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Sustainable Agricultural Export



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Introduction

Agriculture, a core sector of the Indian economy, accounts for 30 per cent of the country's GDP, 20 per cent of total export earnings, two thirds of country's workforce and livelihood for 70 per cent of the total population. The past accomplishments of this sector are a great strength to face the current problems and future challenges in the areas of greater efficiency (competitiveness), sustainability, poverty alleviation and continued food self-sufficiency. With trade liberalisation, agricultural exports have also become an important national goal.

The new economic regime, initiated since early nineties, has led to resetting of the goals of Indian agriculture towards global competitiveness and export orientation without compromising the basic premise of self-reliance. The emergence of the concept of sustainability of agricultural production has made the task more difficult for all those who are associated with agricultural production systems in the country. The present goals of Indian agriculture warrant reformation of strategies and action plans. Agricultural exports increased from about 600 million US dollars in 1960-61 to 3520 million US dollars in 1990-91. During posteconomic reforms period, the value of agricultural exports has nearly doubled. The share of agri-exports in total exports, however, has remained more or less stable around 20 per cent, though the share of exports in agricultural GDP has been rising. Commodities such as marine products, oilmeals, rice, coffee, tea, spices, cashew, tobacco, castor oil, groundnut, sesame, fresh fruits, vegetables, pulses etc., are important export earners and are being exported to more than 110 countries.

The encouraging results of goal-oriented Green Revolution, White Revolution, Yellow Revolution etc. enthuse the agricultural fraternity of the country to set a new goal for 'Agri-Export Revolution' which is not only the need of the hour but also a compulsion to strengthen and revitalise the economy of the country. While India holds an important position in the export market for a set of traditional agricultural commodities, new areas and new commodities are likely to emerge such as live animals and animal products, fruits, vegetables, floriculture, medicinal plants and processed agricultural products. In order to understand the emerging challenges and to identify ways and means of placing our country as a major player in the global export market for agricultural products, the National Academy of Agricultural Sciences (NAAS) in collaboration with the Rajasthan Agricultural University, Bikaner and the State Government of Rajasthan deliberated on the theme "Sustainable Agricultural Export" during the Fourth Agricultural Science Congress held at Jaipur in February, 1999.

Agricultural Exports—Advantage India

Since independence, India has made rapid strides in agricultural production. Salient attainments include the following:

- Food production has increased from a mere 50 million tonnes in 1947 to over 199.30 million tonnes during 1996-97, and per capita net availability of foodgrains has grown from 395 gm per day in early 50s to 529 gm in 1996-97.

- The country is now the largest producer of milk and the second largest producer of fruits and vegetables in the world.
- Oilseeds production has increased from 5.2 million tonnes in 1950 to 22.24 million tonnes in 1997.
- Fish and marine food production has risen from 7.5 to over 50 million tonnes, at present.
- Quality seed production which was negligible in 1947, has shown a quantum jump and is currently placed at 7 million quintals. A large number of private seed companies have also come up.
- Both the irrigated and the potentially irrigated areas have increased since Independence. Efficient methods like sprinkler and drip irrigation have become popular in arid and semi-arid areas.
- The total fertiliser consumption has gone up and India now ranks fourth in the world, although the per unit area consumption is still low.
- India is also the largest reservoir of trained manpower in the world.
- Despite agriculture sector being not-taxed, prices of several agricultural commodities are below international prices, thus conferring trade advantages.

Despite impressive strides that the country has made in agricultural production, India has not yet become a major player in the international arena as far as exports are concerned.

The broad export strategy for Indian agriculture would, therefore, be to strengthen and widen the export market for established 'commercial commodities' like tea, coffee, spices, cotton, jute, sugar, oilmeals etc., and also to create and capture new export market for 'dynamic commodities' like meat, dairy products, poultry, fishery products, vegetables, fruits, floriculture etc., whose demand in the international market is buoyant. India has a comparative advantage in many of these commodities due to availability of varied agroclimatic conditions, diversified commodity mix and low wage rates leading to lower cost of production etc. The major plank of our foreign trade strategy must be on finding a niche for exports of the above mentioned non-conventional and dynamic commodities. This has to be achieved in the context of stricter control processes under Sanitary and Phytosanitary (SPS) Agreement and other non-tariff barriers *viz.*, Technical Barriers to Trade (TBT), etc.

The strategies and action plan for increasing agricultural exports which emerged out of the deliberations are summarised below:

Cereals

- Since compromise on food security/self-sufficiency is undesirable, the export of strategic cereals should be planned very carefully.

- Wheat being a major commodity of agricultural exports from developed countries, India will have to face a tough competition from them. Future projections suggest continued upsurge in domestic wheat consumption and relatively small surpluses.
- While continuing the export of *basmati* rice targeted mostly to Middle East and to NRIs in Europe and USA, the limited scope for accelerating the export of *basmati* and other scented varieties will have to be kept in mind.
- The potential market for rice lies in the Southeast Asian countries like Indonesia, Malaysia and the Philippines and in East Asian countries like Japan and South Korea and also in Sub-Saharan countries. Rice exports to these countries from Thailand have reached a plateau and India has the potential to enter these markets provided we succeed in developing and growing varieties preferred by consumers in these countries and make vigorous efforts to capture the market.
- Crops like barley and maize hold export potential either as cattle feed or as industrial raw material. The competitive edge can be further improved if the productivity of these crops is raised.

Horticultural Produce

- Opportunities of extended production of various fruits, vegetables and floriculture crops and exporting them to newer markets in Central and South Asian countries and Japan in addition to the traditional markets of Europe, USA, Russia and some countries in Africa, need to be tapped on a priority basis.
- Several spices, condiments and medicinal crops can be marketed abroad at a fancied price.
- Efforts are needed for identification of potential markets, choice of cost-effective, eco-friendly and sustainable technologies for product development, value addition and for devising innovative trade practices with emphasis on quality, transparency and timely delivery.
- Policy interventions and incentive packages leading to regional specialisation in production and processing of tradable horticultural products, foreign participation in investment, transfer of technology and buy-back arrangements are also advocated.

Commercial Crops

- The dynamic demand for coffee in the world market opens up splendid opportunities for our country to emerge as a major player.

- Despite stagnation in international market of tea both in terms of prices and quantities and the stiff competition that Indian tea faces, India should continue to work and aspire for leadership in this crop.
- The inter-year instability in production coupled with low yields of cotton stand as major constraints for cotton to emerge as a stable exportable commodity. The possibility to keep our presence in international cotton market lies in the increased productivity and enhanced stability in production.
- India holds a great potential to take advantage of the surge in export of tobacco, especially by improving its productivity.

Oilseeds

- The mission mode approach implemented through Technology Mission on Oilseeds (TMO) not only narrowed down the large, domestic demand-supply gap for vegetable oil but also paved the way for devising separate strategies for import substitution and export of oilseeds. Exportable oilseeds include the production of HPS groundnut free from aflatoxin content, developing varieties of mustard with low glucosinilate, organising production of white sesamum without pesticide residues and rice bran extraction with low silica content. Castor oil has also emerged as an important export item. The strategy for export of oilseeds must include enhanced productivity, development of needed infrastructure, pre- and post-harvest measures to upgrade the quality and popularisation of quality oilseeds production through contract farming in potential places. Improving production efficiency would be most critical in the oilseeds sector.

Dairy Products

- The growth rate of 4.5 per cent per annum in milk production in the country against the world average growth of 1.48 per cent, and its static growth in most milk producing countries indicates the potential of India to emerge as a major player in the export of milk products like whole milk powder, skimmed milk powder, butter, cheese etc., in the rising markets for these products in Southeast Asian countries and the Middle East. The emergence of the country from a net importer to an exporter of milk products since early nineties is an indication of pushing the sector from an occasional exporter to a regular exporter in the years to come.
- The immediate need is to push up the production of milk to a level of making adequate surplus for export after meeting the steadily rising internal demand. To develop dairy products of international standard for export, adequate thrust on quality and clean milk production is required.
- There is a need to segmentise the milk production systems for catering to different market segments including export market which in turn will demand investment on mechanised milking, chilling systems, quality packaging etc.,

with strict adherence to Codex Alimentarius Standards and developing branded market for consumers.

Meat and Meat Products

- Meat and meat products from buffalo, sheep and goat have a major export potential. Some private state-of-art abattoircum-meat processing plants have established a niche in international markets covering the Philippines, Malaysia, Iran, Egypt, Gulf and Middle East countries. The meat export can be further accelerated by modernising more meat plants with world class sanitary and phytosanitary conditions, by establishing disease-free zones for meat animals and by vertically integrating production of meat animals with meat processing.
- The approach of lifting the ban on the export of culled cattle may lead to better economic returns to the farmers and to the country.

Marine Products

- The high growth rate in the volume and value of marine products, in general and frozen fish and shrimp, in particular during recent years is indicative of the export potential of marine products from India. The Marine Products Export Development Authority (MPEDA) should undertake massive advertising and marketing campaign in overseas food markets to diversify the market and products. There is an urgent need for India to modernise processing facilities to maintain international quality standards and meet the stringent quality standards of importing countries.
- Providing on-line information about international market trends, prices etc., to seafood exporters of our country will further help to boost this sector.

Exports from Arid Agriculture

The hot and cold arid zones together cover about 12 per cent of the geographical area of the country. The hot region with 32 million hectares is spread over the states of Rajasthan, Gujarat, Punjab, Haryana, Andhra Pradesh and Karnataka. Despite poor resource base in this region, low density of human population with limited requirements for ensured food security makes it a good candidate to generate surplus agricultural production leading to export options under sustainable integrated farming systems with food crops, horticultural crops, medicinal plants, forestry plants, livestock, etc. The arid region fruits like citrus, guava, *ber*, pomegranate, aonla; vegetables like chillies, garlic, okra, tomato, cucurbits; and seed spices like cumin, fennel, fenugreek etc., hold lot of export potential. Plants like *isabgol*, *henna*, *guggul*, senna, *ashwagandha*, *gwarpatha*, *safed musli*, *bantulsi*, etc. also hold promise. Arid regions minor forest produce like gum arabica and ologum resins also have export potential. *Neem* is an important tree species of arid region which can be used for developing medicinal products, biopesticides, etc. The diversified livestock mix of the region also opens up a number of avenues for export earnings from livestock products.

- The export strategies for seed spices, medicinal plants and other products of plant origin include germplasm collection, conservation, evaluation, cataloguing, crop improvement, mutation breeding, etc. for quality improvement. The expanded use of biotechnology can also play a crucial role.
- Agroprocessing industries based on raw materials available in the arid region provide expanded markets for farmers, add value to the products, create additional employment opportunities and open up channels for sustainable exports.
- Added efforts are needed to increase earnings through exports of commodities like guar gum, guar powder and splits, deoiled cakes, spices, spice-oils, cotton, wool, meat, *isabgol*, castor, etc.

Developing Effective Interface among Various Agencies

- The most critical parameter determining exportability is efficiency. The challenge for the research system is to shift its focus from increased production to globally efficient production.
- Reorientation of research agenda for export involves, augmenting production of varieties, meeting quality requirements of importing countries, strengthening of research on non-conventional crops/plants like minor fruits, medicinal plants, seed spices etc., having export potential, establishment of proper linkages with processing industries and export organisations and identification of exportable commodities and also matching of their potential areas of production in terms of agroclimatic conditions and entrepreneurial support are advocated through effective interface of various agencies from primary production to final exports.

Investment in Physical Infrastructure

- Export of agricultural commodities can be viable and competitive, if required level of investment for creation of physical facilities like transport, cold chain, packaging, port facilities etc., is made.
- Upgradation of domestic airports into international airports in potential areas like Jaipur. will greatly spur production of fruits, vegetables, flowers etc., for export purposes.
- Special incentives may be offered to encourage both public and private sector investment in various activities related to development of commodity specific physical infrastructure for export purposes. Cold storage facilities, transportation and cold chain linkages for maintaining freshness of the produce are important for items like horticultural products. Efforts be made to encourage foreign capital and technology marketing tie-ups including joint ventures for sustainable export of agricultural products.

Export Promotion

- The efforts being made for agri-exports by various agencies like APEDA, MPEDA, Spices Board, Coffee Board, Tea Board etc., need to be augmented. Along the lines of these agencies, a Meat Development Board also needs to be established.
- Contract farming on the lines of the Pepsi Foods in Punjab and replicating the same in Gujarat and Karnataka for commodities like tomato, chillies, groundnut, garlic etc., may be beneficial to the farmers and may facilitate export promotion as foreign buyers get vendor assurance and quality for the items supplied by such agencies.

Food Safety Requirements

- Commodity Boards e.g. Spices Board, Tea Board, Coffee Board, National Dairy Development Board (NDDB), Ministries of Agriculture, Food Processing, and Commerce and organisations like Bureau of Indian Standards, APEDA, MPEDA should initiate awareness programmes in a coordinated manner on Food Hygiene and Hazard Analysis Critical Control Point (HACCP) and other safety measures for export oriented food items so as to avoid rejection and detention of consignments not conforming to quality specifications of the importing countries on the ground of Sanitary and Phytosanitary (SPS) Agreement and also Technical Barrier to Trade (TBT) Agreement which came into force with effect from January 1, 1995.
- Efforts are also needed to develop HACCP and other safety measures for each of the potential fresh/processed food items separately, since single system is not universally applicable.
- Creation of quality testing and certification protocols of international standards would be necessary to fully exploit trade opportunities.

Agri-Export Information System

- In order to develop a common perspective on the constraints, opportunities and other facets of agri-exports by the various stakeholders like producers, research organisations, extension agencies, agroprocessing industries, policy makers and exporters, an easily accessible information system including database on aspects such as volume of trade, quality specifications, demand-supply scenario, border prices regulations governing certification and exports of commodities and countries along with inventory of available technologies for meeting the quality is advocated.

Developing Managerial Capability

- As the agribusiness is being enlarged from domestic to international, and multinational to global level, the demand for trained manpower to manage it is becoming more and more explicit and is increasing. Therefore, for managing

agribusiness, leadership and managerial ability need to be developed in areas such as agricultural production, procurement, processing, quality management, technology management, international trade, marketing, financial management, logistic management, human resource management and also strategic management. The implementation and adherence to quality assurance measures such as ISO 9000, ISO 15000, HACCP, CODES, etc. is possible only through trained manpower. Therefore, long-term educational programmes and short-term trainings are required for developing manpower for sustainable agricultural exports.

Long-term Export Policy

- In order that agriculture sector contributes to full potential of India's exports, a long-term policy leading to export orientation by differentiating the exportable items keeping in view the domestic needs, food security, price elasticity, responsiveness to R&D efforts and export competitiveness, assumes great significance.