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Mizoram: Export Potential and Prospects



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Economic Environment of Mizoram

Mizoram is one of the eight States in the North Eastern Region (NER) of India. More than 70 percent of the State's border is international border, with Myanmar in the East and the South and Bangladesh in the West. Real gross state domestic product (GSDP) growth of Mizoram increased to an estimated 6.5 percent in 2008-09, from 5.5 percent in 2007-08, with a per capita income at Rs.29,576 as against the all-India's per capita income of Rs.38,084. Services sector is the largest sector with a share of 63.2 percent of GSDP in 2008-09, followed by industry and agriculture and allied sector, which constitute 21.4 percent and 15.4 percent, respectively.

Mizoram is a predominantly agricultural state. According to Census 2001, 63.2 percent of the workers are dependent on agriculture and cultivation in Mizoram, as against 61.5 percent for all-India. The main method of cultivation followed in the State of Mizoram is *Jhum* or shifting cultivation. Supported by a wide agro-climatic variation, there is good scope for growing a large number of fruits like mandarin orange, banana, pear, pineapple, papaya and grape, various kinds of vegetables, and flowers like rose, anthurium, gladiolus, orchids and other ornamental and house

plants. Soil and climatic conditions favour the growth of these horticulture crops and their cultivation have been found as a good alternative to *Jhum* system of cultivation in Mizoram.

Identification of Potential Products for Exports

Based on primary and secondary research, the comparative advantage of Mizoram from the exports perspective would lie in high value horticulture and floriculture products, as also handlooms and handicrafts. Within this, the products that have been identified as having potential for exports from Mizoram include passion fruit, ginger, mandarin orange, grapes, banana, chayote squash, bird's eye chilli, wild mushroom, anthurium, medicinal plants and handicraft products.

Passion Fruit

Passion fruit has been widely cultivated in Mizoram as a garden fruit in the villages. Both purple (*Passiflora edulis*) and golden/yellow (*Passiflora flavicarpa*) are successfully grown in Mizoram. While size of area under passion fruit cultivation in Mizoram has increased more than twenty-fold from 350 hectare in 2000-01 to 8,894 hectare in 2007-08, production has recorded over sixty-fold to 44,720 metric tonnes (MT) in 2007-08 from 735 MT in 2000-01.

Yield per hectare of passion fruit in Mizoram has also increased every year since 2000-01, and has improved from 2.1 MT/hectare in 2000-01 to 5 MT/hectare in 2007-08. There has been a growing demand for passion fruit in countries like France, UK, Australia, Israel, South Africa, the United States and Canada. The demand side of the market is very heterogeneous, and processors are widening their range of passion fruit products, which can be suitably exploited.

Ginger

Comparative trend analysis of ginger production in Mizoram vis-a-vis all-India productions shows an interesting result. The yield per hectare of Mizoram has always been higher than the all India average, and by 2006-07 and 2007-08, production of ginger in Mizoram has been over four and half times more productive than that of all-India. Ginger has been cultivated in Mizoram for several decades. Two varieties namely '*Thingpui dum*' and '*Thinglai dum*' are more pungent than other varieties available in the State. The State has surplus production every year, and there is a good scope for marketing such surplus to external markets. The major export markets for India's ginger include the United States, Bangladesh, Spain and Saudi Arabia. Other countries which have exhibited promising demand for Indian ginger include Germany, United Kingdom and Morocco.

Mandarin Orange

Mandarin orange is successfully grown in many parts of Mizoram and is highly demanded locally during autumn season. While the area under mandarin plantation in Mizoram increased from 5,400 hectares to 6,400 hectares during 2003-04 to 2007-08, production has more than doubled from 18.9 thousand MT in 2003-04 to 41.6 thousand MT in 2007-08, thereby recording an annual average growth of 22.4 percent. This results in a jump in the yield from 3.5 MT/hectare in 2003-04 to 6.5 MT/hectare in 2007-08. With topography and climate in its favour, extension of acreage under mandarin orange cultivation with international market in focus could be considered.

Grape

Grape (*Vitis sp.*), belonging to family *Vitaceae*, is a commercially important fruit crop of India. India is among the leading producers of grapes in the world. The grape cultivated in Mizoram is a wine variety grape, commonly known as 'Bangalore Blue'. While the area under cultivation of grapes in Mizoram has declined in recent years, production has more than doubled, resulting in more than five-fold increase in yield from 2.1 MT/hectare in 2005-06 to 11.9 MT/hectare in 2007-08. An analysis of global demand for India's export of fresh grapes reveals that the India's total exports of fresh grapes aggregated to 96,963 MT in 2007-08. In terms of quantity, Bangladesh is the major destination of fresh grapes exported from India, accounting for nearly 40 percent of India's total exports of fresh grapes in 2007-08, followed by The Netherlands, UK and UAE. In terms of value, The Netherlands is the major destination of India's exports of fresh grapes, followed by UK and Bangladesh.

Banana

Banana is harvested throughout the year in Mizoram, having a lean period during winter and peak period in summer. Mizoram's banana production increased steadily from 35,500 MT in 2001-02 to 1, 51,000 MT in 2007-08. In 2007-08, Mizoram's banana production accounted for a marginal 0.7 percent of India's total banana production. As regards export from India, UAE is the major export destination of Banana from India, followed by Saudi Arabia and Bahrain. Other important destinations of India's exports of banana include Nepal, Maldives, UK and Bangladesh.

Chayote Squash

The area under cultivation of chayote squash, locally called *Iskut*, in Mizoram has recorded steady increase from 535 hectares in 2001-02 to 714 hectare during 2007-08. Production has increased from 16,130 MT in 2001-02 to 24,455 MT in 2006-07, before declining to 20,418 MT in 2007-08, partly reflecting the effect of *Mautam*. One plant of chayote squash can produce more than 300 fruits per year. Yields of 22-28 MT/hectare have been reported from commercial plantations. In Mizoram, chayote fruits are harvested manually as often as required depending on the productivity of the plant, unlike in commercial plantations, where harvesting is programmed with much more systematic methods.

Bird's Eye Chilli

Bird's eye chilli (*Capsicum frutescens*) is a bushy type of plant growing to 4 feet, with smooth oval leaves up to 2.5 inches. It is mostly marketed in dried form, and hence, is non-bulky and has long shelf-life, making it conducive for transportation. The State of Mizoram has high

productivity of bird's eye chilli. In the recent years, there has been consistent increase in the level of production of bird's eye chilli in Mizoram, which doubled from 535 MT in 2002-03 to 1077 MT in 2006-07. Accordingly, the yield has also increased from 0.83 MT/hectare in 2002-03 to 1.36 MT/hectare in 2006-07.

Wild Mushroom

According to National Horticulture Board (NHB), during 2001-02 to 2007-08, mushroom production in India ranged between 35,000 MT and 40,000 MT. Israel is the major destination of India's mushroom exports, accounting for 35.3 percent of India's mushroom exports, followed by Russia, UK, Saudi Arabia and the United States. There is good scope for commercial cultivation of wild mushrooms in Mizoram, which offers ideal weather conditions for cultivation throughout the year. In fact, wild varieties of mushrooms, which are locally known as '*pa*', grow abundantly in the State and form one of the traditional cuisines of the Mizos. The State of Mizoram is now in the process of identifying the species of wild mushroom available in the State, including finding out the nutritional and medicinal value. Once such tasks are done, export oriented commercial cultivation of wild mushroom could be carried out on a large scale.

Cut Flowers – Anthurium Cultivation

India's exports of cut flowers increased from US\$ 22 mn in 2004-05 to US\$ 29.6 mn in 2007-08, recording a compound annual growth rate (CAGR) of 10.4 percent. While India's major markets for exports of cut flowers are largely the developed countries including Japan, the United States, The Netherlands, United

Kingdom and Germany, emerging markets like Malaysia have shown promising results in recent years. The promising feature from the point of view of exports from Mizoram is that it has been fresh cut flowers that have performed better and within this, the markets include countries from Asia-Pacific such as New Zealand and Singapore, in addition to Malaysia. Further, anthurium is one of the thrust floriculture crops identified by the Government of Mizoram because of several advantages including increasing demand in the global market, ideal agro-climatic conditions, availability of group of progressive farmers having fertile land and other infrastructure facilities to take up this activity.

Medicinal Plants

According to Planning Commission, the medicinal plants-based industry is growing at the rate of 7-15 percent annually and the value of medicinal plants related trade in India is to the tune of about US\$ 22.4 billion per annum vis-à-vis world trade of about US\$ 62 billion. The Indian Systems of Medicine have identified 1500 medicinal plants, of which 500 species are mostly used in the preparation of drugs. Presently, different Medicinal and Aromatic Plant (MAP) species are under cultivation in the country out of which about 32 are listed in the priority list of the National Medicinal Plant Board, Ministry of Health and Family Welfare, for commercial cultivation and processing in the country. In Mizoram, the rich agro-biodiversity of the State has housed more than 400 species of medicinal plants, which have been documented as being used by the local population.

Handicrafts and Handlooms

Over the years, handicrafts and handlooms sector has been gaining

popularity and the recent decade bears proof to the global interest in Indian products through the rising exports that have taken place. In Mizoram, handicrafts and handlooms sector is one of the largest industries. Main products in handicrafts are cane and bamboo products. Handloom products that have good potential for exports from Mizoram are *puan*, which are traditionally worn as wrap around by the Mizo women. Towards this end, improving the quality and quantity of these handicraft and handloom products would be essential. Further, large proportion of trading in handicraft and handloom products are handled by local private artisans and occurs outside the institutional mechanism, indicating a scope for creating an enabling environment so that such productions can be taken up as a gainful activity whose end-users could largely be those beyond the domestic shores.

Introducing Gherkins in Mizoram

Gherkin is a creeper with a 90-day cycle, which can start yielding from about 35th day and goes on yielding for another 35-40 days. Average productivity in India is approximately 7.5 MT per acre. Given that gherkin is a short-duration labour-intensive and highly profitable crop, extension of area of cultivation would serve to enhance its exports from India. With a wide range of agro-climatic zones in Mizoram, cultivation of gherkins could be undertaken on a wider scale. As gherkins crop can be economically cultivated on small plots of even 0.25 acre, it lends itself to easy cultivation in Mizoram where most landholding is marginal. Further, Mizoram enjoys a wide range of climate, mapped, physiographic, geology and vegetation which influence the formation of different kinds of soils, which are ideal for cultivation of gherkins.

Strategies and Policy Interventions

Role of the State Government: Some of the initiatives that the Government could undertake could include developing of railway network, linking Mizoram to the rest of the country, opening up of border trade with Myanmar and Bangladesh, ensuring continuous and uninterrupted power supply to industries, organising facility for getting export license within Mizoram, organising various training programmes and workshops on export related areas, encouraging local entrepreneurship, creating a centralised umbrella public private partnership body which exclusively works on the development of “Brand Mizoram”, direct involvement in agriculture extension services, and facilitating private sector activities in horticulture sector such as setting up a feed and fodder plant to alleviate supply problems, cold storage and processing factories.

Fruit Juice Processing/Concentration: There is a growing demand for fruit juice both in the domestic and international market. The demand for high aromatic passion fruit juice in the Middle East, Europe, and America is also very encouraging. The changing food habits and increased export has boosted the demand side of bottled fruit juice both in the domestic market as well as institutional market. Therefore, large scale extraction could be carried out for exporting fruit juice from Mizoram to tap the growing international demand.

Promotion of organic farming: Most of the horticulture crop production in Mizoram is organic by default because the farmers of the region neither apply chemical fertilizers nor chemical pesticides. Considering the increasing demand for organic produce all over the world, farmers from Mizoram could earn better returns for their produce. However, the surplus produce needs to

be properly collected, stored, packaged and transported to the distant market after due certification.

Entrepreneurship development: Promoting and developing entrepreneurship in the State would prove to be beneficial. Effective steps may be taken for creation of awareness of entrepreneurial opportunities among the youth, developing their knowledge and skill and raising their level of motivation for entrepreneurial career. In addition, efforts would also need for creation of an entrepreneurial environment in the support system and social environment. Closer linkages with relevant institutions such as Indian Institute of Entrepreneurship (IIE) could be encouraged.

Strategies at the Production Level: Strategies at production level could include developing disease-free quality planting materials of high yielding varieties through development of certified nurseries, identification of planting varieties according to the demands of the importing countries, development of integrated pests, diseases and nutrient management schedules which are environment friendly and ecologically sound and ensuring a smooth transfer of the planting material from lab to land. Establishment of an Agriculture University in Mizoram, better utilisation of informal markets by organic producers and creation of select zones to be exclusively organic, with the objective of catering primarily to international demand, could be another strategies at production level to promote exports from the State.

Strategies at the Processing Stage: Towards creation of processing units in the private sector, food processing

industries could be operated by a large corporation, which will work closely with farmers to improve yields, invest in specific infrastructure to reduce wastage and in research to develop specific varieties of fresh and processed produce for export, and improve quality through better packaging and storing technology. At a broader level, focus could be on creation of small scale processing units for fruits like mandarin and passion fruit. Moving up the value chain through setting up of processing plants is particularly important considering that these will fetch a far higher unit price in the international market and are amenable to transportation in relatively less volumes. Promotion of co-operative farming in the State could lead to economies of scale, while producers' co-operatives could be established to supplement direct government involvement in a host of areas such as input and credit supplies, as well as marketing networks.

Post-Harvest Management and Marketing: Strategies could also include greater focus on marketing arrangements, including encouragement to private sector involvement in marketing; encouraging downstream food processing and research linked to marketing requirements for diversifying into horticulture and floriculture products; encouraging private transporters with adequate credit support through the financial institutions; setting up more marketing outlets for marketing of flowers and processed products; and adopting two-tiered approach for export promotion, viz. exports of fresh produce in the short-term and value-added processed products in the medium to long term to achieve desired export orientation.

Handicrafts and Handlooms: The main pillar on which the strategy for export promotion of handicrafts and handlooms from Mizoram could be based would be that of design enhancement through introduction of motifs which reflect the essence of Mizoram as for instance abstract illustrations of the state birds and animal, flowers, etc. This would call for organising focussed workshops and training programme on the design requirements from an international perspective. For marketing of handicraft and handloom products from Mizoram, there is a need to have several marketing outlets across the major centres in India and also tieing up with large trading houses, both domestically and also with international retail chains in order to get export orders. Mizo *puan* like *puanropui*, *puanchei* and *puandum* need to be registered under the Geographic Indication so that their authenticity is ascertained. For achieving this, proper documentation has to be undertaken on these products.

The contents of the publication are based on information available with Export-Import Bank of India and on primary and desk research through published information of various agencies. Due care has been taken to ensure that the information provided in the publication is correct. However, Export-Import Bank of India accepts no responsibility for the authenticity, accuracy or completeness of such information.

Note: Indian Rupee are referred in crore and lakhs:

1 crore : 10 million

1 lakh : 100 thousand

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