Chapter - 7

SUMMARY OF FINDINGS AND CONCLUSIONS
Dairy industry supplies valuable food, noted for protein, calcium and riboflavin. It is also a significant subsidiary occupation in the villages in India. Hence the Government of India accepted dairy development as an instrument of socio-economic changes benefiting the poor. The three tier co-operative organisation with village-level primary milk co-operatives, district-level unions and state-level federation of Anand type was adopted for this purpose. Programmes of dairy development were implemented by the three tier co-operative organisation under the stewardship and guidance of National Dairy Development Board (NDDB) and Indian Dairy Co-operation (I.D.C), specially created for this purpose at national level. The programmes were launched in 3 phases-Operation Flood LII and III since 1970.

Tamilnadu is one of the major producers of milk in India. As in 1992-93, 17 district level unions and 9635 village level co-operatives operated under Tamilnadu Co-operative Milk Producers' Federation Ltd. They accounted for 14.99 percent of total production of milk in Tamilnadu as in 1992-93 whereas the share of Co-operative sector in the production of milk in the country was 14% in 1994-95.
Statement of Problem

Three kinds of literature on dairy industry highlight the relevance of dairy co-operatives to rural development, impact of the dairy co-operatives on production and distribution of milk and socio-economic effects of the dairy co-operatives. Except a few papers on accounting practices there has been no major study on finances of the district level co-operative milk producers' unions which bear major part of the responsibility for processing milk, production of milk-products and inter-district distribution. Hence the present explorative study on "Financial Performance of Co-operative Milk Producers' Unions in Tamilnadu".

Specific Objectives of the Study

Specific objectives of the present study aiming at evaluating the financial conditions of the co-operative milk producers unions in Tamilnadu are to

1) assess growth in collection, diversification and sales in the milk unions;
2) gauge efficiency in the utilization and management of long term capital in terms of capital-intensity of the unions;
3) measure profitability of the unions;
4) study the pattern of mobilization and deployment of the funds of the unions and
5) recommend remedial measures, if needed, for rejuvenating the financial health of the unions.

Scope of the study

The study covers quantity of collection of milk, value-addition achieved by the unions, capital intensity, profitability and sources and uses of funds.

Methodology

This exploratory study is an inter-disciplinary exercise using analytical tools pertaining to Economics, Management and Statistics. In the absence of any bench-mark study on the finances of dairy unions, the study has to often rely on inter-temporal changes in the unions under study for comparison and evaluation. Data in current prices, have been deflated to the price level of 1981-82 with the help of All India Wholesale price Index with base year of 1981-82. Time value of money has been used for assessment of profitability. Diversification has been measured in the form of net value added by manufacture (NVAM). Growth in collection and sale of milk and NVAM has been measured with the help of linear equation and average annual growth rates. Capital intensity has been gauged in the form of two sets of capital-output ratios—one relating output to total long term funds and the other relating output to fixed capital. Profitability has been estimated
with the help of rate of return on investment. Sources and uses of funds have been verified by fund-flow analysis.

Sample

Out of 17 unions in Tamilnadu, 4 unions were chosen by the stratified random sampling technique on the basis of their scale of operations. The 4 selected unions are

1) Coimbatore District Co-operative Milk Producers' Union. Coimbatore (CMU)
2) Dindigul District Co-operative Milk Producers' Union, Dindigul (DMU).
3) Salem District Co-operative Milk Producers' Union. Salem (SMU).
4) Tiruchirapalli District Co-operative Milk Producers' Union. Tiruchirapalli (TMU).

Scale of Business-Operations

Business - operations were studied in terms of volume of collection, diversification, represented by the net value added by manufacture (NVAM) and sales. Both linear equation and arithmatic average were used for measuring changes in collection, diversification and sales. Growth in collection was judged by reference to growth in production of milk in Tamil
Nadu and growth in collection of milk by all the 17 unions in Tamil Nadu and changes in overhead charge per litre of milk collected in the four unions. Performance in NVAM and sales were evaluated by the inter-temporal variations in them.

Among the four unions, DMU posted poor performance in collection, diversification and sales, because of existence of a fewer towns competition from private sector declining collection by the village level co-operatives, unremunerative price, delay in settlement of bills by DMU and consequent fail in the supply of milk from the village level co-operatives. The problems of unremunerative price and delay in payments are found in other unions also. Two unions- CMU and SMU have also to raise the level of collection in order to bring down overhead cost per litre. In order to raise its share in total production of milk in Trichirapalli District. TMU too should raise collection.

Thus all the four unions under study should enlarge collection and sale of milk considerably. Since liquid milk is the major item of consumption in India, scope for enlarging markets for the other milk products like butter and ghee is very limited. Therefore any increase in demand for these products should come from the new consumers of liquid milk. Remunerative price and timely payments are essential for raising the level of collection. In order to increase the sales, the unions should cover small towns like town
panchayats besides municipalities, now catered to by the unions. Increase in collection of milk by the unions will reduce the availability of milk for the private traders weakening their competition. This will also enable the unions to dispense with bulk sales at lower rate of profit.

**Capital-Output Ratios**

Efficiency in the utilisation of capital and capital-intensity of the project were measured in terms of requirement of long-term capital as well as of the fixed assets per unit of output, as represented by NVAM. For this purpose two sets of capital-output ratios (CORs) were employed.

With regard to effectiveness of utilisation and management of the long-term capital, COR-I relating NVAM to total long term capital showed rise in capital intensity in CMU, SMU, and TMU due to capital rising at higher rate than NVAM. Due to recurrent losses, DMU lost its long term funds by 1991-92. Since value of fixed assets did not rise as fast as the long-term capital COR-II was lower than COR-I. In all the unions COR-II rose initially and came down later due to improved management of the fixed assets. Yet the value of COR-II in the last year under review was higher than the lowest in the early years of the period under review. Therefore these unions, in order to make full use of the long term funds; should increase collection and sale of milk considerably to bring down COR-I, recapture the best
performance of the past year and then strive for the best performance of the unions in the state.

Profitability

Profitability of the operations was gauged with the help of rate of return on investment. Two concepts of net profit or net surplus were used. Net surplus I consisted of net profit as reported in the profit-loss account and provisions for reserves and depreciation and net surplus-II comprised net profit and provision for reserves. Analysis of the profitability covered those factors which influenced the profitability of the operations.

Profitability of the unions depended on scale of business-operations. control over direct costs and consequent rate and amount of gross profit. control over indirect cost influencing net profit. Fluctuations in the rate of gross profit suggesting lack of control over direct costs could be found in all the four unions at least in some years. Similarly excessive spurt in fixed costs also reduced net profit occasionally. However DMU alone. suffered losses continuously and lost all the long-term capital. Both CMU and SMU. despite losses in some years, earned net profit in course of time and reduced the burden of total external liabilities on their own funds. Though TMU too registered steady net profit, burden of external liabilities on own funds could not be reduced because of the large loans raised during the period
under review. The amount of net profit fluctuated in the three unions under review but the main reason for falling rate of return on investment was the huge increase in long ten capital. Since the long ten capital was not adequately used for expansion of capacity, collection and sales, it caused upward trend in COR-I and reduction of rate of return on investment. Utilization of the long-tenn funds in the expansion of capacity and increase in collection and sales would reduce COR and improve profitability in CMU. SMU and TMU while DMU needs additional long-tenn funds for its very survival.

Fund-Flow Analysis

Fund-flow analysis (FFA) in the form of statement of sources and application of funds was used for evaluating the financial performance of the four union - especially in respect of the share of retained eaming in the additional funds, financing of fixed assets and deployment of working capital. Retained eaming was the largest source of long-tenn funds for 6 years in CMU, 8 years in SMU and 5 years in TMU. Relative profitability of CMU, SMU and TMU and continuous losses in DMU were reflected in the proportion of long-term and short-term funds flowing into these unions.

Fund-flow analysis revealed that the long-tenn funds were predominant in the intlow of funds in CMU and TMU and long-tenn and short-term...
funds were nearly equal in SMU. In DMU alone short-term funds formed major part of the inflow of the resources because of the recurrent losses. Mobilization of short-term funds, from increase in sundry creditors resulted in unhealthy extension of the duration of trade credit alienating the primary societies. Share of the net value of fixed assets in the total long-term funds was 36.22 percent in CMU, 8.67 percent in SMU and 15.06 percent in TMU indicating long-term credit-worthiness of the unions though the requirements of net working capital in the three unions did not need the remaining part of the long-term funds. Major part of the long term funds was used on financing of current assets like sundry debtors and such use of long term funds for increase in debtors led to unhealthy extension of collection cycle, rise in the value of COR I and fall in rate of return on investment. Therefore a substantial part of the long-term funds should be utilized for expansion of capacity, collection and sale. The proposed redeployment of funds will lead to expansion of the scale of business operations, reduction of capital intensity and improvement in the rate of return on investment.

Conclusion

All the four unions under review, should expand collection and sales to reduce the burden of overhead cost and raise profitability as in the case of CMU and SJVTU or to raise the share of collection in the total production of milk in the district as in TMU or for sheer survival as in DMU. In atleast
three unions (CMU, SMU and TMU) failure to use long term funds for expansion of capacity and operations resulted in high CORs and in falling rates of return on investment. Utilization of a major part of long term funds on current assets extended collection cycle unduly. Thus all the four unions have to expand capacity and scale of operation and three unions-CMU, SMU, and TMU have necessary funds for this purpose. Only DMU needs additional funds and efficient management.