CHAPTER - X

Suggestions for Future Development of Small Scale Sector of Nadia District

Summing up the discussions on various aspects like, resources, infrastructure, industrial structure, importance of small scale industries, and above all, the potentiality of the industrial activities in the district, it becomes clear that prospects for industrial development in Nadia is limited. The programmes and plannings for development has to be made from grass root level, taking considerations of only the available resources and infrastructure, not what is not there. More over, development is a process of change from the existing level to the planned new level. It implies that the level aimed at is better than what it was physically, economically, industrially and socially, and so on. It has no satiation point and therefore it is a continuous process which is positive and purposive. For all round development, the maintenance of group harmony and involving the people in the achievement task is necessary in order to foster self reliance. It is also necessary to see that these achievements do not bring disparity in the area. More over participation of all sectors of the community is necessary to maintain the social equilibrium and the required morale.

Another factor to be mentioned here is that development does not start with 'goods' it start with people - their education organisation and discipline. Without these three all potentials remain latent, untapped potential. To be more precise, the success
of an industry or an organisation depends largely on the growth and effective utilisation of all its resources of which 'Human Resource' is considered to be the most vital, as they create other resources and are responsible for their effective utilisation. Hence development of a backward region means both 'people prosperity' and 'place prosperity'. These two cannot be separated as they are interlinked and complementary to each other. The just step to this as has been mentioned earlier, is the spread of general education, technical education, training in different aspects of management, marketing, productivity, quality etc.

Crude, uneducated human resource is vast in Nadia. Thus along developing the other infrastructural facilities it would be wise to process this hitherto uncared human resource. To promote a section of diligent, hardworking industrious entrepreneurs like the Japanese workers whose basic attitude is 'idling man is worthy' of no respect, is very urgent.

Improvement in productivity techniques is very essential for development. There is no need to bring high powered modern vehicles on the roads of Nadia, at this moment more projectable is to improve and utilise the maximum capacity of the present form of transportations. Carts are a very common mode of transport in the rural India. The beasts are beaten, tortured to carry more loads, but isn't it would be more human and much better if the capacity is increased by smooth bearings? Improved carts, already on the roads, are carrying three tons, and earnings have gone up by 100
to 300%. This would contribute to rural development by way of increased earnings, increased transport etc. When the carts become economically viable, more and more people would take to commercial transportation by carts. This would mean more employment. The carts would remain here for a long time to come, because firstly 50% of the villages do not have roads, and therefore, trucks and tractors cannot ply, secondly the normal loads taken by the former is too small for trucks to be economical, and cost would be too high and lastly for short distances, where loading and unloading time is high compared to transperation time, thus cart is far more economical.

Rural areas use manual power and animal power more, like drawing water, ginning, gridding, breaking etc. A little bit of improvements, like discarded bearing of a pulling would increase the efforts required to draw water substantially - either by man or animal, or redesigning a gridding stone by the introduction of a simple plan bearing would raise the productivity three times. It should be noted that there is no reduction in labour position, only the effort required has been reduced and output increased.

Productivity of operation can be increased substantially if the implements and tools of farms are redesigned correctly. Even maintenance is very poor resulting in low utilisation of equipment; the designs should be such that maintenance can be easy.

Thus a great deal of improvement can be done in various aspects to increase productivity. These improvements come under various categories.
(a) Design improvements, method improvements, planning, work-study, ergonomics and numerous other simple techniques.

(b) Communication systems through which the rural sector will get information on better methods of working.

(c) Governmental policies and pricing, compensation, land reforms etc.

(d) Better use of science and technology through improved seeds, better working management, afforestation, animal breeding, preventive health scheme etc.

A backward district like Nadia cannot be a suitable location of large and medium scale industries. More viable is the development of a sound network of efficient small scale and cottage industries. The small scale sector for which sky is the limit, has created five times more jobs than large and medium units and led to the emergence of thousands of entrepreneurs mainly in the seventies. This sector now accounts for more than one third of the total Indian exports. Thus promotion of this sector is a must for the industrialisation of Nadia. There is no need to urbanise Nadia. Rural people must not migrate to towns and bring disparity there. Towns cannot live and prosper without villages and villages cannot develop without the educational, technical, medical knowledge departed by the urbans. Thus it is better for the rural region to retain its own characteristics, to keep the overall balance.

Previous chapters have already dealt with the potentials of various units that can be set up. Along with them a few
more ideas about the introduction of an entirely new types of agro and forest based industries may be mentioned. Entrepreneurs endeavour should be directed to harness agriculture produce and waste to effective industrial use. Nadia's number one crop is rice, its main by-products are rice bran and rice husk, which is surely abundantly available in the district. Rice husk has been put used for generating steam for industrial use in place of fuel oil as coal. It has been found that rice husk ash, obtained after control burning, could be gainfully used in the chemical industries, such as Cement, Activated Carbon, Carbon Black, Sodium Silicate, Silica gel etc. Solvent Extraction plants can be set up for processing rice bran oil, which can be upgraded (through Fatty Acid unit and Hydrogenation unit) to produce main ingredients for toilet soaps, stearic acid and industrial oils. Other units that can be set up are pickles and chatnees vinegar, Rape seed oil expect solvent extracted mustard oil except extracted, sesamum oil except extracted, poultry feed etc.

Modern technology has made possible one other thing, turning waste into a profitable resource. Today disposal of waste is a big problem. Disposal needs men, money and machines. All the three are valuable resources. The key factor for success in waste management is "information". What are the waste item and how can they be used. The U.N. official observed, 'waste utilisation, in short should be part of the closed loop system of production cum consumption cycle. The world is about to enter a new age of the post Industrial Society and, with it, probably there will be
enormous global waste generation unless mankind turns the tide by converting waste into wealth'. Waste can be reused in a different number of ways

(i) Finding alternative uses e.g. waste office stationery, e.g., one side used cyclostyled paper can be used for scribbling pads; waste water after treatment can be used for irrigation; straw used for packing, as cattle feed.

(ii) Recycling of material e.g. making metals like aluminium and steel from scrap; recovery of used oil, making paper from scrap paper; polythene and similar scrap can be recycled; process water can be treated, cooled and recycled.

(iii) Consolidating waste, e.g., quilt making, small unusable pieces when joined together can make a large usable and decorative covering, small pieces of soap can be pressed together to make a usable cake of soap; pelletisation of fine material.

(iv) By conversion, e.g., chemical applications - gobar gas plants, oils and gas from waste, power from the water hyacinth; artistic applications - handicrafts, hand made paper, utility applications paper and cloth bags from used material.

(v) By re-building, e.g., re-soling of tyres; reconditioning of furniture and building.

Beside these scientists of Indian and British Research Councils have come to the following conclusions:

1. Bagasse can be utilised for the production of furfurol and
particle board.

2. Nearly half a tonne of oils can be extracted from one tonne of rubbish.

3. Dry backer's yeast can be obtained from molasses for the food industry.

4. Treated industrial waste can be used for flushing toilets.

Municipal wastes in a typical city consists of 85% of organic wastes which would be easily used as soil conditioner.

May be turning waste into wealth will not be readily possible in Nadia now, but certain measures can be taken right from now to take up actions in suitable locations near the cities or waste be collected and brought to centrally located places for re-utilisation.

Certain suggestions can be added to the existing system in the district regarding industrial accommodation, entrepreneurial developments, machinery and equipment, raw materials, marketing assistance and sickness of units, and about chandicoom.

1. Industrial Accomodation - Considering the shortage of industrial accommodation in the district, a programme for setting up industrial estates at the growth centres of Santipur, Phulia Krishnagar, Chakdah and Ranaghat has been suggested. Textile based industries at Santipur - Phulia, agro-based industries of Krishnagar and Chemical and engineering industries at Chakdah and Ranaghat are proposed to be encouraged at the
proposed estates. It has been anticipated that the West Bengal Small Industries Corporation will provide the necessary funds.

2. Entrepreneurial Development: Intensive Campaigns and close liaison with extension agencies at the block level have been suggested for the purpose of identification and motivation of local entrepreneurial talent. Periodical survey with a view to updating the information system on village occupational patterns have also been suggested in-plant training programmes for educated unemployed youth in occupations like manufacture of coir fitter, tile making, yarn dyeing etc. are envisaged. The DIC programme includes a scheme for providing training to 90 schedule caste persons in cane and bamboo craft and shoe and leather bag-making.

3. Machinery and Equipment: An up-to-date catalogue of machinery together with names of bonafide suppliers is proposed to be maintained so that entrepreneurs can be guided in the purchase of the right types of machinery at minimum cost.

4. Raw materials: While the industrial development plan for the district is primarily centred round resource based industries a suggestion for setting up a raw material department at the DIC head quarters is made.

5. Marketing Assistance: Assistance in the marketing of products made of brass and bell-metal, cane and bamboo, or conch shells,
or items like clay modellers, readymade garments, bags, straw covers etc. will be extended from the service cum marketing co-operative societies. Further, marketing service centres are proposed to be organised during 1979-80 at Haliganj, Krishnanagar and Chakdah. Provision of market intelligence and help in enlistment with the NISC or the DGS & D will be the other services to be extended by the DIC.

Marketing poses a major problem, especially in the case of rural artisans. The 'District Industries Centre' should identify the items which are in local demand and a scheme for encouragement of rural artisans on the basis of such market surveys might be pursued.

Further, for articles produced by carpenters, blacksmiths and like artisans, institutional demand emanating from schools, Government offices, banks etc can provide a market if the DIC can provide the initial mediation.

Sickness: A certain amount of nursing finance is likely to flow to sick industrial units in the district during the credit plan period. Inept management (quite often the result of ignorance or lack of training) lack of co-ordination in ensuring smooth supply of raw materials, poor marketing outlets incorrect assessment of feasibility and occasional underfinancing, are some of the major causes of industrial sickness. It is therefore suggested that the DIC may consider framing suitable schemes so that priority may be accorded to sick units in the matter of allotment of raw
materials and purchase of produce by the State Government. The DIC should also accord priority attention to the continuous monitoring of all sick units sponsored by them. This will in future facilitate quick action once the first signs of sickness are detected.

Handloom and Textile Directorate:

An immediate survey of all handloom in the district should be taken up with a view to, (i) Activizing the existing dormant looms; (ii) enrolling all other looms in the area which are presently outside the co-operative fold; (iii) providing a paid manager or executive officer for each society or group of societies operating in a compact area; (iv) estimating the requirements of raw materials in time and in required quantities at reasonable prices and (v) making arrangements for the marketing of finished goods.

Training: The Handloom Directorate should in the case of each society financed under the Credit Plan arrange the services of full time paid managers. Technical advice whenever necessary should also be provided by the Directorate. The present level of training facilities for weavers of the Santipur Weaving Institute is adequate and attention may be given to the need for establishing a full-fledged training institute in the district.

Raw Materials Supply: The West Bengal State Handloom and Powerloom Weavers Co-operative Society and the West Bengal Handloom and Powerloom and Powerloom Development Cooperation should
assume full responsibility with a view to ensuring that the handloom industry gets continuous supply of yarn of the required quality and counts at reasonable prices. Medium and low counts may be considered. Further the scope for expansion of Kalyani Cooperative Spinning Mill may also be examined.

Agricultural product is the only locally found raw material for industries in Nadia. That is why a thorough study of agriculture is necessary. Its development in all respects is also greatly important, not only because it is the most important occupation of the Nadia people for their livelihood at present and will remain so for a long time to come but also because the potentiality of any industrial development of Nadia lies there in. Field survey has helped to sort out certain police station wise agro-based industries which are particularly suitable for development in Nadia.

Krishnanagar:

Major crops here are paddy, wheat, jute and pulses. Scope exists for setting up of wheat grinding unit at the fast developing area of Bhatjangla. Oil ghani may be set up at Chakdignagar. 4 Dal mills may be located at Chak Dignagar, Dogachhi, Bhimpur and Ruipukur. Both wheat grinding and oil ghani units can be set up at Dhubulia, Selpukur and Sadhanpara,

Nabadwip:

Weaving is a major industry in Nabadwip. Still, a number of agro-based industries namely wheat grinding and dall mills,
may be set up here.

**Krishnaganj:**

Krishnaganj is the least developed police station in Nadia. Industrial development is also minimum here. In addition to whatever is present, wheat grinding and oil crushing units can be set up in Krishnaganj and a Dall mill at Matiary - Banpur.

**Chapra:**

Chapra has a good number of existing agro-based industries. And a few more may be added. Wheat grinding unit at Hatisala, Dall mills at Mahatpur, Natisala and Brithihuda. In view of the large jute area in Chapra, Jute baling press can be set up at Chapra.

**Tehatta:**

Potential industries that may be set up here are oil crushing, wheat grinding, milk product and gobar gas units at Tehatta. Jute pressing unit at Betai; Dall mills at Betai and Natua, Wheat grinding at Barnia sugarcane, crushing unit at Sahebnagar.

**Karimpur:**

Betalvine, orchard, sericulture, fishery and dairy have scope for development. Some of the other specific industrial possibilities also exist here, they are a jute boiling press at Natidanga, which has a large area under jute, oil ghani, gobar gas plant, wheat grinding milk product and Bakary units at Karimpur; Dall mills at Shikarpur and Natidanga.
Nakasipara: Dall mills at Nakashipara and Birpur, wheat grinding, at Nakasipara and Sugarcane crushing unit at Birpur can be set up.

Kaliganj: Oilghani, sweetmeat shops, gur mills, wheat grinding, dall mills, and a sugarcane crushing unit are among the industries that hold potential here. The dall mill and oil ghani can be set up at Debagram and Plassey, wheat grinding unit may be located at Kaliganj, while the sugarcane crushing unit may be located at Kaliganj.

Ranaghat: The allied agricultural activities which have scope in the area are sericulture, fishery, dairy, and poultry. Wheat grinding can be set up at Ranaghat and Dutta phulia. Sericulture can be more developed at Ramnagar. Dall mills may be set up at Jugal-kishore. Jute boiling press can be set up at Dulta phulia.

Chakdah & Kalyani: Wheat grinding, dairy product, spice grinding are among the industries that hold potential in these two police stations. Spice grinding unit at Kanchrapara, wheat grinding unit at Tatlah. Agro-service centre may be set up at Madanpur.

Santipur: Wheat grinding unit may be set up at Arbandi, Dall mill at Nabla, Straw cover making and oil ghani at Belgoria and milk processing at Gayeshpur etc. can be developed at Santipur.

Hanskhali: There is scope for orchard development here. Wheat grinding, sweetmeat making and a small bakery can be set up at Hanskhali.

Haringhata: Wheat grinding, gur making, sweetmeat making, milk processing, are the industrial activities which may be developed here.
References

1. 'Rural Development: People Centered Approach'.
   Muthayya B.C. Productivity, Jan - March 1978
   Vol. XIX, No.4.

2. E. F. Schumacher: 'Small is beautiful' Bland Briggs,

3. Human Resource Management - A System Approach by
   M N Sarkar, Industrial Engineering Journal, Vol IX
   No.2 Feb. 1980.

4. V.K.S. Menon quoted Winnick in Rural Development and
   Financial Institution! Productivity, Vol. XIX
   Jan - March No.4.

5. 'Orientation of Japanese Employees to work and their
   Organisation - VKS Menon, Industrial Engineering

6. 'Rural Development Perspective in Productivity',
   Prof. N.S. Ramaswamy, Industrial Engineering Journal

7. Rural Energy Scene in India. - Sen L.K.,

8. Wealth from Waste at Haldia, N.C.Roy, Industrial

9. 'Wealth from Waste', Lobo F.L, Industrial Engineering