
Martin Doornbos and K.N. Nair: Edited **RESOURCES, INSTITUTIONS AND STRATEGIES — OPERATION FLOOD AND INDIAN DAIRYING** Sage Publications, New Delhi, 1990, pp 400

This edited volume is fourth in the series of Indo-Dutch Studies on Development Alternatives. Detailed case studies were carried out by Indian and Dutch social scientists on a variety of aspects of the Operation Flood (OF) programme. These case studies were originally presented and discussed in a workshop held at Centre for Development Studies, Trivandrum in December 1986.

The papers presented in this volume are grouped into five sections.

The first section, "The Model", deals with the emergence of the familiar "Anand Pattern" as an organisational model and evaluates the performance of the model. The paper by Sujata Patel analyses the reasons for the success of the model in Kheda District in Gujarat. According to her, the factors contributing for the success of the Anand Model are the age old dairy culture and the caste structure in the area, the coincidence of the dairy cooperative movement with the national movement, the ability to take advantage of large Bombay milk market and the significantly large foreign aid received even before the Operation Flood programme. According to her, these factors essentially lie outside the organisational model and, are per definition, not replicable. Van Dorsten analyses the methodological issues in a number of reports and studies that claim the success of the Anand cooperatives. This paper raises the urgent need for improvement of methodologies for the measurement of impact and clarity in evaluation criteria. It establishes a need for independent monitoring of large-scale public sector development programmes in general. The paper by Shanti George also underscores the need for independent assessment and examines the consequences of centralisation of dairy development programme in India.

The second section deals with case studies from Saurashtra, Rajasthan and Bihar in terms of the replicability of "Anand Model". The papers in this section also appear to emphasise the need for decentralised approach as against the present trend towards centralisation. The case study in Saurashtra analyses the failure of the model in effectively linking up the maldharis, who have specialised in cattle keeping for ages, with the new dairy processing facilities or to develop novel channels by which the cooperative milk collection centres can effectively relate to the maldharis production cycle. The papers by Shekhawat (Rajasthan) and Mitra (Bihar) stress the need for considering ecological, agro-economic and social contexts of the different regions while attempting to replicate the "Anand Model". Such a consideration could come through more decentralised institutions that are more in tune with the local conditions.

The third section analyses the resource base for dairy development. The paper by Nair and Dhas points out the need for reexamining the cattle breeding strategy in India in light of the possible consequences of the existing policy. The increase in the crossbred cattle to enhance the milk production is likely to be at the expense of animal draught power availability and increased use of fossil fuel in the agricultural sector which will effect the small and marginal farmers. The paper by Parisot analyses the need for a more cohesive fodder plan including the development of new mechanisms to govern the exploitation of communal lands. The intensification of milk production through crossbred cattle will accentuate the process of environmental degradation in the country through depletion of grazing lands. Dhas's study of Tamilnadu indicates that the milk production increased substantially in the last two decades whereas the feed supply had been stagnating. There is less scope now for substituting milch animals for work animals and hence, a sustained growth in milk production is uncertain. In addition, the favourable terms of trade which contributed to the significant increase in milk production have become unfavourable to the farmers.

The next section looks at the ability of Operation Flood as a vehicle for social change with regard to poverty eradication, tribal development and emancipation, and employment potential for women in cooperative dairying. Verhagen's study on rural India, concludes that Operation Flood has only a limited impact in terms of income and employment generation among rural poor. Limited access to fodder, generally related to landholding is a major barrier for the poor, especially landless labourers. Also, as pointed out by Baviskar, the large farmers tend to draw more benefits from their involvement in cooperative dairying as compared to small and marginal farmers. The small farmers have clearly gained from the cooperative which helps them earn additional income. But, as large farmers derive greater benefits, the cooperatives have perhaps increased the gap between them and the small farmers. However, the cooperatives have contributed to the survival and viability of the small farmers. Savara's study of the tribals in Surat district shows that the dairying programmes introduced among the vulnerable groups such as tribals face the same resource constraints as the rural poor. While there is an increase in the quantity of milk produced by small and marginal farmers who are mostly tribals, the dairy activity seems to be barely profitable. It does not seem to be a self-sustaining development programme. There are only short-term gains and no long-term gains in terms of asset generation. It is the extreme backwardness of the area and lack of suitable alternatives that seem to make the tribals receptive to the dairying. Mitra's study on the women dairy producers in Andhra Pradesh notes that the prospects of poor women involved in dairying are mixed and require more attention. Based on four profiles of women engaged in dairying, the author suggests all-women cooperatives to strengthen the participation of women to enhance their position. There appears to be a definite and important difference

in asset base for dairying between women of different socio-economic backgrounds. In addition, the formalisation of milk transactions through cooperatives may deprive women of the control over milk income they have had earlier.

Foreign aid has definitely played a major role in India's dairy development in the organised sector. The issue of foreign aid revolves around the question whether India's dairy development has become dependent on external sources either in the form of aid or imports. The last section of the book deals with the question of this dependence. Chatterjee examines the evolution of aid link between India and New Zealand in the field of dairying. An aid package is easier to put together, if the donors also can serve their own national interests in some way. However, such convergence of interests is unlikely to be the most inefficient basis for long-term international collaboration. Indian dairying, in the last three decades, had to face the uncertainties inherent in such arrangements. Baviskar and Terhal, in their analysis of internal constraints and external dependence, argue that Operation Flood has been unable to overcome structural constraints that characterise Indian milk production. India has made itself dependent upon continued aid or imports of dairy commodities. The Government of India has relegated the initiative for policy making for the dairy sector, especially that of international aid, to autonomously operating public corporate bodies. For the Indian planners, wanting to further expand Operation Flood to 200 major cities and all milksheds of the country, dairy aid seems to be the preferable option. But, this may have long-term implications for India's balance of trade and its desire to be self-sufficient in dairying. Batra's analysis of the impact of Operation Flood on the Delhi milk market, emphasises that a large part of the funds generated by donated dairy surpluses needs to be used for enhancing milk production so that the country's dependence on aid will be reduced over time. Heavy emphasis on procurement alone is likely to increase the financial burden on the public exchequer. In this way, dairy aid will only be a short-term solution to the problems faced by the country.

India's Operation Flood had been studied by many official organisations such as UN/FAO, Government of India, CEC, etc. In addition, the programme has attracted lot of attention from social scientists in India and abroad. This interest has been prompted by various factors such as replicability of the AMUL pattern, its potential as an anti-poverty programme, impact on the Indian livestock and fodder resource base, role of external support, etc. A large amount of literature on all these aspects of Operation Flood are already available. Nevertheless, this present volume attempts to answer many of the questions raised with regard to Operation Flood Programme and highlights not only the benefits of the programme but also the drawbacks and possible problems likely to be encountered in the future. This volume gives a overall picture of the Operation

Flood but fails to provide indepth analysis of certain aspects of the programme. But this volume is complimentary to other books brought out under the Indo-Dutch series.

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