POLICY VACUUM IN AGRO-PROCESSING INDUSTRIES

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Processing of agricultural produce at the primary level and with modern methods offers immense benefits both to agriculture and industry. Yet these primary processing activities have not received due recognition in the programmes and policies of our Five-Year Plans. This article attempts to explain the significance of agro-processing industries in the context of economic development and examines the policy lacunae in this regard.

I

MODERNISED AGRO-PROCESSING

Agro-processing industries can be defined as those industries concerned with the conversion of agricultural raw materials into finished products. These processing industries fall into two broad categories: (i) Primary processing, and (ii) secondary processing. Primary processing industries are industries which are engaged in the first stage of processing, such as sugar, gur and khand-sari manufacturing; coffee, tea and tobacco curing; fruit and vegetable processing; cotton ginning; jute baling; rice, dal and flour milling, etc. Secondary processing industries are industries which are engaged in the further stages of processing or more sophisticated treatment of the product or in the utilization of by-products. Examples of those are: bakery and confectionary; cigarette manufacturing; cotton spinning and weaving; vanaspathi manufacturing.

This primary processing level needs further explanation. Primary processing is carried out by the sectors: One "traditional" and the other "modern." The traditional processing can be distinguished from the modern processing on the basis of: (i) the type of technology, (ii) the coverage of markets served, (iii) linkages with the rest of the economy both backward and forward. The traditional processing, as is well known, is primarily concerned with the processing of local raw materials for serving local markets, with simple techniques with the result that its scope for the development of links with the rest of the economy is either wholly absent or is very much restricted. In other words, the traditional processing functions on a subsistence as well as in an isolated manner. On the other hand, the modernisation in processing connotes processing of agricultural raw materials by the modern mill sector. This sector, as can be readily seen, uses a technology which enables this sector to serve larger markets and develops vital links with the rest of the economy and it forms an integral part of the agro-industrial economy.

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When it is stated that modernisation of processing industries will be instrumental in modernising agriculture and in developing the region, it refers to modernisation at the primary processing level. Such a type of development effect is possible since most of the primary processing industries cannot be separated from their source of raw material without harming the cause of both the processors and the growers of raw materials because of their perishable nature requiring immediate processing in nearby area.

Intertwining of the interests of both the growers and the processors and the rural orientation of these industries have benefited both the parties. This has enabled the industry (i) to grow in size and efficiency, (ii) in being instrumental in modernising agriculture, (iii) in assuming the nature of an industrial complex, i.e., by creating favourable economic climate for the industries to spring up in the region utilizing the products and by-products of the industry and also other industries which have no economic or technical relationship with the main industry.

That a programme to modernise and effectively develop agro-processing industries converts the farming sector around them from subsistence to commercialised type has been demonstrated by the three case studies made by us. For instance, when a modern sugar factory was established in Mandya, a backward region then (1933-34), around economic development followed in its wake. Area under sugarcane increased continuously, both absolutely and relatively. A close co-operation between sugarcane growers and the sugar mill led to mutual benefits. The growers were benefited by way of an assured market and assured price for their product; received financial assistance from the factory in the form of cash advance to meet harvest expenses; received technical advice in improving the quality of sugarcane and controlling pests and diseases. The sugar factory, on the other hand was benefited by an assured and regular supply of sugarcane; expansion of production and production capacity to accommodate increasing number of cane growers. It also led to the establishment of new industrial units for the effective utilization of by-products of the sugar factory. A paper manufacturing factory was set up to make use of the bagasse; a distillery unit came into existence to produce power and potable alcohol and to supply materials required in the manufactures of explosives and photo films.

These developments led to the economic progress of the region. People’s cash income increased; the construction activity developed; number of educational institutions increased; and savings of the community went up reflecting in the increase in bank deposits.

Similar results were achieved in Chickmagalur, predominantly a coffee growing area when modern processing units were established.  

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dependence of these units on agricultural raw material (raw coffee seeds) led to the increase in the number of raw material suppliers and also to closer ties with them through technical-cum-extension assistance programme. The units have built up a large number of farmer clientele, 1,500 to 1,600 small growers and 230 to 250 big growers. The processing units have emerged as one of the main sources of finance for meeting cultivation expenses. They have advanced cash loans upto Rs. 4 to 5 lakhs to the growers during the coffee fruit picking season; supplied fertilizers worth Rs. 20 to 25 lakhs; provided financial assistance to the tune of Rs. 10 to 12 lakhs to meet other expenses. They have also gone to the extent of manufacturing the fertilizers required by the coffee growers. A soil testing laboratory has been maintained by one processing unit and soil testing and analysis is made free of cost.

If the above developments are termed as primary effects, the secondary effects flowing from the establishment of coffee processing units took the form of creation of favourable conditions for the growth and development of industries and institutions outside the coffee business. The banking industry could flourish by way of increasing deposits and increasing advances without the fear of defaulters since the processing units stood guarantee for the loans borrowed by their farmer clientele. For example, the total deposits received by a leading bank in the area increased from Rs. 12.26 lakhs in 1957 to Rs. 44.76 lakhs in 1967. During the same period, the total advances made by the same unit increased from Rs. 3.75 lakhs to Rs. 22.96 lakhs.

Due to the presence of coffee processing units and the consequent growth of Chickmagalur township, the Chickmagalur taluk also became more developed than other taluks of the District. In this taluk many amenity centres and educational institutions were set up. 30.2 per cent literacy of Chickmagalur taluk compares with 27.5 per cent literacy in Chickmagalur District; one first grade college and several polytechnics are established in the taluk indicating the increased need for education felt by the people of the area.

The results of the case study of fruit processing unit also confirmed the above conclusions. The establishment of the fruit processing plant led to the development of close co-operation between the fruit growers and the processing unit. This mutual co-operation in its turn brought about price benefits, production benefits, quality benefits and risk reduction. For instance, the policy followed by the case study unit in respect of purchasing of tomatoes and its development effects on the fruit growing and processing industries is worth noting here. The sale and purchase of the tomatoes is governed by a tripartite agreement entered into by the growers, processing unit and the National Seed Corporation of India. According to the agreement farmers have to plant and supply to the processing plant the quantity

and quality of tomatoes stipulated in the agreement. Likewise, the processing unit undertakes to accept the entire crop grown under the contract at a price stipulated in the agreement.

The new system proved beneficial to all the three contracting parties. The price received by the growers of tomatoes is Rs. 40.50 per quintal (Rs. 27.50 per quintal of tomatoes and Rs. 13.00 per kg of tomato seeds) whereas the price received previously varied between Rs. 28 to Rs. 35 depending upon the market conditions. The assured market and price provided by the processing unit helped the growers to methodically commercialise the production of tomatoes according to the specific requirements of the processing plant.

The processing unit also benefited by way of obtaining raw material at reduced costs. According to the agreement, the unit now pays Rs. 27.50 per quintal as against the price it was paying under the market purchase system which varied between Rs. 28 to Rs. 35. The unit now could systematically plan and schedule its purchase and processing operations since it could control the supply and delivery of the fruit. The National Seed Corporation of India also benefited by way of getting good quality seeds at cheaper price.

Increasing number of farmers willing to grow and supply tomatoes to the processing plant is a clear indication of the interest the growers have in the processing unit and the favourable impact of the processing unit on the farming community. Six farmers supplied more than 3 lakh kgs. of tomatoes grown over an area of 35 acres in March-May, 1970 season. In August-October season nearly 60 acres of land was planted with tomatoes to be supplied to the processing plant. The processing plant has an ambitious plan to procure 2,500 to 3,000 tonnes of tomatoes directly from the growers.

The establishment of the processing plant also popularised the growing of raspberries which was unknown to the farmers. Due to the remunerative price paid by the processing plant, the quantities of raspberries supplied increased beyond the requirements of the plant.

Realising the advantages of the direct co-operation of the growers and encouraged by the success achieved with its experience in respect of tomatoes and raspberries, the processing plant has plans to seek the co-operation of growers of other fruits also.

Modern methods of processing large scale operations and the growth-oriented policies of the processing unit have enabled the unit to develop more and more links with other industries like bakery and confectionary industry, ready-to-serve beverages industry, fish canning industry, etc., and thus cater to the ever widening markets, both domestic and foreign.
The conclusion of studies conducted by other authors on the role of agro-processing industries also confirm the findings of the above case studies. It is worth citing the results of two studies, viz., Hindustan Lever’s peas processing plant, and the Amul Dairy Co-operative.  

Hindustan Lever has built up in West Uttar Pradesh an agro-industrial complex interlinked with operations all based on growing and processing of peas. Since the growing of peas was considered risky, the farmers were not anxious to grow them. The Company had to take the initiative. The result of the efforts of the processing plant was an increase in the number of farmers who undertook growing of peas for the Hindustan Lever from nil to 1,200 in 1967, the area under peas increased to 6,500 acres. The Company expects that the acreage under peas will soon have to be doubled or quadrupled. The Company maintains a separate agricultural department whose activities are research and extension, supplying farm requisites, harvest and transportation of peas, etc.

A more widely known example of this type is that of the Kaira District Dairy. Establishment of this most modern primary processing plant illustrates how a primary milk processing industry organized on modern lines transforms a subsistence economy into a commercialised one. The establishment of the modern dairy resulted in (i) greatly increased income to the milk producers; (ii) the expansion of capital investments; (iii) supplementary cash income to the farmers; (iv) fillip to transport industry and rural road construction; and (v) better and enlarged veterinary service improving health and yield of dairy cattle.

It is clear from this discussion that such agro-industrial activities in primary processing have the capacity to transform and modernise the agricultural sector and become the nuclei for more widespread development. A pertinent question now is what were the objectives, policies and programmes towards the development of these agro-processing industries in our Five-Year Plans? Have they recognized the growth promoting qualities of modern processing plants? It is appropriate to review the developmental efforts and their objectives during the four Five-Year Plans.

II

AGRO-PROCESSING INDUSTRIES DURING FIVE-YEAR PLANS

The efforts made by the planners for the development of primary processing industries were directed under such heads of development as

co-operation, village and small scale industries, dairying, rural industries projects, etc. It is, therefore, necessary to closely examine the trends in expenditures under these heads.

Such an examination reveals that there is a small rise in the percentage of amount provided for agricultural and rural development under the head of co-operation in the total Plan provision, the percentage being 0.3 in the First Plan; 1.0 in the Second Plan; almost the same in the Third Plan and 1.2 in the Fourth Plan. Expenditure under the head of village and small scale industries, however, shows a diminishing trend (1.3 per cent in the total Plan provision in the First Plan; 4.1 per cent in the Second Plan; 2.7 per cent in the Third Plan; 1.8 per cent in the Fourth Plan). Milk processing activity received greater priority in our Plans, the provision for dairy and milk supply being raised by several folds from Third Plan expenditure level. Rs. 33.6 crores were expended on dairy and milk supply in the Third Plan which constituted 0.4 per cent of the total Third Plan expenditure. The outlay in Fourth Plan was raised to Rs. 139 crores constituting 0.8 per cent of the total Fourth Plan outlay.6

If a further breakdown of expenditure under each of the above heads of development is made it is seen that primary processing industries did not receive due attention of the policy makers. For instance, out of the total Third Plan provision for developmental programmes under co-operation, provision for processing industries accounted for only 14 per cent. Activities like co-operative credit, marketing and storage received top priority in the co-operative sector and accounted for nearly 85 per cent of the total financial provision. Processing industries fared a little better in the Fourth Plan, the proposed outlay for their development being 25 per cent. But this did not alter their insignificant position.7

The pattern is not very different in the case of village and small scale industries. Analysis of the expenditure under village and small scale industries reveals that small scale and handloom and powerloom industries received very high priority in all the four Plans in that they accounted for 42 per cent of the total estimated expenditure in the Second Plan, 46 per cent in the Third Plan and 48 per cent in the Fourth Plan outlay under this head. Khadi and village industries on the other hand received relatively lower priority, their share being 46 per cent in the Second Plan, 37 per cent in the Third Plan, and 33 per cent in the Fourth Plan.8 Even under this head of expenditure activities relating to khadi were given more importance. This can be seen from the disbursement of funds by the Khadi and Village Industries Commission. During the last three years of the First Plan, Rs. 6.23

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crores were given for khadi and Rs. 1.91 crores for village industries; in Second Plan Rs. 64.71 crores for khadi and Rs. 17.98 crores for village industries; during Third Plan Rs. 94.38 crores for khadi and Rs. 31.86 crores for village industries. Further, on some occasions in the past, the Commission had approached the Central Government for transfer of funds allotted for village industries programme to khadi programme." However, not all funds disbursed by the Commission under the head of village industries can be said to have spent on primary processing industries, for the category of village industries included 14 different industries of which only four were concerned with the processing of agricultural products and that too on traditional lines. These four categories are: Processing of cereals and pulses, ghani oil, gur and khandsari, fruit and vegetable processing.

Judging from the investment allocations made to develop these industries in the co-operative and village industries sectors, we find that the planners have increasingly recognized the importance of agro-processing industries though late. But the relative share of co-operative processing in the total processing activities is not much significant. Also, the developmental efforts envisaged in the Five-Year Plans in respect of processing industries were confined to few industries and to few States only. For example, excepting sugar and cotton ginning, co-operative processing has not made much headway. While the co-operative sugar factories accounted for 30.7 per cent in 1967-68 of the total production of sugar in the country, in respect of cotton ginning and pressing, co-operatives ginned 5.9 per cent and pressed 11 per cent of the national total in 1963-64, the share of co-operative sector in processing of fruits in terms of value was 3.1 per cent in 1963, the co-operative coffee curing accounted for 15 per cent of the total quantity of coffee cured in the country. Less than 1 per cent of the units engaged in the processing of paddy and oilseeds were in the co-operative sector.

Whatever assistance was given to co-operative processing units it was given with a view to increase the producer's share and little attention was paid to the linkage effects of these industries. Further, the majority of primary processing industries especially rice mills and coffee curing units now are working purely as service agencies, i.e., these units process agricultural raw materials on the basis of service charges. Though processing of agricultural raw material of this sort can help raise income of the farming community and would be very useful to the family and community, this type of development will not help the processing industry to grow, and increase in income.

10. Ibid., p. 85.
13. Ibid., p. 652.
and employment so achieved will be temporary and not cumulative. Merely
sanctioning of cent per cent finance on some ideological grounds without ob-
erving the growth potentialities will hardly solve the problem of rural de-
velopment.

The efforts of planners to develop primary processing industries can also
be judged by reviewing the working of various agencies or institutions set up
at the Central and State levels during the last 20 years. Among these agencies
the following important ones can be mentioned: National Co-operative
Development and Warehousing Board which was later called as National Co-
operative Development Corporation; Industrial Finance Corporation; State
Finance Corporation; Agro-industries Corporation; Food Corporation of
India; Village and Khadi Industries Commission and Boards, etc.

The National Co-operative Development Corporation was charged with
the objective of developing processing industries, among others, by providing
long term capital and short term loans for the purpose of purchase of trans-
port vehicles and setting up of new units, etc. The sugar factories and some
modern rice mills have been the major beneficiaries of the assistance provided
by the Corporation. The amount of assistance from 1956 to 1965 was Rs. 138
crores. 15 Industrial Finance Corporation has made greater contribution to
the development of sugar industry by way of providing initial capital. But
it has not made much progress in respect of other processing industries. That
the impact of this assistance was very small has already been noted above.

A review of the working of the State Finance Corporation entrusted
with the function of providing long and medium term capital to State level
industries reveals that except in the case of Assam, Bihar, Orissa Corpora-
tions, other State Corporations have not made much progress in respect of
sanction of loans to primary processing industries. For instance, the percentage
of loans sanctioned by State Finance Corporations to agro-processing industries
to the total loans sanctioned was 35, 33 and 32 in the case of Assam, Orissa
and Bihar respectively. The loans sanctioned by the Corporations of Jammu
& Kashmir, Haryana, West Bengal constituted only 7, 8 and 9 per cent
respectively.16 The average of loans sanctioned to agro-processing by all the
State Finance Corporations for 1970-71 is about 20 per cent. Out of the total
loans of Rs. 1,346 lakhs sanctioned by the Mysore State Finance Corporation
since its inception, only 21 per cent (Rs. 293 lakhs) were given to agro-pro-
cessing industries. And, it is further observed that the bulk of the loans were
given to only sugar factories and in very recent years to rice mills. Thus, we
notice greater disparities in the level of working of different State Corporations
and also progress being confined to only few agro-processing industries.

15. Report of the Committee on Co-operative Marketing 1966, Government of India, Ministry of
Food, Agriculture, Community Development and Co-operation (Department of Co-operation),
1966, p. 268.

The new State level agencies to come up are the Agro-Industries Corporations whose primary activities hitherto have been confined to distribution of agricultural machinery and implements under hire-purchase system, production and distribution of agricultural inputs, etc. Recently, however, they have turned their attention to the processing activity also since some of these processing plants are still in the planning stage, it is difficult to assess the contributions made by them to the development of processing industries.

The Food Corporation of India, though its main function is to implement agricultural price policies through procurement, storage and selling of foodgrains, has plans to set up 220 mills to shell paddy in the most modern method. As a first step, the Corporation has plans to import 12 modern rice mills from Japan. Unless these mills are set up and worked it is difficult to assess their impact as an agro-processing industry.

III

INADEQUATE POLICY

This unsatisfactory progress or performance of agro-processing industries can be explained by the policy considerations which governed their development.

The aims of policies and programmes which were built around primary processing industries were:

(i) to expand work opportunities within the rural economy through the intensive development of agricultural processing industries and village and small scale industries; (ii) to avoid as far as possible further technological unemployment which occurs specially in the traditional village industries; (iii) to provide the basis for the structure of an essentially ‘decentralised’ society and also for progressive economic development at a fairly rapid rate.17

These policies of the Five-Year Plans were based on the premise that unless protection was given to traditional agro-processing industries’ sector, it could not develop on its own. This is evident in the initial policy which favoured protective direction. These protective measures took the form of: (i) reservation or demarcation of spheres of production for the traditional and modern/mill sector; (ii) non-expansion of the capacity of the modern/mill sector; (iii) non-issuing of licences to the modern/mill sector; (iv) imposition of cess on modern/mill sector; (v) provision of subsidies and tax rebates to the traditional sector.

Benefits of these measures were made available to paddy dehusking, oilseed crushing and sugarcane processing industries in the Second Plan.

On the eve of the Third Plan a review of policies undertaken during the first two Plans was made. It was found that in spite of the protection given to these industries, they failed to adopt improved techniques or to achieve economies of scale and organization and their production costs remained high. To overcome these difficulties the Third Plan attempted to improve the productivity of the worker and reduce production costs by placing relatively greater emphasis on positive forms of assistance such as improvement in skill, supply of technical advice, better equipments and credit, and to reduce progressively the role of subsidies, sales rebates and sheltered markets. The Third Plan continued the policy of developing processing industries in the decentralised and small scale industries sector on co-operative basis.

The Fourth Plan without changing the basic policy sought to improve the production technique of small industries so as to enable them to produce quality goods and to bring them to a viable level. It continued the fiscal and other measures of support to enable these industries to stand competition with large industries. As licencing system did not operate effectively in preventing competition from large industries, further positive measures of assistance including liberal credit facilities, adequate supply of scarce raw materials, provision of technical assistance and improved appliances, tax concessions and differential excise duties were adopted. The Plan also continued the existing reservations to protect small scale and traditional industries.

Thus, an awareness is noticeable in the policy objectives of Third Plan and after that these industries were not functioning well. Neither the initial policy which stressed the protective aspect too much nor the policies at the later stages which aimed at improving the economic and technical strength of these industries have achieved the desired results.

IV

NEED FOR AN APPROPRIATE POLICY

In India, the policy for development of agro-processing industries has rested on the relief they provide to the rural unemployed and under-employed. This is certainly not an unimportant matter. But what is important is that agro-processing industries, based on primitive techniques and justified on the unemployment relief they provide, cannot maintain their present characteristics and yet offer competition without support of some kind or the other by the Government. They cannot countervail the economic power of in-

19. Ibid., p. 431.
20. Ibid., p. 435.
industries using more efficient techniques. Ultimately, therefore, the policy should aim at strengthening the economic power of the industry which will enable it to make major contributions to the economy rather than aiming at small increases in production and employment in short run periods. Even the small increases in these industries may not be continuous which in turn may not enable the industry to grow.

It may be further observed that, following the historic pattern of economic development, the planners thought of a more positive approach to create employment opportunities for more non-farm employment in the rural areas and keep the released labour force there by encouraging traditional processing industries which were more labour intensive. A programme for the development of agro-processing industries was, therefore, considered as necessary as a landing place for the surplus labour arising in rural sector. Traditional processing methods which were more labour intensive with limited use of capital were accepted as the "Indian Way." Thus, the agro-processing policy could be said to have the employment orientation.

Though the wisdom of this objective is not questioned, the main question is about the timing of its implementation. When this objective is pursued, there arises a problem of choice between the immediate and the future benefits. It is not always true as it is opined by experts that a policy which gives the highest volume of employment today will also yield results in the shape of a faster growth in employment opportunities in the future. This is because after a certain point, substitution of labour for capital fails to yield a net investible surplus to society, even at a relatively low level of wages. Without such surplus, future employment will suffer on account of an inadequate increase in the supply of capital and other productive resources. Experience has shown that such additions to employment as has been brought about in the field of village industries has not resulted in conditions favourable to cumulative growth in the opportunities for enduring employment in that sector or elsewhere.

It was further believed that the development of agro-processing industries in their traditional form would "accompany" the development of the agricultural sector. Whether development of agro-processing industries initiates or causes agricultural development or is the result of the development of agriculture is a controversy of the "chicken-egg" type. On the assumption

21. The characteristics of the historic pattern of development may be stated as follows:
   (i) A gradual reduction of proportion of population on farm so that capital and labour in agriculture declines as a proportion of the total and income from farming gets reduced as a fraction of national income. In short, economies "grow away" from agriculture as they progress;
   (ii) The development of agro-processing industries would "accompany" the development of the agricultural sector;
   (iii) Earnings from the exports of agricultural products is a declining component in the total export earnings due to the disadvantages that are attached to heavy reliance on exports of agricultural products.

that the development of agro-processing industries would accompany agricultural development, no special efforts were made to develop this sector so far. The economic benefits of the linkage effects of agro-processing industries on the economy in general and agricultural development in particular were not fully studied or realised. The significance of these linkage effects has been sufficiently explained by the case studies referred above. On the basis of this explanation agro-processing industries claim a fair deal in planned programmes and they need not be held as an “isolated sector” as has been done hitherto.

Besides linkage effects, the policy has failed to realise the significance of agro-processing industries in the context of increased urbanization. Economic development and urbanization has created greater demand for highly processed run-of-the factory consumer goods. The wage-price spiral experienced at present demands not only more of processed goods but cheaper ones too.

Even in the export sector, the prospects of enlarging foreign exchange earnings due to the returns from modernisation of agro-processing industries are likely to be high. The agricultural economics which relied heavily on exports of agricultural products are experiencing a decline in their foreign trade. This declining trend can be corrected by the values added to export products at the processing stage. What therefore is required is a deliberate policy change aimed at encouraging modern primary processing industries. This policy change would imply the constitution of a permanent national commission of agro-industries with two main divisions: one solely charged with the responsibility of promoting modernisation of primary processing industries and the other dealing exclusively with the development of agro-supply industries.

As stated earlier, the development of agro-processing industries has been attempted from many angles, such as, village and small scale industries sector, co-operative sector, agro-industries corporations at State levels and other commodity boards each functioning independently of the other. This has not helped to place the agro-processing sector in its proper perspective. In this context recommendations made by experts who have studied this problem may be recalled. While defending the retention of processing in the co-operative sector only, the need to improve these industries has been emphasized by Professor Dantwala who recommended the establishment of a research body to evaluate methods and trends of processing to plan and promote programmes for the development of processing industries by undertaking areawise surveys, systematic and periodic inspection of the processing

organisation, etc.\textsuperscript{24} Asoka Mehta who says that the employment potential of these industries has stagnated after reaching a peak in the Second Plan also recommends a complete change in the organization of the Khadi and Village Industries Commission.\textsuperscript{25} To incorporate recommendations of experts, and to strengthen the entire agro-processing industries sector so that it becomes an agent of transforming traditional agriculture into a modernised one, there is necessity of a permanent national commission for agro-industries as recommended above.

\textsuperscript{24} Report of the Committee on Co-operative Marketing, \textit{op. cit.}