

## Chapter – VII

### UNEXPLOITED AREAS/ OPPORTUNITIES FOR EXPORTS

There are a number of unexploited areas in fruits, vegetables and other commodities having very high potential for export. Some of these unexploited opportunities are listed below:

#### 7.1. EXPORT POTENTIAL OF ORGANIC PRODUCTS

Countries like Netherlands, Germany, France and U.K. in EU, U.S.A and Japan have special interest in import of organic products and as a result there is good demand. Therefore, organic cultivation of following crops needs to be encouraged.

**(i) Mango:** Production of organic Banganpalli mango in Vijaiwada district of Andhra Pradesh, organic Kesar mango in Aurangabad district of Maharashtra and Dashehari mango in Saharanpur and Lucknow districts of Uttar Pradesh needs to be encouraged as these areas have higher potential and mango growers are progressive. This opportunity needs to be exploited through proper training and sensitizing the mango growers in these areas.

**(ii) Pomegranate:** There is a good potential for export of organic pomegranates especially to European countries. Organic pomegranates can be produced as Hast Bahar crop in Sangole area of Solapur district of Maharashtra. This area is most suited for organic pomegranate, because flowering and fruiting development in Hast Bahar crop takes place mostly during rain free period resulting in fewer incidences of pests and diseases.

Alternatively drier areas of Rajasthan, comprising districts of Sirohi and Pali can also be exploited for cultivation of organic pomegranates as these areas are least attacked by insects & pests because of scarce rainfall.

**(iii) Litchi:** Litchi in states of Tripura, Assam, Orissa etc is being cultivated under organic conditions. European countries especially Germany, Netherlands etc are importing large quantities of litchi and they have interest in importing organic products also. It will therefore be appropriate to explore markets for organic litchi.

**(iv) Pineapple:** Pineapple has great potential for export as sufficient attention has not been paid towards its export. Some of the areas which can be exploited for the production of organic pineapples are mentioned below:

The entire pineapple in North East region is being cultivated organically. Considering this, APEDA has sanctioned an Agri Export Zone for export of organic pineapple in Tripura. However, exports from this AEZ have not yet started. One of the difficulties possibly could be high cost of transportation from Tripura to JNPT in Mumbai. Alternatively, in order to reduce the costs of transportation, the production of organic pineapple can also be encouraged in Kodagu district of Karnataka or Ratnagiri district of Maharashtra.

This could be a good venture, as demand for organic products is quite high in European Union especially in Germany.

**(v) Banana:** Normally world over, banana is cultivated in tropical countries having very high rainfall and humidity. These conditions are very conducive for disease and pest build up and control of which requires very heavy schedule of spray of fungicides and insecticides.

However, Jalgaon district of Maharashtra state can be exploited for cultivation of organic banana as it has less rainfall and humidity compared to other banana growing areas like Tamil Nadu, Andhra Pradesh and Karnataka. Because of unique climatic features, dreadful diseases like Black Sigatoka leaf spot and burrowing nematode (*Rodophilus similis*) are not present in Jalgaon area and it is therefore most suitable area for cultivation of organic banana for export purposes.

## **(vi) Okra and Green Chillies**

**(a) Okra:** Okra is exported to many countries and its export data is included in the mixed vegetables category which comprises capsicum, broccoli, etc. Sizeable quantity of mixed vegetables is exported to European countries and there is a good potential for exporting organic okra. It has been observed that availability of okra is quite less during November to March and therefore efforts need to be made to make available organic okra in these months by promoting cultivation in the states of Gujarat, Maharashtra, Chhattisgarh, Orissa and West Bengal. This will enhance export possibilities of organic okra.

**(b) Green Chillies:** Although our major export of green chilly is to Gulf countries but the demand for organic products is not much. However, green chilly has trade opportunities in European countries where there is great scope for organic products.

**(vii) Ginger:** Entire ginger cultivation in North Eastern region, Sikkim and Uttaranchal states is cultivated under organic conditions. Analysis of figures shows that out of total production of 517.8 thousand tons in the entire country 279.4 thousand tons of ginger is produced in these states, it will, therefore be appropriate to take advantage of this situation, by identifying suitable markets for organic products especially in European countries.

For identifying markets for organic ginger, it will be advisable to campaign aggressively in European countries as well as in U.S.A, Canada and Japan. Moreover, states producing ginger in North East region, Sikkim, Uttaranchal, etc. need to be geared up for producing quality ginger by providing good planting material , technical backup in cultivation, etc.

**(viii) Turmeric:** There is excellent potential for exporting organic turmeric. The countries like Germany, France, Netherlands, UK etc. in Europe, USA in North America and Japan in the Far East region import sizeable quantity (approx 11,682 tons ) of turmeric from India.

There is a good potential for exporting 500 to 1000 tons of organic turmeric to all the above mentioned countries in future. However, for promoting further exports, quality standards of powdered turmeric of European Spice Association need to be adopted and maintained.

**(ix) Sesame:** India is exporting substantial quantities of sesame to countries like Germany (10,648 tons), Netherlands (11,979 tons), Turkey (10,640 tons), UK (3,279 tons) and USA (14,681 tons). These countries have more inclination towards organic products. Therefore, efforts need to be made to explore export of organic sesame which can be popularized in the states of Gujarat, Rajasthan and Madhya Pradesh. Specific blocks in above states having favourable weather will have to be identified.

## **7.2. CONTROLLED ATMOSPHERE (CA) AND MODIFIED ATMOSPHERE (MA) STORAGE**

For promoting exports, CA and MA storage technology needs to be standardized. The details are enclosed below:

**(i) Mango:** Countries like Brazil, Mexico, Venezuela, Peru, South Africa, etc. export mangoes to European countries through sea shipment. However, India's penetration to European Union is still insignificant. Although trial shipments of Kesar and Banganpalli mangoes have been made through CA and MA storage, but for extensive use of this storage technology, the protocol needs to be refined and fine tuned to cover all commercial varieties.

**(ii) Litchi:** At present litchi from India is exported to Gulf countries and to some extent to European countries. In order to penetrate GCC market in a significant manner, it will be advisable to standardize protocol for CA and MA storage for sea shipping for different varieties of litchi.

**(iii) Pineapple:** Export of pineapple to European Union is insignificant at present mainly due to high transportation cost by air. If India wants to increase the export, the facility of CA and MA storage is absolutely essential for enhancing the shelf life, which is very much required for export to European Union and CIS countries. Moreover, adequate infrastructure for post harvest handling needs to be created in addition to creating cool chain facilities from packhouse to port considering its sensitiveness.

**(iv) Banana:** At present export of banana from India is limited to Gulf countries. Entire banana trade in the world is through shipping by sea. For India to penetrate countries like Russia, Ukraine, etc. for export of banana in an effective manner, CA and MA storage protocol needs to be standardized.

### **7.3. WIDENING THE SPECTRUM OF EXPORTABLE VARIETIES**

India must expand the list of exportable varieties especially by including varieties which are liked in foreign countries. A few suggestions are given below:

#### **(i) Export of highly coloured and attractive varieties of mango**

Countries like Brazil, Australia, Israel, Peru, Venezuela, South Africa, Kenya etc. trade in highly coloured varieties of mango like, Haden, Tommy Atkins, Kent, etc. Maximum trade revolves around these coloured cultivars. Various Research Institutions in India engaged in mango research, have evolved highly coloured varieties having very good edible quality. Some of the newly bred varieties are:

- Ambika- CIHS, Lucknow
- Arka Puneet, Arka Anmol and Arka Aruna – IIHR, Bangalore
- Pusa Arunima and Pusa Surya - IARI, New Delhi

These superior varieties need to be got evaluated in foreign markets for acceptability through trial shipments.

## **(ii) Widening the spectrum of exportable varieties of grapes**

At present, our exports are mainly restricted to varieties like Thompson Seedless, Sonaka, Sharad Seedless and Tas-a-Ganesh. Recently, many more varieties have been evaluated which are being preferred in the foreign markets. Indian Institute of Horticultural research, Bangalore has identified two cultivars namely 2A clone from California, USA and Shweta Seedless bred by IIHR Bangalore. Both these varieties have promising export potential because of the acceptability and liking in EU market. This has been amply demonstrated in sample evaluation studies. Now, these cultivars need to be cultivated on a larger scale for further trial shipments in various foreign markets.

## **(iii) Exports of onions to European Union and Japan**

India is exporting onions to many Gulf, SAARC and South East Asian countries; however, India's export to European countries is very moderate. The requirement of European countries and Japan is of yellow onions having mild pungency with thick fleshy layers.

National Horticultural Research and Development Foundation (NHRDF) at Nasik have already developed a variety which is suitable for cultivation in Maharashtra, M.P and Orissa States during late kharif season. Thus, export of Arad (H) variety through electrically ventilated containers could be explored to Europe and Japan during February to May.