

CHAPTER – IX

SUMMARY AND CONCLUSION

9.1 SUMMARY

Even though some writers in the West now seek to preach against milk, milk is the time tested ideal food for man. In India throughout ages consumption of cow milk has been recognized as the greatest cause of human longevity. Thus it is ^{no} wonder that in the *Mahabharata*, the great Indian epic, the cow was regarded as the best among the quadrupeds.

The cow milk has significant quantities of protein, fats, vitamin A and minerals. Even though higher amount of protein per 100 grams of edible portion are found in other foods, milk proteins have advantages over proteins of other foods. In the first place, milk is full of rich minerals. Protein food with such rich minerals is rare in nature. Secondly, of the 23 amino acids found in proteins, most essential amino acids are found in milk protein. Thirdly, these amino acids in milk protein are greater in amount than in proteins of eggs, meats and beans.

The ratio of calcium and potassium to magnesium and sodium as found in cow milk approximates the ratio of these minerals in the human system. Calcium which is important not only for the building of the bones but also for the functioning of muscles is found abundantly in cow milk. Some scientists say that the calcium content of cow milk is four times that of human milk.

When publicity campaign about the benefits of the consumption of cow milk will fully enlighten the people, more and more people will consume greater amounts of milk and milk products with the growth of income. Therefore, the location of the sector of milk and milk products in the most suitable countryside is of paramount importance.

The average heat of the districts of North Bengal Division of the State of West Bengal is lower than in other areas. Within these districts again there is a wider variety of different temperature zones offering scope of rearing different kinds of breed. Besides, the state of agriculture is still now under-developed and since the region lacks optimal heat for paddy in every part of the year, the region is fit for diversion of areas for the building of expansive pastures and intensive culture of special products and crops in the remaining cultivable areas. The area is most suitable for production of all sorts of animal feed. No other area of the country can match the districts of the North Bengal Division of the state of West Bengal in this respect.

A representative district of this Division, namely, Koch Bihar, is selected with a suitable design for the purpose of field study. The productive activities of a household is divided into sectors. The household schedule used for the purpose of collection of data are divided into as many parts as the number of sectors. Besides the household schedule has also a part for identification of members, sex, education, primary and secondary occupations, agrifultural land holdings, homestead land and elaborate demographic data.

On the whole the productive units of the village surveyed are under very low input regime. In this situation we find that both for crops as well as for milk the tiny farms are better organized. Relatively greater amount of family labour is put in by the tiny farms. On the whole they also put in the best combination of inputs. An analysis of the village data of only three of blocks shows that two husking mills earn, for the two separate owners, more than what they earn from their farms. If we do not take these two husking mills, all the non-agricultural units of production suffer from incomes lower than even low level farming.

Productivity of inputs of enterprises of crops and milk have been found on the basis of an analysis of regression production functions. Analysis also shows that with proper development planning the operators can do incredible things.

On analyzing the relative profitability of milk we find that an especial class of rural entrepreneurs from among the tiny farmers have seized the opportunity, however meager ^{that} has arrived for producing and marketing of milk. If the demand creating infrastructures (defined in the widest sense of structural or inter-activity dependence) develop, many other rural level producers will get into the bandwagon. There is no compulsion to believe that a stream of unending flows of foreign investors or national corporate sector should step in, as desired by the motive of acceptance of globalization, to bar the rise of rural lower sector into the fold of competitiveness. We win positive testing of two hypotheses (1) private producers may have big role. This is supported by the fact that some small entrepreneurs have come forward to expand milk production despite insufficient facilities. (2) They could do this only because the area is endowed with necessary natural endowments.

If ^{the} selling of expanded output is not possible, no producers would spend on input to expand production and suffer losses in the form of price cut or inability to dispose of an important portion of output. In absence of new activities that could support each other by releasing pressure of demand for each others output directly and indirectly, demand for all commodities within the village system has been low indeed. Present demand for milk of families producing milk from HYV cows vary from 133 ml. to 236 ml. per year.

Farmers of crops who do not produce milk including farmers owning more than 5 acres cannot afford to spend on milk. Such is the restriction imposed by their incomes on consumption of milk. With such miserable shape of these lagging rural economies the producers of milk here depend for sustenance of their production on demand outside these villages.

Formally the producers make direct sale to four types of people, consumes of fresh milk, makers of Bengali sweets, middleman and pasteurization agents. The middlemen, in their turn, sale to processors of Bengali sweets and primitive processors of *Ghee* and *Dahi* and to consumers of fresh milk. The pasteurization agents here sell the collected milk as pasteurized

fresh milk to urban people in the district of Koch Bihar and neighbouring Assam.

Of the total milk produced in these villages 70% is sold as non-pasteurised fresh milk to consumers, 24% to makers of Bengali sweets and primitive makers of Ghee and Dahi, 6% to pasteurization agents.

No network of cooperative processing of milk and milk products and marketing with professional management right in the villages has been set up.

So far reforms galore in India for flow of continuous foreign investment into India. There is no urge of reforms in the interest of raising an efficient army of productive workers and the growth of investment by them raising their productivity to the height of international level. This explains why present set-up of marketing of milk especially on the basis of natural endowment of the districts of the North Bengal Division is almost as good as absent.

We have analysed individual incomes on the basis of frequency of incomes earned and concentration curves. We find that average highest per capita income in the family for the highest group is Rs. 3000/- only. The dollar equivalent is 60 Us dollars per annum. On the basis of a concentration curve analysis we find that villagers are more equally poor when we consider the per capita annual income in the household.

Our elaborate analysis of employment in the sixth chapter has led us to the conclusion that of the 683 persons seeking full employment only 203 persons can be given full employment through the present level of operation of the existing rural productive activities. That is to say, ^{more than} two thirds of employment seeking persons are unemployed even at generally low value full employment.

Fortunately our land endowment and resources have enormous promise for great employment potential. Only thing to stress is that we must be up and doing for great plan and great reforms for implementing higher output and employment in every state without cessation. With correct planning, proper reforms and matching infrastructural facilities it is even possible to shift the main productivity centre from towns to villages because technicians and

experts may move to countryside to enrich the professional management of cooperatives.

We fit Leontief input-output system for possible special and general solutions. The Leontief models can be fitted in intervals of years, as special and general solutions of the model can help the Raiffeisen Cooperative to plan and develop new activities maximizing the use of local resources.

In the seventh chapter on income elasticity of demand we recount a history of use of this concept in India with the launching of the second plan of the Government of India. Before computing income elasticity of demand for milk we seek to study the trend of consumption expenditure on milk and milk products among different incomes. Western data have shown a steady rise in expenditure on milk and milk products with rise in income. With graphical representation of the data we collected, we analysed the graphical figures for urban and rural areas. For income elasticity studies we collected data for family budgets for both urban and rural areas. We notice a number of features. Firstly, rural consumption of milk is on average lower than urban consumption. This is true both for per family consumption and per capita consumption. Secondly, while difference in the levels of rural and urban consumption of milk is mostly caused by differences in the income levels, whole of the difference is not caused by difference in income. For example, with midpoints of income classes from 60 to 120 the per family expenditure on milk and milk products in the rural area is for the most part less than Rs. 5000/- per annum whereas in urban areas the same is not on the whole less than Rs. 6000/-. Some will say that some vegetarian families are disposed to consume relatively more milk. However, it is difficult to accept that all the families of the span of income classes described are vegetarian. So it is possible to be disposed to support the hypothesis that knowledge might be factor affecting the consumption of milk.

Even though the average level of per capita expenditure on milk and milk products is higher in urban areas, the ~~data~~^{data} give strength to suspicion that milk is generally not bought for consumption by all ages. Despite these side

observations, on average, consumption of milk and milk products does increase with increase of income.

We find that income elasticity of demand for milk and milk products is consistently higher than that for cereal and cereal products as well as for vegetables. Income elasticity of demand for education and health care are still greater.

In the eighth chapter we make elaborate recommendations for the required planning pattern and institutional reforms. The motivation is to quicken the process of preparation for take-off in the North Bengal districts for an upsurge of milk and milk processing sector. We have critically reviewed the reasons for neglect of rich endowments of our countryside.

We then explain why Vajpaee-Sinha type globalization is bent on continuous reduction of the rate of interest. The essential condition for generating quick take off in our countryside is that the rural institutions be freed from the coercive control of the central, ministry of finance and the Reserve Bank in respect of fixation of rate of interest.

We recommend the installation of a Raiffeisen type of Coperative Credit Bank as the planning authority for a ~~number of~~ villages.

9.2 CONCLUSION

The state government may have well-defined responsibilities. They must install a basic agency of extension in designing of new activities of production. They must also make sure that rural Raiffeisen has no difficulty to choose its technologists and managerial experts for their multifarious activities of getting products and services produced. The government also has the responsibility of appointings autonomous busuness houses to produce such services as the association of Raiffeisen Cooperatives of the district needs. Production and distribution of electricity and setting up of district circular railways might be examples. Legal restructuring (Restructuring in terms of new sets of legislation) in consultation with the Raiffeisen Cooperatives would be necessary on some fronts. One such front is proportional employment of men and women on newer activities. But the most important thing is the government

must balance its budget as early as possible reducing its internal debt to zero. The next most important thing is that the cooperation between the government and autonomous houses installing infrastructural services must be transparent. One advantage of the Raiffeisen Cooperatives is that there would be built-in checks against any deviation from the transparency of such cooperation between the government and the business.