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Export potential of plantation crops in India

Plantation crops are broadly classified as estate (tea, coffee and rubber) and small-holders' crops (coconut, cashew, arecanut, cocoa etc). Occupying an area of about 6 million ha (including spices), 3.4% of the total cropped area, they generate an annual income of more than Rs 5,52,590 million and export earning of approximately Rs 93,350 million. Plantation crops serve a variety of human needs such as food, oil, industrial raw materials, beverages and confectionery items. They generate huge employment opportunities directly or indirectly to several millions of people in their production, processing, marketing and international trade sectors.

IN the present era of economic liberalization and globalization, competitiveness through higher productivity is the main theme during Tenth Five-Year Plan for plantation sector as a whole with more emphasis for achieving higher targets in international trade sector. For planning and implementation of appropriate policy measures in this regard, it is necessary to assess the present status of exports for various plantation crops and suggest suitable strategies for achieving the same.

SMALL HOLDERS' CROPS

Coconut

Coconut is cultivated in more than 50 countries around the world. However, intensive cultivation and trade are mainly carried out by 15 member countries of the Asian-Pacific Coconut Community (APCC). India, Indonesia, the Philippines and Sri Lanka are major coconut producers in the world. The country's annual production of coconut is 12,597 million nuts from an area of 18.40 lakh ha. The average annual productivity of 6,847 nuts/ha is highest in the world. In India, coconut is mainly cultivated in Kerala, Tamil Nadu, Karnataka and Andhra Pradesh. In present scenario, our country leads the world in production and export of coir products. In addition, India also produces and exports other products such as raw coconut, desiccated coconut powder (D C powder) and coconut oil (Table 1). There is an increasing trend in quantity and value of exports of raw as



A high-yielding hybrid coconut

Table 1. Export pattern of coconut products from India (tonnes)

Particulars	India
Coconut (No.)	3,19,000
Copra	20
Coconut oil	1,535
Copra meal	30
Desiccated coconut	209
Coir yarn	14,817
Coir mats	28,944
Coir matting	8,288
Coir ropes	298
Total export value (Rs)	6.75 lakh US\$
Contribution in export earnings (%)	0.20

Source: <<http://www.apcc.org.sg/apcc.htm>>

well desiccated coconuts.

Nepal, UAE and Bangladesh are prime importers of Indian fresh coconuts, while UAE and Spain import dried coconuts from India. The country also exports copra to USA, UK and Canada. According to Directorate of Commercial Intelligence and Statistics, Kolkata, India also exports coconut shell to USA, Spain, Sweden and other European countries. Major strategies need to be followed for augmenting exports of coconut products from India are: to achieve a sustainable level of higher productivity in production sector, streamlining unorganized marketing system in major coconut-producing regions, encouraging on-farm processing and value-addition through self-help groups and other appropriate developmental programmes, integrated system of production for coconut-based value-added products in medium and large scale and application of market promotion techniques for coconut and its products to sustain domestic market as well as to compete in international markets.

Arecanut

India is largest producer of arecanut in the world, earning about Rs 45 million annually by exporting its various forms. Area and production of arecanut in India showed an

increasing trend during past 40 years. Karnataka, Kerala, Assam, Tamil Nadu and West Bengal are important arecanut-growing states. At present, India produces 3,35,000 tonnes of arecanut from an area of 2.9 lakh ha, average productivity being 11,552 kg/ha of fresh nuts. India exports its whole betel nuts to 22 countries, of which Yemen Republic, Bangladesh and UK are prime importers.

The country exports 592.4 tonnes of whole betel nuts and earns Rs 3.2 crore per annum as foreign exchange. Pakistan, Maldives and USA import fresh arecanut to an extent of 171 tonnes, fetching an annual income of Rs 57 lakh. The country also exports spitted arecanut to an extent of 333 tonnes, which fetches an annual foreign exchange of Rs 2.35 crore. India also exports Pan Masala and scented supari to 37 countries in different parts of the world. The annual export earning through this is Rs 65 crore from 15 lakh tonnes. Major importing countries are UAE, Mexico, Kuwait and USA. Augmenting research on value-added products of arecanut would further widen the horizon of arecanut exports from India. The vision for this should focus on: increasing competitiveness through higher productivity in the production sector, constantly monitoring the level of international demand and improving the quality of the produce exported, and strengthening the research on post-harvest technology and explor-

ing the possibility of producing new products from arecanut.

Cocoa

Cocoa is cultivated in about 14,000 ha with an annual production of 7,500 tonnes. India exports cocoa butter, husks and shell, cocoa paste and cocoa powder and cake to many countries. UAE and USA are major importers of cocoa beans, while the Netherlands, Poland, Kuwait and Egypt are major importers of cocoa shells and husks. The UK is main importer of cocoa butter fat, while Nepal imports a huge quantity of cocoa powder from India. In addition, India also exports 579 tonnes of chocolate and confectioneries to more than 25 countries annually. The total foreign earning from the export of cocoa and its products is Rs 7.58 crore. The trend in quantity and volume of exports of cocoa and its products is increasing. The strategies suggested for achieving sustainable growth in cocoa exports are: increasing productivity through adoption of production, protection and processing technologies, and to upgrade processing technologies in manufacturing of chocolates and confectionery.

Cashew

India is largest producer of cashew in world. Kerala, Maharashtra, Karnataka, Goa, Tamil Nadu and Andhra Pradesh are major producers of cashew. The present level of production is 5,00,000 tonnes from

Table 2. Area, production, yield and trade scenario of cashew in India

Year	Area (ha)	Production (tonnes)	Yield (kg/ha)	Export (tonnes)	Value of export (Rs, lakhs)
1990	5,32,000	2,95,000	0.55	49,000	44,224
1992	5,34,000	3,05,000	0.57	47,738	66,909
1994	5,65,000	3,48,000	0.62	69,884	1,04,602
1996	6,35,000	4,18,000	0.66	70,334	1,24,050
1998	6,75,000	3,60,000	0.53	76,593	1,39,610
2000	6,86,000	5,20,000	0.76	92,461	2,45,150
2002	6,70,000	5,00,000	0.75	95,540	2,97,900

Source: Directorate of Economics and Statistics and Directorate of Commercial Intelligence and Statistics

6,70,700 ha. The area, production and productivity of cashew in India are showing an increasing trend. However to meet domestic demand, India also imports a large quantity of cashew from other countries. But export of processed cashew from India is high and continues to show an upward trend (Table 2). The major thrust to sustain India's position in global trade of cashew is to achieve higher productivity in all cashew-growing tracts of the country through adoption of high-quality grafts for newer plantations as well as rejuvenation of existing plantations, adoption of recommended production and protection technologies with specific reference to integrated nutrient management and integrated pest management, and adoption of soil and water conservation methods in slopes where cashew is planted.

ESTATE CROPS

Tea

India is largest producer of tea in the world. It is grown mainly in Kerala, Tamil Nadu, Uttaranchal and Assam. At present, it is cultivated in 4.27 lakh ha with an annual production of 8,55,000 tonnes with an average productivity of 20,000 kg/ha. Since nineties, there is an increasing trend in area, production and productivity of tea in India. During 2001-02, its production in India had setbacks which are now being tackled through market reforms. Since nineties, there is an increasing trend in quantity and

value of exports of tea from India. The major strategies to be followed for augmenting tea exports are: to overcome constraints faced by planters for technology adoption for achieving higher productivity, to utilize provisions of recently introduced Tea Marketing Control Order, 2003 and to create a congenial environment for boosting up domestic as well as international trade.

Coffee

India is a major producer as well as consumer of coffee in the world. Karnataka, Tamil Nadu and Kerala are major coffee-growing states in the country. The present level of production is 3,00,600 tonnes from 3,10,000 ha. Since nineties there is an increasing trend in area, production and productivity of coffee in India. Coffee is exported as green coffee, coffee extracts, roasted coffee as well as coffee husks and skins. There is an increasing trend in quantity and volume of export of these products. However during early years of new millennium, there is a serious setback for international trade of coffee and its products. The export potential of these products could further be increased through: augmenting the production, more emphasis on quality parameters in processing and constant watch on fluctuations in domestic as well as international demand and launching of appropriate corrective measures.

Rubber

India is largest producer of natural rubber in the world. The country

produces about 6,30,405 tonnes of natural rubber from 3,90,000 ha. Kerala is major producer of rubber in India. During nineties, its production, productivity showed an increasing trend. India exports a huge quantity of natural rubber. The recent price crash in international markets did have serious impact on domestic price situations of rubber and its products in the country. However, recovering market demand and better stability in the international prices have given better hopes for Indian rubber industry as a whole.

SUMMARY

Small holders' plantation crops such as coconut, cashew, arecanut and cocoa and the estate crops like tea, coffee and rubber would continue to play a major role in enhancing the export potential of horticultural crops in India. Major objective for achieving a sustained growth in their exports is to formulate and implement medium- and long-term strategic plans for increasing their productivity. This could be achieved through concerted cooperation between research and developmental organizations.

For further interaction, please write to: Dr V. Rajagopal (Director), Drs S. Arulraj and C.V. Sairam (Scientists), Central Plantation Crops Research Institute, Kasaragod, Kerala 671 124.

Gardening provides you ...

- Feeling of peace and tranquility, reduces stress, and offers a sense of self-esteem and mastery of environment.
- Horticultural therapy, which is utilized in psychiatric hospitals, general hospitals, physical rehabilitation centres, homes for elderly, prisons and schools.
- This therapy helps the individual to overcome the diagnosed problems or cope with the problem much better while developing relationship with plants and landscaping.
- The patients can achieve higher level of personal development and satisfaction.

These farms also deal in tropical species. In north-east, only one commercial farm dealing in tropical species is there at Guwahati. Orchid cultivation in subtropical and temperate species are mainly represented by the hobby growers and few large growers; and are concentrated in Sikkim, Darjeeling district of West Bengal, Arunachal Pradesh and Shillong.

Infrastructure

Large commercial farms in tropical zone use mostly shade houses with imported shade nets placed horizontally at 10' height. Some farms in Kerala, which experience heavy rainfall during monsoon, follow two-tier system of shading. In this method, inner layer is replaced with plastic film during rainy season. In north-east, growers mainly use bamboo houses or low-cost polytunnels made from galvanized water pipe. Tops are covered with plastic film. Packaging sheds are available with most of the farms. Only 3 farms have cold storage facility. A few farms have water treatment facility, mainly deionizing facility.

Planting material

Majority of planting material is imported. Very recently some Indian farms have started producing tissue-cultured plantlets. Tropical species are imported from Thailand, Singapore, Malaysia etc., whereas temperate species are introduced from Australia, New Zealand etc. by hobby growers in north-east. Planting materials are imported as flask grown seedlings, hardened plantlets and as full-grown plants. About 80% of these are in the form of hardened plantlets.

Transport and marketing

Cut flowers are generally transported by road air or combination of both. Some growers complained that

freight charges are very high and suggested that freight charges should be reduced to give an impetus to the industry. Major domestic markets for orchids are Delhi, Mumbai, Kolkata, Bangalore and Chennai. Export is negligible. Growers usually send their flowers to big florists, who subsequently sell them through the retailers. Major consumptions are in big hotels, corporate offices and social ceremonies. Prices vary from Rs 5 to 20/spray. For *Cymbidium* prices received are Rs 30–50/spray. The middlemen, who collect flowers from hobby growers as well as large growers, market cymbidium from the north-east. The domestic demand for orchid cut flowers are confined to upper strata of society and occasion specific.

ORCHIDS IN NORTH-EAST INDIA

Generally temperate orchids are grown in this region. Unlike southern India the orchid industry here is mainly based on hobby growing. They instead of having number of plants of same cultivar they have 200–500 pots of 50–100 cultivars. Structures in this region is mainly made up of bamboo. The growers have worked out their own method of cultivation. Orchid plantation in this region is affected by outbreak of unknown diseases. Owing to this disease most of the orchid growers are not willing to invest further in the orchid business.

Rich gene pool

India is home to about 1,300 orchid species, a large number of them are important floriculturally. Throughout the history of orchid culture a substantial number of Indian indigenous species figured prominently in international breeding programmes to develop superior orchid hybrids. In fact, *Calanthe masuca*, which went up to

make the first ever orchid hybrid in the world, is also indigenous to India. The international flower trade in *Cymbidium* is also solely based on the modern hybrids bred from 5 or 6 larger flowered species found in the Himalayan Orchid Belt at elevations about 1,000–2,000 m.

India's varied climatic conditions offer it a unique advantage over other orchid-growing countries of the world. All tropical, temperate and intermediate types of orchids can be grown easily in the country. Other major strength of India in this sector lies in low labour cost in comparison to the European countries, availability of trained scientific manpower and good institutional infrastructure.

A strong research support in the form of development of internationally acceptable varieties/hybrids, standardization of production technologies, availability of quality planting material in large-scale and post-harvest management. Marketing support in the form of proper market outlets, subsidy in transport and reduced freight charges is imperative. This will go a long way in establishing orchid industry in the country.

SUMMARY

India can become a major player in orchid trade at the global level owing to its diversified agroclimatic conditions, rich gene pool, a vast and rapidly-growing domestic market besides international market, lesser production cost and trained manpower in the field of floriculture.

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