CHAPTER - VIII

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INTRODUCTION:

In the foregoing chapters a review is made of the existing situation as regards the various problems of sugar industry in Assam. There is a very bright prospect of this agro-based industry in Assam. There is strong case of expanding sugarcane cultivation as almost all the districts of Assam have sufficient land for sugarcane cultivation. The existing position of sugarcane crop in the agricultural map of Assam is very negligible in comparison to the other states of the country. It is found in course of our investigation that at least seven sugar mills can be operated parallel during a crushing season if the area under cultivation is extended to at least 4 percent of the total cropped area. The present production of sugarcane in Assam is sufficient to feed the existing three sugar factories. But the supply of sugarcane to these factories for production of sugar is comparatively low as the percentage utilisation of sugarcane for sugar is higher than that of sugar in Assam which has already been discussed in our fifth chapter. However, if the area under sugarcane cultivation is expanded to a reasonable extent, the production of sugarcane would be quite sufficient to feed another four sugar factories regularly in the state.
To achieve this goal, at first the related problems as mentioned in our foregoing discussions must be solved. Without doing away these problems it is quite impossible to expect a developing sugar economy in Assam. The economic backwardness can be improved to a great extent by establishing more sugar mills in our state. So the programmes for the development of both sugarcane cultivation and sugar mills are highly important in the present state of affairs.

SUGGESTION AND CONCLUSION

The sugar industry of Assam calls for immediate development measures as it has been playing a very significant role in the development of Assam economy. The measures taken upto this time for development purpose are not satisfactory. After proper analysis of all the problems of sugar industry, we have suggested a package of recommendation for the all round development of sugar industry in our state.

(1) The development of sugar industry depends mainly upon the production of adequate raw materials. So for the expansion of sugarcane cultivation and for adequate production of the same, the attention of the farmers must
be drawn towards the specific object. Their attitude is to be changed very soon by imparting proper education so that they are in a position to cultivate sugarcane in modern scientific method by giving up their traditional or orthodox practice of cultivation. To meet the domestic demand for sugar and to compete with other parts of the country the farmers of Assam must apply the modern scientific, sophisticated methods of cultivation. They should be provided modern facilities of ploughing, harrowing, planting and harvesting etc. in their cultivation either free of cost or at subsidised rate.

(2) Most of the farmers are ignorant about the usefulness and importance of high yielding varieties, ripening varieties, chemical fertilizers, pesticides, herbicides etc. So the concerned departments of the Country should take some active measures so that the farmers are convinced of these inputs of agriculture. The farmers should get sets of sugarcane of improved or high yielding varieties and fertilizers etc. in time and these inputs should be within easy reach of the farmers. In Uttar Pradesh, Bihar, Punjab, Gujarat, Maharashtra etc. the farmers are getting all the necessary inputs and there by development of primary sector has been taking place which encourages the development of secondary and tertiary sectors in these states.
(3) There should be area wise or situation wise identified improved varieties of sugarcane in Assam. The agricultural scientist will have to work in order to meet such requirements.

(4) Although the sugarcane research in our country has made definite progress, yet there is still a lot to be done in the state of Assam. The research scientist will have to play a very significant role in augmenting sugarcane production. The yield potentiality of sugarcane varieties have increased due to the development of B.P.V., yet it has been difficult to cross the yield barrier of sugarcane crops in Assam beyond what has been attained. The yield per hectare of sugarcane in Assam remains almost static for most of the high yielding varieties such as Co.747, Co 740, Co 1008 etc. developed so far. Research is therefore needed to break such yield barriers so that the production potential can be increased. The research findings will help to train the sugarcane growers to get the desired result in cultivation.

(5) The recovery percent of sugar from sugarcane has also been decreasing from bad to worse in this season. The research scientist as well as the concerning department should try to find out the causes for deficiency of recovery.
percent and active measures should be taken to meet such challenge. In the states of Maharashtra, Karnataka, Punjab etc. the growers are able to raise their yield up to 1,000 quintals per hectare with an average recovery of 10 to 15 percent whereas in Assam it is hardly 450 quintals. The recovery is also too poor which is hardly 7 percent in average at the present time. So it is necessary to develop varieties which are potentially more efficient having soil resistance of draught, pests etc. The research on production technology for intensive cropping and to increase return per unit area has to be sought.

(6) The cane growers in Assam are quite ignorant of testing their soil. As sugarcane grows well in the soil of neutral character, the soil must be tested before plantation. For soil testing, the government should give proper facilities to the farmers so that they may be able to test their soils at free of cost locally before plantation.

(7) Infrastructural facilities are vitally related to the growth of sugarcane cultivation. As the mainstay of Assam's economy is agriculture, it is highly essential to increase the irrigation potential so that on one hand, dry lands can be harvested for agriculture to the maximum extent possible and on the other cultivators become less and less dependent on nature. For this purpose, we need a
steady and assured irrigation system. The progress of irrigation potential in Assam is quite slow. So, for regular plantation of sugarcane in Assam the irrigation facilities are the main determinant. The late plantation and late harvesting of sugarcane in Assam affect badly in the yield and recovery percent of sugarcane. If proper irrigation facilities are provided, even October plantation will be possible in Assam. Therefore it is highly necessary on the part of the government to take immediate measures for rapid programme of irrigation system in the state.

For development of this acre-based industry the suggestions made above are to be executed soon which will solve the problems of raw materials of sugar industry in our state.

(8) Flood in Assam is a permanent problem of Assam. Every year floods come one after another and cause heavy damage to standing crops like paddy, sugarcane and other crops, lives, cattle and properties. During the year 1988-89 the total cropped area affected by flood in Assam is estimated to be more than 11,00000 hectares. The rural sector economy of Assam is remaining backward and poverty is increasing mainly due to the severe occurrence of flood. The flood in Assam therefore calls for immediate and permanent control measures. The measures taken at fav
by the Government to defend flood is purely temporary and quite insufficient. This problem should be looked at as a national problems in Assam and hence long term measures should be taken by the Central Government. "The Central Government should take up integrated regional project for regional development and mutual social benefit. As suggested by the Brahmaputra Board, the Central Government should take up immediate works of multipurpose river projects, hydro-electric projects etc. Such projects will ease the flood in the plains and generate power in the hills. This sort of integration would bring in the various gains like production gains, consumption gains, technological gains and marketing gains. For such regional economic co-operation, there should be a central supervisory body, the role of which can be played by the North Eastern Council. Besides planning in the individual states and the union territories, regional planning on the basis of geography and resource availability should be made."

(2) The Sugar mill authorities also have many things to be done for the expansion and development of this industry. They should take development schemes for the retention of sugarcane cultivation in all over Assam. It should be done on large-scale in well organised pattern. It is also suggested that the sugar mills should have all required

1. Economy of North East India, - Dr. Narceloi C. und, 1984, . . .
and extensive sugarcane plantation of their own. The board of management of the mills should introduce new programmes to improve the system of nursery creation and seed multiplication. If the mills fail to get sufficient raw materials from the growers, the deficiency may be made up from the mills' own farm. The growers will also get sets of double varieties of cane from such nursery at cheap cost.

(10) For the development of sugar industry in Assam, the preparation of our from sugarcane should be controlled. The extensive utilisation of sugarcane in making our affects the sugar mills in the state. It has already been discussed that more than 70 percent of the sugarcane has been utilised for our in the state of Assam. And the recovery percent of our is less than that of sugar which is at present only 5 percent or less than that. The interest of the farmers must be drawn so that they may supply sugarcane to the mills without any hesitation as it will give them more earnings.

(11) The illegal preparation of alcoholic liquor (Sulai mod) in the state must be banned by taking legal action. It has adversely affected the sugar industry of Assam. The demand for our is increasing in the market only because of the utilisation of our in the preparation of home-made alcohol. More than 50 percent of the our is in
Bean m. has been utilised in this purpose. Moreover, the government is deprived of due tax and duties from this alcohol. Further it is a community health hazard. The excise department of the government should take bold step to prohibit such illegal business practised by such anti-social elements. If this illegal process of making alcohol is completely stopped the sugar industry of Assam will develop to a great extent.

(12) The cane growers of the interior and remote places should get more advantages in transportation so that they can supply their sugarcane at the minimum cost at right time. Due to lack of transport facilities most of the farmers are compelled to utilise their sugarcane in production of cur which is not conducive for the industry.

(13) It may also be suggested that the mill authority should purchase the sugarcane from the growers in the field as has been done in the states of Maharashtra, Madhya Pradesh etc. If it is done sincerely at the risk of the mill authority sufficient quantities of sugarcane will be available in the factories and it will maximise the volume of profit and minimise the rate of cost of production.

(14) If the sugar mills get sufficient sugarcane, sufficient quantities of by-products such as molasses, bagasse,
pressmud etc. can profitably be used. The proper utilization of the by-products will help in the growth and development of many auxiliary industries. Introduction and development schemes for subsidiary industries like Distillery, paper mills, Confectionery unit, Dairying, Poultry etc. are not yet thought of earnestly in our state. The proper utilization of various by-products will accelerate the pace of industrial development of the backward state like ours.

(15) There should be a vast change of technique both in the factory and the field to have the desired results of production. It is impossible on the part of an individual grower to apply mechanical power or to use even expensive machinaries and tools. The Agriculture Department of the Government should come forward with a view to render their yeoman service by-supplying modern inputs in the form of the term. Active participation is to be sought by the State Government, Agriculture Department of both Central and State, and Industry Department for the successful execution of different development programmes on sugarcane and jute industry.

(15) The farmers should get adequate loans and subsidies from different financial agencies for development of their cultivation. Besides Government and various co-operative organizations, the commercial banks should play
significant role in granting credit and subsidies to the farmers of the state as suggested in our previous discussions.

(17) The sugar mills' authorities should take care, so that the cane growers may have loans, subsidies, etc. in proper time of their cultivation. The field supervisors or the field assistants appointed by the mill authority should be more active in the field so that the farmers are inspired immediately. Proper care should be taken by the field staff of the sugar mills or the banks so that the farmers may utilise the financial assistance wanted to them in proper channels. The bank authority or the sugar mill authority should be very much conscious of realising the amounts of loan granted from the growers in due time. The sugar mill authority should be more active in this regard as the mills would have to repay the entire amount of loan with interest to the banks or to the other financial institutions while it is granted to the farmers for the mills.

(18) The existing sugar mills in Assam are not economically viable which has been discussed earlier, so the low milling efficiency of the mill (particularly A.C.S.M. Ltd., Borabamun gaon) should immediately raised to at least 2500 T.C.D. For expansion of crushing capacity...
of the mills the Central Government should grant new financial assistance, accepting the proposal of the State Government.

(19) The short duration of crushing days in the sugar mills of Assam raises the problems of capacity idle for major part of the year. So the mill authority with the proper co-operation of the Government should create some auxiliary industries whenever possible to utilize the by-products on one hand and man power resources of the mills on the other.

(20) For greater involvement of the farming community in the development of sugar industry, a well informed and competent organisation of cane growers, with unit from grass root level should be built up. It should promote, execute and assist the cane growers in scientific farming.

The lack of proper plan programmes, lack of organisation, lack of co-ordination between the management, employees and the growers, lack of control of cost, lack of proper provisions etc. are to be treated as serious problems in the path of development of sugar industry and so these living problems faced are to be solved as early as possible. The Management at various level of the industry must be conscious of all these defects.
(21) It is observed that there is no control aspect exercised by the management of the mills. To exercise the control aspect there should be responsibility centre, budgetting standard costing, variance analysis and planning. It is our humble suggestion that the sugar mill authority should have used the modern principle of management which will result in the overall development of the industry. The internal environment of the industry is reflected in the external environment also. Internal environment can be controlled by the efficient management.

(22) The change of leadership is an imperative need for the development of sugar industry in our state. A leader is a person who can lead whole house with him. Such leadership is highly called for in an underdeveloped region. In our sugar industry politically motivated leader or executive in the factory has nothing to do for the proper management of the industry.

(23) Industrial relation has a very important impact on employee-employer relationship which facilitates high productivity in the industry. Employees motivation can be penetrated by the motivated management. These aspects may help in the growth and development of the industry. The management team of the modern industry should consider these vital factors for the survival of the industry.
(24) There should be a scientific method of recruiting the right person for the right job. But the fact of recruiting in the industry is not to the desired level as such there is a strong resentment amongst the employees of the mill. These practices should be abolished immediately. Training and promotional avenues on the basis of performance evaluation should be introduced to have efficiency among the workers. Human resource accounting is the most important aspect of industrial development.

(25) Reporting system in the sugar industry is very much insufficient. In case of internal reporting, accounting information is not properly used. There is no classification of fixed and variable costs which brings the calculation of break-even point in the industry. It can not take necessary decisions to drop a product from the product line, to extend the present infrastructural facilities to accept or reject a proposal. So that should be practiced to have a strong control over the activities of the mill.

(26) The industry should be kept free from any political influence of the government. The nepotism, corruption, red-tapism etc. should be treated as serious defects of management or administration. All such defects should be removed for the greater interest of the industry.
(27) The Centre Excise Duty of the Government on sugar is quite high which has added to the cost of the same. So the Government should reduce the rate of Central Excise Duty to give incentive to this industry of our backward region.

(28) The wide gap between the theoretical education and practical findings in agriculture must be removed. For all round development of sugar industry in the country active co-operation as well as coordination should take place in the midst of the cane growers, Government, the sugar mill authorities and other sugar industries.

(29) Sustained effort should be made by the central Government and State Government to set up new sugar factories step by step in Assam and for smooth running of all the factories, broad expansion and development policies may be taken for sugarcane cultivation. The productivity may be increased through adequate investment and modernisation of cultivation applying labour intensive and land intensive techniques with modern inputs.

(30) There are many important Government and Non-Government organisations connected with the sugar industry of the country. The organisations like Indian Sugar
Development Council (ISDC), National Federation of Cooperative Sugar Factories Ltd (NFCSF), National Co-operative Development Corporation (NCDC) etc. have multiple functions to be performed for the development of sugar industry, yet practically the sugar industry of Assam has been a privy of their active assistance in comparison to other states of the country.

The organisation like Indian Sugarcane Development Council may consider development programmes in the state in respect of Sugarcane crop and recommend measures for increasing production. Such organisations may consider the special needs of small and marginal farmers in respect of sugarcane and may suggest the Government necessary and suitable measures for meeting the same. It may also facilitate co-ordination between research and development programmes relating to sugarcane, advice about the need for improvement in the quality and productivity and it may also advise the Government on such other concerned matters as may be considered necessary from time to time.

The National Federation has also been dealing on behalf of the Cooperative Sugar with various Governments of the Central and State Governments and other organisations. The National Federation may undertake advisory and coordinating activities on the problems faced by the sugar factories.
in their day to day working. The problems referred to by the sugar factories of the state for advice of National Federation over various aspects such as improvements of quality of sugar produced, fuel economy measures and programmes for off season over haulling etc. The Federation may render timely advice to the factories after making on spot study and assist in the selection of suitable personnel for appointment such as Managing Directors, Chief Treasurers, Chief Chemists etc. Besides the Federation may assist in securing necessary financial accommodation from state and Central cooperative banks and from any other financial agencies.

The Development Council may also suggest forms of efficiency with a view to eliminating waste, obtaining maximum production, improving quality and reducing cost. The council may recommend measures for securing the fullest utilisation of the installed capacity and for improving the working of the industry particularly of the less efficient units. The council may undertake enquiry as to machines and equipments and as to method of production, management and labour utilisation etc. It can promote the training of persons engaged or proposing to be engaged in the sugar industry and their education in technical subjects relevant thereto.
Another sugar institute called the national sugar Institute, Harpur is the only institute in the country for training and conducting research in sugar technology, sugar engineering, alcohol technology etc. under the administrative control of the Ministry of Agriculture and Cooperatives, Government of India.

Our Government should take active measures to provide technical education in all branches of sugar chemistry, technology and sugar engineering and to provide training in research in such institute so that the deficiencies of the technically qualified persons are made up easily. Our Government should facilitate the interested persons of the area to undertake training and research work on the problems pertaining to sugar technology, sucrose chemistry and such institute.

(31) Under the decentralised planning scheme, which is sponsored in the recent years a village unit is to take stock of present state of affairs and suggest measures for the integrated rural development. The new twenty point programme though seems to be theoretically viable, are not properly implemented in comparison of its cost involvement.
It is our humble conclusion that if the above suggestions are implemented properly in an underdeveloped state like Assam, the economic condition of the rural masses as well as the entire economy will be developed. From the above findings it can easily be concluded that industry has a very bright prospect in Assam.