the investment was observed in the case of fish-processing unit with 7,662 man-days per unit per year followed by fruit-processing (4,195 man-days) and paddy-processing (1,550 man-days). Among the non-food processing units, maximum employment generation by the activity was observed in the case of wood-based product manufacturing unit (2,150 man-days) followed by paper-based unit (2,100 man-days), leather-based unit (1,760 man-days) and jute-based textile product unit (1,730 man-days). As expected, labour employment in the units increased with the increase in the size of the unit. With regard to employment across sexes, fruit-processing units in the food-processing sector and jute-based textile units in the non-food sector are seen to be female-dominated ones.

Problems Faced by Manufacturing Enterprises

Given the dominance of the unorganised sector in the state, agro-based enterprises are mostly tiny and small household based enterprises. Reportedly the problem of non-availability of raw materials throughout the year, variability of prices of raw materials and absence of information network to keep track of raw materials prices and availability came to be featured prominently in the array of problems faced by the entrepreneurs. For food processing units the major problem in procuring raw materials reported to be variability of prices of raw materials (cent per cent) followed by absence of information network (72.22 per cent) and non-availability of raw materials (66.67 per cent) throughout the year. As far as the non-food processing units are concerned, the specific problem faced by the enterprises in procuring raw materials reported to be variability of prices of raw materials (cent per cent) similar to those of food-processing units. Notably, the problem is reported uniformly by all categories of enterprises. For these units, the problem of non-availability of raw materials did not stand in the way of functioning of the unit, rather, the next important problem faced by the enterprises reported to be absence of information network (50 per cent) to keep track of raw materials prices and availability.

In food processing industries, raw materials from agriculture and allied sectors constitute the major component of cost of production. Cost on raw materials further increases in the face of variability of prices of raw materials during the seasons. Moreover, on account of variability of prices of raw materials, it is difficult for the processing units to fix prices of the processed product well in advance which has a direct bearing on the marketing of the product. In the absence of information network, the entrepreneurs of the units are left unaware about the movement of raw materials prices and availability. For non-food processing units, availability of raw materials is not the major problem, rather, they face one major problem of variability of prices of raw materials occurring during the year. Similar to food-processing units, they also face difficulties in fixing prices of products, having bearing on the marketability of their products.

In the field of marketing of processed products, reportedly for food-processing units, the main problem was lack of proper domestic market of processed products (72.22 per cent) followed by absence of good network purveying market information (66.67 per cent) and dependence on middleman for marketing the processed products (66.67 per cent). Notably, all the OAME units in the food-processing segment reported these three problems uniformly across the category of enterprises. Reportedly, for non-food

processing units, the major problem was absence of strong network for obtaining market information (58.33 per cent) followed by lack of proper market of processed products (50 per cent) in domestic market and dependence on middleman for marketing the processed products (41.67 per cent). Here again, OAME units in all categories of enterprises reported the above three problems in the sphere of marketing of their products.

Prospects of the Units

The state of West Bengal is a significant producer of many horticultural and agricultural crops. Besides, West Bengal being the largest producer of freshwater fish and second largest producer of shrimps offers extensive scope for investment in the area of processing of fish. Processed fish are in great demand in international markets. All these give it a natural advantage to invest in grain processing, fruit processing and fish processing. In general, the state has a comparative advantage to invest in food processing industry. On the basis of analysis of secondary data, the present study reveals that foodprocessing sector as a whole witnessed higher growth rate as compared to the non-food sector both in the organised and unorganised segments. As revealed by primary data, within the group of food processing industries, paddy-processing units gave maximum net return. However, the activity faces problems in its day-to-day operations. As revealed by primary data, the major problem encountered by the paddy processing enterprises is the variability of prices of raw materials followed by the absence of information network. Paddy is the raw material for the paddy processing units. Although the State of West Bengal is the significant producer of paddy, rice milling processing units face the seasonal problem of non-availability of paddy as raw material for the paddy-processing units. In the absence of information network, the processing units have become subject to paying variable prices of raw materials at different points of time during the year, the second major problem faced by the paddy-processing enterprise. However, the state of West Bengal being blessed with largest production of paddy has the potentials for investing in paddy processing industry. The industrial units in future can take advantage of the growing demand for the value added processed product in India as well as abroad. This would be possible if the units have access to information network to keep track of raw materials prices and availability.

Among the food processing units selected for the study, fruit (mango) processing activity yielded net income of smaller amount in comparison with other units in the food-processing segment. All the sample units belong to the un-organized sector with small

size of the investment. The processed products of the selected units included Jam, Jelly, Sauce, Slice, Pickles/ Anchar. Due to having demand for the fruit-based processed products in the domestic as well as international market, mango-processing units have the good potential for expansion. However, the major problem faced by these units is the non-availability of raw materials throughout the year, the same being encountered particularly by the OAME units of enterprises and accordingly facing the problem of variability of prices in procuring raw materials for the product. Further, in the wake of lack of proper market for the processed product and absence of marketing information network, the units have to compromise in availing reasonable prices for their products. In view of production and availability of mango as raw materials of the processing units, their exists potentials for setting up mango processing units in the fruit processing sector. They are however provided with proper infra-structural support for preservation of mango fruit as well as in getting remunerative prices for their product.

Apart from the above, the state has the comparative advantage in fishery and thus it is in one of the most important sectors for investment in the state. Traditionally fishing communities preserved fish by salt curing and drying them out in the sun. The nature of the fish processing industry has undergone changes with large-scale export of prawns and shrimps etc. Today the industry is modern and mechanically sophisticated. As observed from the study of sample fish processing units, traditional sun-drying fish processing units belonging to OAME and NDME categories faced the problem of non-availability of raw materials throughout the year. They also equally face the problem of marketing of their products. Processed products of the units involved in sun-drying of fishes are marketed domestically through wholesaler /middleman who passes the product to the retailer from whom consumers procure. The prawn processing units belonging to DME category faces the problem at the stage of procuring raw materials who purchase the same mainly through agents. However, marketing is no problem for prawn processing unit, where the unit having link with the export market used to market their product to the consumers through the wholesaler. The constraint / problem common to the OAME and NDME units of fish processing enterprises is the absence of information network both in the sphere of availing raw materials and marketing of the product. Therefore fish processing units having their large potential in the state could enhance their efficiency if they are provided with assistance in terms of creating access to information network.

With the growth in urbanization, rising economic well being and spread of education, there has been a shift in the pattern of consumption expenditure away from food items towards non-food items such as those based on textiles, wood, paper and leather. As revealed form the analysis of secondary data, although there has been an expansion in the number of non-food processing units both in the organized and un-organized segments of agro-based industry, the rate of expansion is lower as compared to food processing units. Within the group of non-food industries, textile and leather units have shown relatively better performance in terms of their numerical strength. The analysis of primary data collected from the sample processing units however clearly revealed that textile and leather units generated relatively lower net income. Amongst non-food processing enterprises, paper-based manufacturing units gave highest net return and thus there exists good opportunities for investment in units manufacturing paper-based products.

As revealed from the analysis of primary data, the textile units have faced the basic problem of low market demand for the products. Lack of internal market and low income generated by the units are the main hindrances that stand in the way of growth of textile units. In our sample processing units, leather based activities included items viz. manufacturing of ladies purses, shoes, leather jackets and bags. Similar to textile units, they also face the problem of marketing of their products. The common problem faced by the entrepreneurs of leather and textile units reported to be the absence of network for the marketing of their products. Obviously, these units could enhance their numerical strength if they are supported by better infrastructure providing market information for their processed product.

Conclusions and Policy Implications

The following are the major policy recommendations emerged from the study.

* Lack of adequate infrastructure like marketing infrastructure, storehouse, cold-storage facility appeared to be the greatest impediment to the growth of agro-based enterprises. This is clearly evidenced in primary data analysis of sample processing units. Agricultural development alone cannot take care of the desired growth in agro-based manufacturing enterprises unless it is backed by easing of infra-structural bottlenecks. While agricultural development would act as a prime mover in initiating the process of growth of agro-based enterprises, the development of infrastructure would facilitate the process of expansion of agro-based enterprises making it possible to realise scale and transaction cost advantage. Thus public investment in developing the required infrastructure needs to be stepped up for the growth of agro-based enterprises (Attn: West Bengal Industrial Development Corporation (WBIDC), Government of West Bengal).

- * Pricing of products is an important element of marketing of agro-based products. In the present study, sample-processing units experienced one major problem of variable prices of raw materials varying over the seasons. In the face of variable prices of raw materials, the processing units find difficult in fixing prices of their products in advance. This has deterred these units from entering into forward contract with the customers who can purchase their products at reasonable prices and thus ensuring the marketability of the products. Moreover, for want of information network infrastructure, the processing units are unable to assess the supply demand conditions of raw materials and thus prices of raw materials. They are also unable to forecast market demand for the product. This calls for creating infrastructure in the form of developing network linkages (Attn: 1. Directorate of Agriculture, Government of West Bengal).
- * As for the non-food processing units, the textile units have faced the basic problem of low market demand for the products. Similar to textile units, leather based activities also face the problem of marketing of their products. However, the common problem faced by the entrepreneurs of leather and textile units reported to be the absence of network for the marketing of their products. Obviously, these units could enhance their numerical strength if they are backed by better infrastructural support providing market information for their processed product. (Attn: West Bengal Industrial Development Corporation (WBIDC), Government of West Bengal).
- * Of course, tasks are many and performing of tasks enumerated above would require coordinated efforts among different departments of the government as well as amongst government and non-government agencies. There is now widespread recognition that agro-processing industries can play active role in generating income and employment. Equally, there is vast export market potential for agro-based processed products in earning foreign exchange. On the demand side, changing consumption habits have opened up new domestic market possibilities for the value added processed products. Government policy environment has also created favorable investment climate in recent years. The overall effect of all these is that there exists large potential for the development of agro-processing industries. However, So far, there is no separate agency either at the central or at the state level exclusively for focusing on the problems of agro-based industries. Today, when agro-processing sector has started gaining strength, the establishment of a separate agency for the agro-industrial sector at the centre and state

levels would help a lot in realizing the problems peculiar to the agro-based activities and in overall development of the economy and employment generation.