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RAPPOORTEUR'S REPORT

ON

EXPORTS OF AGRICULTURAL COMMODITIES

Rapporteur: G. R. Saini*

The need for increasing exports both for increasing foreign exchange earnings and promoting overall economic growth of the country is well recognized. The share of agricultural exports in the total exports is substantial. With the growth of the economy this share is projected to decline. However, we observe that traditional export items in which agricultural exports play a dominant role, continue to be the mainstay of India's total exports. The study as well as analysis of agricultural exports and their future potential is therefore of great importance specially when export earnings are going to play a critical role in the coming phase of our economic development.

It was expected that there would be a considerable response in terms of papers on exports of agricultural commodities. It has been rather disappointing to receive only 19 papers. With a few exceptions, the bulk of these papers are descriptive in nature and lack analytical content expected of these papers.

The papers received for discussion can be broadly classified into two categories. The first group consists of contributions giving a general overview of the performance of different components of agricultural exports over a period of time which varies from paper to paper. By their very nature, some of these papers though interesting are rather too long in narration. In the second group of papers the authors have chosen to concentrate on individual agricultural export commodities and have tried to analyse different aspects of the same.

The sources of data used by different authors are quite varied so also is the time period covered in each case. It is not therefore surprising to find divergence in figures reported. An attempt has been made in what follows to present the main findings of these papers along with some observations and to demarcate the areas and issues which need discussion at the Conference. We present first a review of the papers belonging to the general group mentioned above and thereafter take up the papers dealing with individual items of agricultural exports.

I

GENERAL

Sucha Singh Gill and Ranjit Singh Ghuman start by giving a background of the colonial transformation of the Indian economy till 1947 in which India's

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exports consisted primarily of food products and raw materials and the bulk of its imports were those of manufactured items. They observe that as a result of planned development and operation of internal and external factors, the share of food and raw materials began to decline in India's exports and that of manufactured items began to increase. Taking raw materials like cotton, wool, animal hair, hides and skins, the authors attribute the decline in their relative share in exports to a rise in domestic demand for these materials as a result of growth of cotton textiles, woollen and leather industries in India. The share of tobacco has been observed to be more or less stable. Tea, cashew kernels, spices and oilcakes have suffered a decline in their share in total exports.

One of the factors causing a fall in India's share is the pressure of domestic demand resulting in the share of exports in total production registering a decline. Domestic demand has grown as a result of the growth of population and income and has come in the wake of the growth in production as well.

Making their observations on individual items, Gill and Ghuman observe that India imports a major part of cashewnuts, processes them and exports cashew kernels. Over time exporters of cashewnuts have developed their own industry and have directly entered world market causing a fall in India's share. They suggest an increase in the production of raw nuts as the only solution to save India's position in the world cashew trade. In the case of coffee while India's share in the world market is reported to have improved over time, there still exists scope for further improvement. Expansion and stabilisation of production have been suggested for steady growth of India's coffee exports. It is however surprising that the authors see advantage in price competitiveness when Indian tobacco fetches low price. The low prices are attributed to the relatively poor quality of Indian tobacco. If the price is linked with the quality of the produce the advantage would perhaps be in producing and exporting superior quality tobacco to fetch a higher price. In the case of spices the fluctuation in their share in exports throughout 1970s is attributed primarily to fluctuations in production.

The authors observe that Soviet Union and the Eastern Block countries have emerged as the major markets for India's exports. They advocate diversification of trade to new markets. They also underline the urgency of correlating India's efforts with other developing countries particularly their competitors to stabilise prices in the international market.

Kusum Aggarwal *et al.* emphasize the low bargaining power of the developing countries in respect of their exports as well as imports which adversely affect their balance of trade. The authors concentrate their attention on sugar, tobacco, tea, coffee, groundnut and jute and attempt to study the production and pattern of exports of these commodities. Using time-series data from 1960 to 1978, the authors compute correlation coefficients to determine the relationship between the level of domestic output and exports of agricultural commodities. They also estimate linear and semi-log functions to analyse production and exports. The authors observe that the wide fluctuations in production and exports of agricultural commodities over time adversely affect the country's

credibility as a dependable supplier in the international markets. It has been observed that during the years of low domestic production the percentage share of the exports in the total production of the commodity goes up substantially and adversely affects the interests of the consumers within the country. The authors observe that India's share in the total world exports stands considerably reduced even in the case of traditional export commodities like tea, jute, sugar, etc. While a positive and significant growth trend in production has been observed for coffee, tea and tobacco, positive and significant growth trends in quantity exported has been observed in coffee and tobacco. Except in the case of coffee, no significant and positive correlation in quantities of domestic production and exports was observed for the other commodities. Stabilisation of production and exports of agricultural commodities through adequate buffer stocks has been suggested as a solution for achieving stability in agricultural exports.

V. Prasad *et al.* in their paper attempt to examine the contribution made by agricultural commodities to India's foreign trade, composition of exports and import, share of exports in relation to production and export possibilities and the efforts needed to promote the export of agricultural commodities. Analysing agricultural exports, the authors observe the predominance of agricultural commodities in India's export basket. Despite a decline in the share of agricultural exports to total exports from a level of 42 per cent in 1965-66 to a level of 32 per cent in 1978-79, the authors feel that the traditional agricultural commodities continue to hold their own. Studying exports relative to production between 1960-61 and 1979-80, the authors observe an increasing trend in the case of sugar, tobacco and coffee and a reverse trend in the case of tea, jute and cotton. For purposes of assessment of export potential and possibilities, the authors suggest a five-fold classification of agricultural exports: (i) traditional items of export, with declining trends like essential oils, lac, jute cotton and woollen goods; (ii) items with growth potentials like textile fabrics, tea, coffee, pepper, cardamom and other spices; (iii) commodities with little pull of domestic market like processed fruits and vegetable products; (iv) commodities which need further processing before exports like meat, hides and skins, etc; and (v) commodities on which research is still necessary before their production could be developed for exports.

The authors suggest various measures, such as export promotion effort covering the form of commodity, the competitiveness in price and infrastructure development, link between production, exports and domestic consumption, improvement in packing, export marketing research, adequate and timely finance, quality control and cost competitiveness, for the promotion of agricultural exports. While the authors have also analysed the import of selected commodities during 1977-78 to 1979-80, they have not attempted further analysis of the same and its linkages with the balance of trade, etc.

B. B. Barik, pointing to the deterioration in terms of trade of developing countries, attributes the phenomenon to technical change leading to substitution of raw materials by synthetics, and low elasticity of demand for primary products. Between 1970-71 and 1979-80 agricultural exports increased by 273

per cent. The author observes that there was erosion in agricultural export earnings due to inflation and suggests that the real value of agricultural exports increased only by 79 per cent during the decade. It is observed that in view of the increasing competition from other exporting countries, increase in production efficiency and stabilisation of production and reduction in costs must be achieved to promote agricultural exports. Liberalisation of credit policy, lowering of export duties, transport and shipment facilities at concessional rates and exports subsidies are the other measures suggested for increasing agricultural exports. Agricultural producers could be provided incentives in terms of prices, reduction in cost and increased productivity to increase the exportable surplus of agricultural commodities.

R. Mukherji undertakes a detailed and exhaustive analysis of India's exports. Analysing the composition of India's exports, the author underlines the fact that about 70 per cent of current Indian exports are directly and indirectly accounted for with the produce of the agricultural sector. Though one might question the propriety of including pearls, precious and semi-precious stones, works of art and antiques (accounting for about 10 per cent of the exports) in the list of traditional items, the author underlines that India's foreign trade in the present times is a continuation of the pre-1947 colonial pattern. In the context of increasing exports of agricultural commodities, the author underlines some special characteristics, *viz.*, inelasticity of demand for primary products, limited supply possibilities due to lower productivity, competition among the developed countries themselves, recession and increasing protectionism in the developed countries, dumping of agricultural commodities by advanced countries and discovery of substitutes, which have direct bearing on the efforts to promote agricultural exports. He suggests the continuation of further expansion of the export promotion measures already in force. He also cautions against the unchecked diversion of area to export-oriented crops. In this context, he refers to a recent study in which a shortfall of 32 million tonnes of foodgrains is anticipated by 2000 A.D. It must be pointed out that there are alternative projections which give India a comfortable position. The author has made an uncritical use of the findings of the exercise without going into the basic assumptions and limitations of the study. Such uncritical use of the data needs to be avoided.

The author has observed that despite growth in trade volume, India's share in world exports had declined and a number of commodities have also witnessed a fall in unit values. These factors appear to frustrate the objective of achieving economic growth through increasing export of agricultural commodities. The author expresses reservations about this approach.

The author emphasizes that the export trade of India exhibits characteristics of a colonial era coupled with developed countries fixing quotas, generalised scheme of preference and protectionism putting a serious constraint on the expansion of export of agricultural commodities by developing nations. It is suggested that India's trade policies have to be viewed and properly geared to meet this challenge. In the domestic front the author underlines the role of institutional factors in determining the agricultural output and would like

the institutional constraints to be eliminated for the growth of Indian agriculture.

B. Prasad and Suresh Pal describe the relative shares of different agricultural commodities (grouped into five categories) in India's exports and observe that the contribution of value of agricultural goods to total value of exported goods was lower in recent years in comparison to past years. To increase the export of agricultural commodities the authors suggest an increase in the domestic output of agricultural commodities.

Raj Kumar Sen in his paper concentrates on a few agricultural products entering into mass consumption. Commodities considered are tea, sugar and cotton. Contrary to the general belief and advocacy to encourage agricultural exports, the author suggests that further emphasis on promotion of exports of commodities under consideration should not be encouraged as their per capita production has not increased appreciably, their exports are inelastic and that in view of the low standard of living of the average man the export of commodities entering into mass consumption is not warranted. He would like export promotion to be considered in the context of the rate of increase in the per capita production and the rate of increase in population as well as differences between the domestic and export prices. He would like priority to be given to the upliftment of the standard of living of the masses.

II

TEA

In an excellent analysis of India's tea exports, A. K. Bora observes that between 1951 and 1980 India's share in global export of tea has declined by 19.28 per cent. The principal competitors in this respect have been Sri Lanka, China, Kenya, etc. It has been observed that a remarkable increase in average yield from 901 kg. per hectare in 1951 to 1,511 kg. in 1980 has helped India to increase production. The domestic demand for tea has also been growing providing fast a market for tea. The growth in internal consumption and the emergence of competing producer nations are the salient factors affecting India's tea export. The author identifies lower taxation and relatively lower cost of production in some other countries as the principal factors enabling them to increase their exports. He suggests that the export strategy should also be directed at promoting value-added items for which the demand is growing fast in the developed countries. U. S. market offers ample opportunities for this. Increase of production of value-added tea with slight processing modifications to suit the overseas consumers may help the country in increasing her export earnings from tea. He strongly advocates promotional measures, such as advertisement, uninationaional promotional activities, reduction in freight for packed tea and other incentives for this purpose. On the production front efforts should be made to improve the quality of tea and reduce its unit cost of production.

S. Bandyopadhyay attempts to study the proximate effect of rapid growth of population of India and progressive impact of keen competition in the world market upon India's share of world tea exports. Correlation coefficients have been computed and linear regression analysis has been undertaken to study the above relationship. The author has not however given any economic justification for using linear regression nor is there any mention of some other forms having been tried and discarded in favour of the linear regression. On the basis of the observations between 1964 and 1980, the author notes an erratic and downward trend in India's export of tea as a percentage of total production. This is attributed to a spurt in the demand for tea in the domestic market due to rapid growth of population. Demand for tea does not depend on the size of population alone. Some other relative economic factors may also be important. The author however has not discussed any variable other than population.

India's share in the growing world market has declined considerably over the period. This is attributed largely to competition from other countries like Sri Lanka, China, Kenya, Indonesia, etc. Rise in domestic production of tea, a decline in the proportion of tea exported as well as a decline in India's share in the world export of tea are the major findings of the paper. The author feels that elements of instability will continue to prevail in India's export front unless rapid growth of population is effectively checked and substantial increase in both production and productivity of high quality tea is achieved to show an impact on the exports. The associated problems which constrain India's export prospects of tea are low productivity, climatic reverses, high cost of production and paucity of suitable land and capital.

J. S. Sharma underlines the decline in India's share of world tea market and in the export price of Indian tea. He attempts to empirically estimate the effect of various factors affecting the export, supply, demand and price for tea in the world market. He uses an econometric model consisting of two linear equations and one equilibrium identity. He also estimates structural equations by the two-stage least squares method. His major findings are that an increase in the export from other countries by way of one million kg., other things remaining the same, would reduce the export price of Indian tea by .00404 rupee per kg. There has also been a decline in the export price of tea on an average by about Re. 0.30/kg. with the passage of one year. Amongst the factors contributing to the observed phenomenon mention is made of the imposition of taxes on the import of Indian tea, deterioration in the quality of Indian tea or improvement in the quality of tea of other countries and changes in the preference in the importing countries. He observes that the export supply responds positively to domestic output and export price but increase in domestic income has depressing effects on the export supply of tea. The author is sceptical about the effectiveness of price as a policy instrument and would like the policy to be directed at promoting consumption of Indian tea abroad through improvement in quality, export incentive, advertisement and market promotional activities. Exploration of new markets is also suggested.

In his econometric analysis, the author uses GNP as one of the variables. While important as it is, its effect cannot be studied without reference to the accompanying increase in population. It would have been better if the author had also covered this aspect in his analysis.

P. K. Chatterjee also underlines the fact that while India's production of tea has been rising, an increasing proportion of it is being retained for domestic consumption. Despite an increase in the export price of Indian tea at a rate higher than that of domestic tea price, a considerable increase in domestic production and a significant increase in world tea exports, exports of Indian tea have not done well. Indian tea is progressively turning to home market. The overall scene of tea export may be described as one of stagnation. Another feature is the emergence of U.S.S.R. as the largest customer of Indian tea, paying for it in non-convertible currency. Indian tea also fetches low price in affluent quality conscious countries like U.S.A., Canada and Australia. India's competitors appear to be doing a better job. A perspective tea production plan with balanced emphasis on both home consumption and export, stress on uninational rather than generic promotion and progressive shift to value-added exports to quality conscious rich countries are suggested to improve the prospects of tea exports from India.

III

CASHEW

B. Sridharan undertakes an analysis of India's cashew export trade. Apart from internal consumption, India imports raw cashew and exports cashew kernels. The net foreign exchange earnings from cashew increased from over Rs. 23 crores in 1970-71 to about Rs. 128 crores in 1977-78. In addition to the export of kernels the country has also earned about Rs. 9 crores in foreign exchange from the export of cashewnut shell liquid. India's share in the world export trade in cashew kernels declined from about 95 per cent in 1960 to about 37 per cent in 1978. In 1980 this share stood around 48 per cent. The main reason for the declining share of the country in world exports is dwindling imports from East African countries. The establishment of mechanized cashew processing factories in East African countries was the main reason for the non-availability of raw nuts for Indian cashew industry with a consequential fall in India's export trade. The emergence of Brazil and some other countries as exporters of cashewnut also contributed to it. U.S.A., U.S.S.R., Japan and U.K. are the principal markets for India's cashew exports with Australia and Netherlands joining in as the new markets. The point to be noted is that the trade has been concentrating on export to countries like U.S.A. and U.S.S.R. There is need for diversification in countrywise export trade in cashew. The measures suggested to encourage export of cashewnuts are: (i) increase in area and production of cashewnuts by adopting cultivation of improved varieties, better agronomical practices and plant protec-

tion measures; (ii) countrywise diversification with well planned rigorous export promotion; and (iii) new sources for import of raw nuts at reasonable price to ensure an adequate level of exports and to eliminate unhealthy competition.

H. K. Sandhu makes an effort to work out the export demand, income and export market share elasticities in the important market segments for Indian exports, with the help of time-series data using double logarithmic function. An endeavoured exercise was done to snag exchange rate fluctuations, domestic inflationary trends, currency devaluations and other transitory trend effects by converting the unit value figures into SDR values. Structural and directional transformations have been also incorporated. The logarithmic regression analysis has been followed and the derived demand estimates of Indian cashew kernels have been worked out with regard to export demand and income elasticities in general (1950-51 to 1979-80) and income elasticities in the U.S.S.R. market (1955-56 to 1979-80), export market share elasticities in international trade of U.S.A. in comparison to market share of Mozambique and Brazil (1954-55 to 1979-80), and export market share elasticities in international trade of the world (1950-51 to 1979-80).

Sandhu takes into account not only the quantities exported but also the unit values earned by India and her competitors. Per capita income has also been included as one of the variables along with time as a variable. Separate analysis has been undertaken for U.S.S.R., U.S., Mozambique and Brazil. The results show positive income elasticity suggesting a favourable consumption behaviour of the inhabitants of the importing countries. Demand for cashew in the U.S.S.R. was found to be neither price responsive nor income elastic. The results show a better bargaining position in favour of Brazilian and Mozambique exports to U.S. markets. The world export market share price elasticity was found significant at 5 per cent level with a magnitude of 0.7247, indicating a competitive behaviour of Indian market share.

Sandhu suggests that if India is to maintain its existing market share or desires to improve itself in cashew kernel exports leading to maintenance of a monopolistic status, it is high time that Indian policy makers should implement the following measures: (a) improve production technology resulting in low comparative domestic price which in addition offsets the locational advantage currently being enjoyed by competing countries; (b) improve processing technology aimed at minimization of domestic price of processed materials; (c) provide export incentives in terms of taxes and custom duty; and (d) allow transport subsidy particularly when the produce is being transported from backward/tribal areas.

IV

TURMERIC

N. Raveendran and P. K. Aiyasamy set the study of factors influencing export of turmeric and the analysis of variations in export price of turmeric

as the major objectives of their paper. Exports of turmeric have been growing over the years but show a good deal of fluctuations from year to year. Compared with the quantity exported, the export prices exhibit a much larger variation. The respective coefficients of variation are 49.88 and 70.11. Using 19-years data the authors employ a linear function to explain the export of turmeric with the help of production of turmeric in the previous year, ratio of export and domestic price and time variable to capture the collective effect of various measures adopted to promote turmeric export. Only time variable was found to be significant, suggesting the non-responsiveness of exports to the price variable. By inference it is promotional efforts which emerge as the most important factor determining exports.

V

ARECANUT

R. K. Singh *et al.* attempt to analyse the profitability of arecanut cultivation to determine the replacement time of arecanut trees and the most profitable sizes of arecanut gardens. The authors employ four major techniques, namely, (i) pay-back period, (ii) net present value, (iii) internal rate of return and (iv) benefit-cost ratio. The study pertains to a sample of farms in Jalpaiguri district in West Bengal with 1978-79 and 1979-80 as the period of study. A major advantage of this study is that it takes *time* into consideration in studying the profitability of arecanut. Having established the viability of arecanut cultivation, one would have expected the authors to analyse the implications of their analysis for agricultural exports. But no such attempt has been made in the paper. One would naturally have been eager to know as to how the unit cost compares with the export prices. From the point of view of the subject this paper has failed to establish its value.

VI

NON-WOOD FOREST PRODUCTS

Tirath Gupta and Amar Guleria make an attempt to examine the actual and potential contribution of the exports of non-wood forest products (NWFPs) to India's total export earnings and some macro level impacts of efforts to enhance export of these products. To meet the first objective, some selected products are divided into eight groups. They compare the money values of their exports with India's total exports during 1967-68 to 1980-81. During the period under review, the contribution of NWFPs to the total exports ranged between 1.3 and 2.9 per cent. In nine out of thirteen years it was, however, more than 2 per cent and the average for the period was 2 per cent. This is considered to be a significant contribution in the context of the status of, and environment for, the forestry system in India. They argue that the exports of NWFPs may be encouraged only in the con-

text of the main objective of forest management in India, *i.e.*, enhanced timber and wood output. They also argue that the contribution of the NWFPs to total export earnings can increase significantly if adequate processing facilities are created, and export incentives available for some other products are provided.

In the context of the pressure of population on the cultivated land and prevailing under-employment/unemployment in rural India, they estimate that the employment opportunities only for collection of these products can be increased from 1.6 to 4 million man-years. They note that this may lead to a situation where the demand for labour for gathering NWFPs would be in conflict with crop farming. But they argue that this may be desirable for (i) reducing the dependence of rural labour force on cultivated land; (ii) generating healthy competition in rural labour markets; and (iii) encouraging technological change in agriculture which, in turn, can enhance productivity per unit of land and labour engaged. The authors conclude that efforts at harnessing these renewable natural resources can create conditions for dynamic and sustained change in the socio-economic fabric in general, and for farming in particular.

VII

OTHERS

Brian Beharrell and Paul Smith discuss India's sugar export in the context of the Lome Convention. Although India did not become a part of the formalised arrangements, it has been allocated a quota of sugar, currently 25,000 tonnes which is included in the total ACP protocol quota of approximately 1.3 million tonnes. The guaranteed prices are usually higher than the world prices. The authors commend India to explore the possibility to re-negotiate her right of access as this would represent a considerable loss of value added accentuated by the alternative possibility of trading on cyclical and world markets.

T. Satyanarayana in his paper demonstrates the advantages of processing and grading of F.C.V. tobacco by producers, reducing costs associated with processing of tobacco at different stages. He shows that if the farmer offers a scientifically graded and stripped tobacco his returns will improve without affecting the margins of the exporters. It would have been interesting if the author had demonstrated the unit cost advantage in export trading emerging out of his proposals.

Prakash Chandra Arjyal has contributed a well documented paper on the direction and patterns of agricultural exports of Nepal. The paper demonstrates erratic fluctuations in Nepal's exports which are concentrated around very few agricultural products and any change in the exportable quantities and prices of one or two major items can have marked effect on the export-import ratios. Added to this is the irregular and swelling growth of imports. Diversification of trade is advocated as the major solution.

VIII

ISSUES FOR DISCUSSION

In the light of the overview of the papers submitted for discussion, it would be profitable to focus attention on the following issues during the course of discussions at the Conference:

1. Pace and pattern of India's export of agricultural commodities, its composition and country diversification.
2. World demand for agricultural commodities and potential for Indian exports.
3. Potential for the export of perishable and semi-perishable agricultural products.
4. The role of price and non-price factors in world trade in agricultural commodities with particular reference to India.
5. Quantitative methods, their application and usefulness in the analysis of India's export of agricultural commodities.
6. New vistas and avenues in the export of agricultural commodities.