

Livestock Development Policies During the Five-Year Plans in India

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Livestock plays a vital role in rural life and economy even today. In fact, animal husbandry and agriculture are twin occupations, which are practiced by the rural households since ancient times. Livestock rearing being 'a way of life' in rural areas and with more than 70 per cent of the people relying on the above activities, it forms the backbone of the rural economy. In fact, combination of livestock rearing and crop production enables fuller utilization of farm by-products, conserves soil fertility and increase the household income. It provides employment especially self-employment and the most valuable supplementary income to the vast majority of rural households, majority of who are small marginal farmers and landless laborers.

Livestock provides nutritious protein rich balanced food viz., milk, egg, meat and value added products to the population. In fact, the milk and milk products are the major protein source to the vegetarian population. Organic fertilizer produced by this sector is an important input to crop production and dung from livestock and draught power are chief sources of energy in rural areas. Livestock is not only intricately associated with the social, cultural and traditional values of the region but also serves as an insurance substitute, especially for poor rural households since it is an asset that can be encased during times of distress. Livestock also provides the basic raw material namely, raw hides and skin for leather industry, which has great employment and export potential.

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The very first attempt to conceive a set of policies for livestock development was made by the Royal Commission on Agriculture (RCA) in 1928. The Commission clearly recognized the role of draught animals in the Indian agriculture. The problem of excessive numbers (cattle) and the scarcity of feed and fodder were also recognized by the RCA.

The Commission linked the vicious circle of low quality stock, fodder scarcity

and excessive numbers to the Hindu religious sentiment against slaughter of cows. The next comprehensive review of the livestock sector was made by the National Commission on Agriculture (NCA) in 1976. The NCA's review of the sector was for the period of the Fifth Five Year Plan – 1974 to 1979. The NCA therefore, had the benefit of reviewing the plan strategies, and achievements under four Five Year Plans between 1951 to 1974. The NCA Report deals with the problems and prospects of Animal Husbandry Livestock Production comprehensively.

Review of Literature

1. Maitri Satashia and R.S.Pundir, (2021), “Marketing Efficiency of Milk Marketing Channels in Middle Gujarat and Scope for its Improvement”, Dairy farming is a profitable sector in India that has provided a significant source of income and employment. In case of Milk marketing, Channel – I (Producer – Consumer) was found to be most efficient channel.
2. Pushpa Yadav, B.S.Chandel and Punit Agarwal, (2021), “Total Factor Productivity of Livestock Sector in Gujarat: Evidence of Technological Changes and Sustainable Growth of Livestock Sector”, livestock productivity is increased by strengthening the research capabilities through public private partnership so that new high yielding breeds of milking animals and high yielding varieties of fodder having more nutrients could be developed.
3. Baban Bayan (2020), “Impact of Dairy Co-operative Society on Adoption of Improved Farm Practices: A Farm Level Experience in Assam”, the findings show a positive and statistically significant impact of smallholder dairy farmers participation in dairy co-operative society on green fodder cultivation, adoption of AI, and feeding concentrate to the farm animal.

The **First Five Year Plan** goals for livestock development were primarily to increase milk production, improve milk supply to the large urban demand centers and to improve the quality and supply of draught animals for agriculture. The strategies laid down were selective breeding of indigenous cows, grading up of non-descript cows with Indian breeds to increase their milk potential and selective breeding of draught animals. All three resulting in a population of dual purpose animals.

The Plan also recognized the problem of fodder scarcity, excessive numbers and the phenomenon of city kept cattle. Launching the key village scheme was one of the strategies adopted under the First Plan to increase milk production and to an extent fodder supply. Castration of scrub bulls and the enactment of the livestock improvement act by most states were attempts of sorts, to control the population growth as well as to enforce a degree of selectivity in breeding. Artificial insemination too was included as a tool for rapid breed improvement.

Diseases of animals were identified as a serious limitation to the productivity improvement. But no major interventions to control disease were set in motion, except investments in veterinary hospitals and dispensaries. For milk supply to urban areas, the policy option was to promote a series of government owned dairy plants handling milk procurement, processing and marketing. The city kept animals were to be brought under a scheme of peri-urban co-operatives where they were supported to produce and supply milk to the government owned dairies.

The **Second Five Year Plan** maintained and continued the same policies and strategies with no major changes in it. Both the First and Second Five year Plans failed to include the draught animals in a meaningful scheme for breed improvement and was there an attempt to improve their work output. The **Third Five Year Plan** too continued the policies and strategies under the first two, but recognized the need for an ultimate policy for breeding cattle for increased milk production.

Limited practice of cross breeding started during the Third Plan. By the end of the Third Plan, the inadequacies of the key village scheme were apparent particularly in the fodder front. So also, the failures of the urban milk schemes too were recognised, along with the need for a greater rural orientation for milk production. Some of the policy initiatives under the Third Plan were setting up of feed mill for balanced feeds and the promotion of capabilities for indigenous manufacture of dairy plant and machinery. Another policy initiative under the Third Plan was to recognize the economic potential of animal by-products like skin, hides and fallen animal products.

The **Fourth Five Year Plan** was delayed by three years. With three Annual Plans making up the gaps in the continuity of the five year plans, between 1966 to 1969. The livestock sector saw some of the most momentous policy initiatives during this period. The key village concept matured into the intensive cattle development projects which became the Government flagship programme for cattle development. More important, the failure of the government run dairy development programmes during the earlier Plan periods enabled the Government to see dairy development in the perspective, emphasis on milk production in the rural milk shed movement of processed milk from the rural areas to the urban demand centres became the cornerstone of Government policy.

This policy found institutionalizing in the National Dairy Development Board and its translation into an action in Operation Flood I. Dependence on imported commodities as a substitute for indigenous milk procurement was the order of the day. The Government dairies used upto 55,000 metric tonnes of imported powder annually reconstituted milk accounted for the bulk of the throughout the Government owned plants. Operation Flood sought “to use the gift commodities to end all commodity aid”. And the country’s milk production chart, stagnant over the years since independence, suddenly started to come alive the sluggish growth of milk production – 3 million tonnes from 19 million to 22 million tonne in nearly 22 years from 1947 to 1969 gave way to rapid growth from 22 million tonnes in 1972 to 44 million tonnes in 1985.

Cross breeding of cattle as a national policy gained momentum and economic relevance as the co-operative network under Operation Flood move into provide the much need market stimulus and price incentive. Producer price offered by the co-operatives, in effect became the support price for milk and milk gained recognition as a marketable commodity. Buffaloes, established their pre-eminence as the “main stay” of the Indian Dairy Industry.

The **Fourth Plan** policy on dairy development also included the concept of ‘National Milk Grid’, which will undertake the balancing of seasonal and regional shortages in milk supply, buffer stocking of milk solids and create the where-with-all for the movement and storage of milk and milk solids across the country warehouses, road and rail tankers and so on. But the relevance of the policy is in that it created a structure to ensure price support (through producer price in village co-operatives), leveling imbalances, buffer stocking and if necessary a market intervention within the industry and outside the Government.

The Third and Fourth Plan policies ensured that the growing dairy industry in India is supported by the parallel growth of the dairy machinery manufacturing enterprise, almost entirely in the private sector. This initiative enabled Operation Flood dairy plants to progressively draw their supply of plant and machinery from sources within the country, in fact by the mid 80s the Indian manufacturing industry was in a position to supply almost 75-80 per cent of the industry’s requirement, except very sophisticated heat exchangers, homogenizers, packaging machines, etc.

More or less similar growth and development took place in the cattle feed milling plant and equipment manufacture.

The **Fifth, Sixth and Seventh Plan** periods, as far as milk production was concerned became the years of the Operation Flood Project. It dominated the policy environment to the exclusion of all other options during twenty years period from 1970-1990. In spite of the general awareness even during the RCA times and then the NCA period, that draught animal are indispensable to the farming system in India, none of the Five Year Plans from First to Eighth engineered a policy initiative for their improvement of regular supply to the farming sector. The first official policy statement on draught animal improvement and their precise relevance to the bovine population size is seen in the Eight Plan document.

Meaningful strategies to exploit this policy perception through a set of action programmes are yet to emerge. Buffalo as an animal for milk production did not receive much attention under the successive plans; in fact, buffalo appears to have been taken for granted by the planners. The possible excuse for the policies favoring the cows is perhaps that cows provide male calves potential work animals. The two interventions, the Plan introduced for buffalo development are; (1) an all India coordinated Research Programme on Buffaloes, (2) the establishment of a Central Institute for Productivity of Buffaloes in India. However, the recognition of the buffalo as the main stay of the Indian Dairy Industry by the organized sector of dairying in India encouraged its development, predominantly through market stimulus and price incentives.

Progeny testing of the bulls used for Artificial Insemination (AI) in buffaloes is an unavoidable requirement for its productivity enhancement, and from the Third Plan period, programmes for progeny testing of both cattle and buffaloes had been initiated. However, none of these attempts succeeded as there was no linkage between these schemes and the field AI programmes in buffaloes. There had been claims from various quarters, of the availability of evaluated buffalo bulls, but the authenticity of the claims or the accuracy and validity of the so called evaluations had never been investigated.

Fodder development continued to remain marginalized even in the Seventh Plan despite growing concern over the acute scarcity situation. The devastating effect of the two year stretch of severe drought, almost country wide during the 1985-87 period focused attention on the need for alternate strategies for feeding the livestock. The Seventh Plan however could not rise above the usual departmental approach of fodder development schemes, mini kits, etc.

On animal disease control, the policy through the successive **Eighth Plan** period was to expand the capabilities and coverage of the State Departments of Animal Husbandry, the thrust being on curative treatment rather than on prevention and control. During the Seventh and Eighth Plan, disease prevention and control received some attention. This was manifested in setting up of the National Rinderpest Eradication Programme and greater regional co-operation in control and containment of the diseases, proposed under the Eighth Plan.

Ninth and Tenth Plan on Animal Husbandry and dairying will receive high priority in the efforts for generating wealth and employment, increasing the availability of Animal protein in the food basket and for generating exportable surpluses. This overall focus will be on four broad pillars viz. (i). removing policy distortions that is hindering the natural growth of livestock production; (ii). building participatory institutions of collective action for small-scale farmers that allow them to get vertically integrated with livestock processors and input suppliers; (iii)

creating an environment in which farmers will increase investment in ways that will improve productivity in the live stock sector; and (iv) promoting effective regulatory institutions to deal with the threat of environmental and health crises steaming from livestock.

References:

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