# The case of gherkin exports from india economics essay



Food products are being increasingly traded between countries with production and consumption points being separated by large distances. World agricultural exports have grown from \$ 224 billions in 1979-81 to \$ 721 billion in 2006 (FAOSTAT). By 2004, the share of processed foods in international food trade increased to about 65% from 54% in 1979-81. The expansion of trade in processed foods has been stimulated by the higher demand for processed foods due to 'internationalization of food habits' of consumers (led by growth in incomes). This demand is being met by innovations (relating to food technologies, refrigeration facilities and transportation) on the supply side leading to an overall growth in international trade of processed foods. The growth rate of processed foods exports from developing countries is higher than that of primary products and shares of traditional items of export (such as meat products) have fallen over time. Trade in traditional fruits and vegetables such as oranges, canned pineapples, and apple juice have grown at a slower rate as compared to nontraditional products such as mangoes, frozen potatoes and fresh mushrooms.

Rising incomes and consumer interest in product variety, freshness, convenience, and year-round availability have led to increased levels of international trade in fruit and vegetable products. The share of fruits and vegetables in global agricultural exports rose from 10. 6% in 1961 to 19. 3% in 2007 (FAOSTAT). International trade in fruits and vegetables has been favored by sudden shortfalls in major overseas markets, new foreign direct investment or strategic partnerships, and improvements in international logistical capacity. Towards promoting international trade in fruits and vegetables, various countries have invested in research and adopted

international technologies, expanded and upgraded logistical facilities, strengthened vertical supply chains, developed industry organizations for collective action, and built credible systems for quality assurance and food safety management. These interventions have been intensified in many developing countries with a view to tap developed country markets. The share of fruits and vegetables (fresh and processed) in total agricultural exports of developing countries rose from 16. 7% in 1980-81 to 21. 8% in 2000-01 (Diop and Jaffee 2005). Exports of fruits, vegetables, speciality produce and processed products constitute non-traditional agricultural exports and in 2001, developing countries had a share of 56% of world trade in fruits and vegetables (excluding the traditional exports of bananas and citrus) (Hallam et al 2004).

During 1999-2001, India emerged as one of the 30 top exporters of processed fruits and vegetables in the World (Huang 2004). The share of non-traditional export items of fish and fish preparations, fruits vegetables and pulses, and processed foods in Indian agricultural exports has increased during the last few years. The value of food exports from India has more than quadrupled during 1995-2009 with exports reaching Rs. 36294 Crores in 2008-09 as compared to Rs. 7915 Crores in 1995-96. Of this, the value of processed food items (processed fruits and vegetables, animal products and other processed foods) has risen from Rs. 2329 Crores in 1995-96 to Rs. 10793 Crores in 2008-09 (Fig. 1) indicating an average annual growth rate of 12. 5%. During this period, exports of processed fruit and vegetables have grown from Rs. 492 Crores to Rs. 3164 Crores (growth rate of 15. 4%).

## Fig 1. India's Food Exports in 2008-09 (by value – Rs. Crores)

Source: Anon 2009b

#### Table 1. India's Exports of Processed Fruits and Vegetables

Processed items
1995-96
2000-01
04-05
05-06
06-07
07-08
Value
% share
Value
https://assignbustor.com/tho.caso.of.ghorkin.ovports.from.india.assamina

#### % share

248

50.4

738

227

397

424

430

17. 54

Mango Pulp

85

17. 2

264

316

364

506

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107

21. 7

207

879

1605

\* Includes Pulses from 2004-05 to 2007-08 of value – Rs. 590 Crore, Rs. 1095 Crore, Rs. 790 Crore and Rs. 549 Crores respectively. Source: Anon 2009c. Value in Rs. Crores.

A non-traditional vegetable that is being exported from India since the early 1990s is Gherkins.

During 2008-09, India exported about 0. 30 million tons of Cucumber and Gherkins of value of about Rs. 797 Crores. Indian Gherkin exports have shown significant growth rates since the mid-1990s and the share of gherkin exports in India's exports of processed fruits and vegetables has grown to 16. 19% in 2007-08 from 6. 20% in 1995-96. Table 2 indicates the growing relevance of gherkins in India's exports of processed fruits and vegetables, and food exports. During the recent financial crisis (2007-08), Gherkin exports from India saw a decline of about Rs. 106 Crores (21. 21%) as compared to exports during the previous year (2006-07). Exports to Russia and Canada fell to a greater extent (about 40%) as compared to other destination countries. During this period, exporters focused on identifying new clients in other markets resulting in significant growth in 2008-09 exports to countries such as the USA and Canada. Overall exports in 2008-09 doubled as compared to exports during 2007-08 and grew by about 58% as compared to exports during 2006-07.

#### **Table 2. Status of Indian Gherkin Exports**

1995-96

2000-01

04-05

05-06

06-07

07-08

08-09

Quantity of Indian Gherkin exports (tons)

18183

56101

122350

222458

235768

189072

303955

Value of Indian Gherkin exports (Rs. Crores)

30. 51

126.05

229.61

438.48

504. 11

397. 17

797.36

#### Share of Gherkins in India's food exports (%, by value)

0. 39
1. 37
1. 36
2. 45
2. 38
1. 24
2. 19
Share of Gherkins in India's exports of processed fruits and vegetables (%, by value)
6. 20
9. 36
14. 80
17. 86
20. 15
16. 19
n. a.

Source: ibid 2009a, ibid 2009b and ibid 2009c. Export data of 3 ITC classifications (at the 8 digit level – 20011000, 07114000 and 07070000) primarily relates to gherkin exports from India.

Gherkin is an export-oriented vegetable that is being cultivated in India since the late 1980s. The domestic consumption of gherkins in India is estimated at about 100 metric tons (MTs) with consumption limited to a few niche segments. The low domestic demand translates to the predominant dependence of the Indian gherkin sector on exports. Indian gherkins have found buyers abroad mainly due to price advantages, consistent quality and ability to supply round the year.

Although Indian gherkin exports constitute a significant proportion of India's exports of processed fruits and vegetables, with gherkin production emerging as a successful case of contract farming in the country, the evolution and dynamics of this sector has been relatively undocumented. The relative newness of the Indian gherkin sector along with its regional presence, low-profile operations of the gherkin exporting firms and lack of awareness about gherkins have constrained sectoral studies and research. The gherkin sector's experiences in contract farming and business practices could be useful for planning interventions in other food processing subsectors. Towards filling this gap, this study profiles the evolution of the gherkin sector in India and outlines the factors that have contributed/constrained its growth. This paper ends with a few issues that need to be addressed by policy makers and industry to sustain the sector's competitiveness and growth.

#### 2. The Indian Gherkin sector

Gherkin (also called pickling cucumber – Cucumis sativus) is one of the largest pickled vegetables in the world. About 44 million tons of cucumbers and gherkins were produced in the world during 2008 with China being the largest producer at 28 million tons. China, Turkey, Iran, Russian federation, and United States of America (USA) together produce about 76% of the world production of cucumbers and gherkins (FAOSTAT). During 2001-2005, world production of cucumbers and gherkins has grown at an annual average rate of 3. 6%. The consumption of pickled gherkins is expected to increase considering the increasing food consumption away-from-home (Martinez et al 2006). While world demand for pickled products has been relatively flat, trade volumes have grown with higher imports of gherkin pickles by the USA. About 1. 92 million tons of Cucumbers and Gherkins worth US\$ 1. 88 billion were exported by 128 Countries in 2007. Dill pickles, sweet pickles and refrigerated pickles are the popular varieties of pickles.

Gherkins are primarily traded in three forms: i. raw gherkins – between farmers and briners/packers and, between briners and packers ii. semi-processed gherkins – between briners and packers and iii. processed ready-to-eat gherkins – between packers and retailers/consumers. International trade in gherkins has been dominated by the increasing imports of ready-to-eat forms of gherkins by developed countries from developing countries. E. g. USA's imports of ready-to-eat pickled gherkins from India increased from 1. 5 billion Lbs during 1992-96 to 23. 6 billion Lbs during 2002-05. (Martinez et al, 2006). Growth in imports has been led by the ability of a few developing countries to cultivate, process and export gherkins that adhere to

global quality standards at low prices. Developing countries in tropical regions, due to the favorable climatic conditions in some parts, have also been able to meet the seasonal demand from temperate country consumers by cultivating gherkins throughout the year.

In India, gherkin production is concentrated in the states of Karnataka, Tamilnadu and Andhra Pradesh. The gherkin sector is a good example of successful contract farming in India, and this sector has widened the crop spectrum for at least 60, 000 farmers in the states of gherkin cultivation. A study in Karnataka has shown that gherkin ranks first in terms of gross and net returns to farmers, followed by sunflower, garden crops like coconut, vegetable crops, arecanut, paddy and groundnut, the lowest being ragi (finger millet) (Erappa 2006).

The development of the Gherkin sector in India has been marked by a high level of private initiative in all dimensions of gherkin cultivation and trade. All aspects of production (e. g. varieties) and processing (e. g. recipes) are aligned to meet the demand of export markets. Trends in the value and quantity of India's gherkin exports are presented in Figure 2. Governmental intervention in the gherkin sector was minimal upto the year 2001 with private firms taking the lead in producing, processing and exporting gherkins. Prior to 2001, gherkin exporting firms received support primarily as subsidies for capital investments on processing machinery, and freight subsidy from Ministry of Food Processing Industries and Agricultural and Processed foods Export Development Authority (APEDA). In October 2001, as part of a new program to establish agricultural export zones (AEZ), the government of India notified eight cultivating districts in Karnataka as an https://assignbuster.com/the-case-of-gherkin-exports-from-india-economics-essay/

AEZ. Under this program, various interventions were undertaken by the Government of India along with the Government of Karnataka with the objective of promoting gherkin exports from the AEZ. Subsequently, in May 2003, an AEZ was also formed covering 7 districts of Andhra Pradesh. Under the AEZ program, the respective state Governments and the Government of India plan and implement various activities so as to improve efficiencies along the gherkin value chain. Therefore, it can be said that sector-specific interventions to support gherkin exports from the country were initiated with the establishment of the AEZs in Karnataka and Andhra Pradesh.

## Fig 2. Indian Gherkin Exports, 1993 – 2009 (by value) (Source - Anon 2009b)

Prior to establishment of the Gherkin AEZ in Karnataka, gherkin exports from the country primarily consisted of bulk gherkin exports. Figure 3 indicates the trends in the growth of gherkin exports with respect to the various performance indicators.

## Fig 3. Indian Gherkin Exports prior to and after establishment of Gherkin AEZ (annual growth rates %) Source - Anon 2009b

Overall gherkin exports from India, indicated as value of exports, recorded a compounded annual growth rate of more than 20% pre- and post-2001. The growth in unit value (Rs./Kg) of gherkin exports was greater post-2001 although growth rate of export quantities was lower during that period as compared to pre-2001. This increase in unit value can be attributed to the higher proportion of exports of bottled gherkins. The growth rate of quantity https://assignbuster.com/the-case-of-gherkin-exports-from-india-economics-essay/

and value of bottled gherkins was higher during 2001-09 as compared to growth rates prior to the establishment of the gherkin AEZ in Karnataka. However, growth in quantity of bulk gherkin exports declined sharply after the establishment of the gherkin AEZ in Karnataka but the unit value of bulk gherkins grew to a higher extent as compared to bottled gherkins post-2001. Higher unit prices for bulk gherkins was obtained due to the increasing export of small-sized gherkins (considered to be of higher grade) in bulk form to countries such as Netherlands where the fruits are processed and packed in bottles.

By 2005, India emerged as the second largest supplier of ready-to-eat forms of gherkins and the largest supplier of semi-processed gherkins to the US. However, analysis of data on destination countries of Indian gherkin exports reveals an increasing focus on the Russian market. During 2001-02, the value of exports to Russia constituted only 3% of value of Indian gherkin exports while this share rose to about 20% during 2008-09 (Fig. 3). In terms of quantity, the corresponding values during 2001-02 and 2008-09 were 3% and 24% respectively. This focus on Russian exports has contributed to higher gherkin exports from India. The unit value (Rs./Kg) of gherkin exports to Russia has increased from Rs. 15. 26 in 2001-02 to Rs. 22. 54 in 2008-09.

## Fig 3. Destination Countries of Indian gherkin exports (2008 – 09, value of exports in Rs. Crores)

Source - Anon 2009b

As compared to exports to Russia, the unit value of bottled gherkins exported to USA was Rs. 18. 92 in 2001-02 and it rose to Rs. 27. 38 in 2008-

09. Table 3 indicates the realizations from exports to Russia and USA. Similar comparisons of price realizations from exports to other countries reveal that lower prices are being obtained from Russian markets for both bulk gherkins and bottled gherkins. Therefore, while the focus on Russian markets has contributed to higher export quantities, the lower price realizations have reduced the profitability of gherkin exports. This lower realization is due to the higher share of larger gherkins (considered as lower grade) in exports to Russia. Grade analysis at the National level is restricted by the lack of data on the grades of gherkins being exported to Russia. However, grade-wise price realization of gherkin exports from the Karnataka AEZ shows that most of the exports to Belgium, France, Netherlands and Spain are of Grade I Gherkins while most exports to Australia and Russia are of grade III. France has been the largest buyer of Grade I Gherkins from the AEZ while Russia has been the largest buyer of grade II and grade III Gherkins. The form preferences of most buyers have changed (from bulk to bottled Gherkins) during the past few years while grade preferences have remained the same.

## Table 3. Unit Realizations from Gherkin Exports to Russia, USA and other Countries

Destination

Russia

**USA** 

Avg price from all countries (Rs. per kg)

Year

Share of Indian exports (%, by value) Unit value (Rs. per Kg) Share of Indian exports (%, by value) Unit value (Rs. per Kg) 2001-02 2. 9 15. 26 17.4 18. 92 17.75 2003-04 13.0 15. 42 18.0 18.49

2005-06

18. 78

- 41. 9
- 17. 50
- 13.6
- 21. 14
- 19.71
- 2007-08
- 19.8
- 16.96
- 19.8
- 22. 14
- 21. 01
- 2008-09
- 20. 3
- 22. 54
- 20. 3
- 27. 38
- 26. 23

Source: Anon 2009b

#### 3. Evolution of Indian Gherkin sector

In India, Gherkins were cultivated for the first time in the State of Karnataka, and since then, Karnataka has been the national leader in the production and export of gherkins. The favorable natural endowments for gherkin cultivation during most months of the year enabled the state's exporters to produce and export gherkins in an efficient manner. Gherkin exports from India commenced in 1989 with an entrepreneur cultivating gherkins in Bangalore and exporting gherkins in bulk form to Australia. The initial challenges of gherkin cultivation (and quality control) were met primarily with guidance from the Australian buyer, a local supplier of seeds, and by trial-and-error. The first batch of gherkins that was shipped to Australia in September 1989 was found to be of acceptable quality and orders were obtained for regular supply. This posed a managerial challenge, as the entrepreneur had to evaluate and choose between the options of "captive" centralised farming and decentralised "contract" farming to produce gherkins to meet the export orders. As captive farming entailed high capital investments in land and labour, it was assessed that the meagre margins in gherkin trade would render the activity unviable. Further, the plethora of labour laws and other regulatory measures would render the system complex and require high level of administrative/overhead expenses. It was therefore decided that gherkins would be cultivated through contract farming by entering into agreements with farmers. Thereby, the private initiative of an entrepreneur with economic motives and individual drive resulted in the commencement of gherkin cultivation in India. The forward linkage with an Australian gherkin

unit (for buyback of cultivated gherkins) and access to seeds and plant protection chemicals motivated the entrepreneur to risk the cultivation of this new crop.

As it was assessed that gherkins could be cultivated in most regions of Karnataka due to favourable climatic and soil conditions, farmers in various districts of Karnataka were contracted for gherkin cultivation. Extension activities such as visits of potential gherkin farmers to other gherkin farmers' plots helped in motivating farmers to take up gherkin cultivation. The entrepreneur's prior experience in contract farming in India, Africa and Central America proved to be useful in initiating contract farming of gherkins in India. Guided experimentation in farmers' fields resulted in an average output of 2. 2 MTs per acre (small grades for French markets) and the formulation of a package of practices for gherkin cultivation. In 1990, marketing linkages were developed with a local exporter for the export of gherkins due to the then-prevalent system of export quotas. The grade-based pricing was introduced and this has emerged as a standard industry practice and one of the drivers of contract farming of gherkins in India.

Subsequently, word-of-mouth communication about the successful cultivation and delivery of Indian Gherkins resulted in interest being expressed by various European processors. The ability of Indian firms to supply quality gherkins on a round-the-year basis in a world market facing scarcity of gherkins, and the lower price of Indian gherkins (about 40% lower than gherkins cultivated in consuming countries) rendered Indian gherkins attractive. Sensing the emerging opportunity in gherkin exports, in 1991, a business conglomerate in India in partnership with a Swiss firm, established https://assignbuster.com/the-case-of-gherkin-exports-from-india-economics-essay/

the Global Green Company Limited (GGCL). Thereby, an initiative by an individual entrepreneur developed into a corporate entity with significant capital investments. By 1993-94, two more firms in Karnataka and one firm in Tamilnadu commenced activities of gherkin cultivation and export. In 1996-97, GGCL produced bottled gherkins for the first time in India. Meanwhile, some large exporting firms began procuring gherkins through agents (facilitators) who would source gherkins from farmers.

The successful activities by the conglomerate-backed firm and the involvement of corporate groups attracted a number of entrepreneurs to gherkin cultivation and trading. The seemingly-naÃ-ve contract farming of gherkins, buyback agreements, assessment of high potential for growth and low barriers to entry led to a number of firms commencing cultivation and trade in gherkins. An association of gherkin exporters, Indian gherkin exporters' association, was set up to promote the interest of its members by interacting with Government and other stakeholders. The gherkin sector in India, by the year 2000, evolved into an oligopolistic structure (for specific product forms) with most firms transacting in bulk gherkins. In 2008, about 40 firms were involved in gherkin exports of which 26 firms were based in Karnataka and accounted for about 55% of the value of gherkin exports from the country.

The Indian gherkin industry has evolved from being a bulk supplier of gherkins (in HDPE barrels) to a supplier of quality products in ready-to-eat forms (in bottles). The firms are able to cultivate gherkins of desired grades and supply pickles of various recipes all-round-the-year. The gherkin sector in India has, tacitly, been effective in developing structures and mechanisms https://assignbuster.com/the-case-of-gherkin-exports-from-india-economics-essay/

that support contract farming, grade-based pricing and product standardization while adhering to international quality standards. The private firms operate by avoiding media attention to a large extent as contract farming in India has been subject to criticism and review by social activists. The sector has successfully practiced contract farming long before the Government of India accorded formal status to agriculture based on contracts. The successful operation of the gherkin sector is validated by the increasing value of gherkin exports and the growing share in world gherkin exports. As an indication of India's global presence in the sector, The Global Green Company limited has recently acquired a Belgium-based gherkin exporting firm and a Hungary-based exporter of processed vegetables to emerge as one of the largest exporter of preserved foods in the world. This Indian firm now has production facilities in Belgium, Hungary and Turkey and is well-poised to grow as a global player in processed fruits and vegetables.

4. Factors influencing evolution of gherkin sector in India
Enabling factors: The Indian gherkin sector has been able to grow into a
global player due to the largely favorable policy environment for agricultural
exports in India. Upto 2001, although there were few direct policy
interventions specifically in the gherkin sector, the private exporting firms
have benefited from Governmental programs that were offered to the entire
agricultural sector in the Country. The gherkin industry in India holds a
distinct position as an example of successful contract farming and exportoriented agriculture. The primary factors that have contributed to the
development of the gherkin sector in India can be summarised as:

Cost advantages in processing due to minimal capital investments (on infrastructure such as automated plant and machinery)

Comparative advantage of raw produce quality due to the ability to cultivate gherkins (of all grades) and produce processed products that conform to International quality specifications

The 'fit' of gherkins in the existing crop production systems prevalent in south India

Well-adapted networks for the production and supply of preservatives and ingredients (such as dill) for the preparation of processed ready-to-eat products

High level of private initiative in all aspects of gherkin cultivation and trade

Support extended by APEDA

Absence of inhibitory macro-level policies

Along with the enabling factors indicated above, a few factors have limited the growth of the Indian gherkin sector. These limiting factors include-

Price-based competition and low product differentiation

Backward integration of foreign buyers and higher power of buyers

Farmer retention and extension costs

### 5. Policy Environment for Non-traditional Exports and Gherkin sector in India

The food processing sector in India is recognised as having the potential to improve farmer incomes and lead to improvement of the rural economy. Along with the central government's ministries of agro-processing and food processing industries, state-level departments in most states also exist to promote processing of farm produce. Under various five year plans and industrial policies, the Indian government has encouraged the establishment of food processing industries to enhance value addition of primary agricultural produce (Anon 2008). As part of the agricultural reform program initiated in the mid 1990s, most of the processed food items were exempted from licensing, and excise duty on processed fruits and vegetables reduced from 16% to 0%. In 1999, food processing industries were included as a priority sector to enable access to bank credit. Fruit and vegetable processing units have been exempted from payment of excise duty. Such policy interventions have contributed to the increase in installed capacity in fruit and vegetable industries from 11. 08 Lakh tons in 1991 to 24. 74 Lakh tons in 2007 (Anon 2008). The major focus of the Ministry of Food Processing Industry for the period 2007-12 (11th Plan) is to increase Government investment in creating the farm-to-market supply chain, market processing infrastructure to attract more private investment. Schemes are also planned to strengthen research and development, human resources in the food processing sector, establish more food testing laboratories to ensure quality of food products and compliance of national and international standards, etc. The Gherkin sector in India is distinct from most of the other agri-based enterprises in India due to the following reasons:

- a. Gherkin cultivation is undertaken only through contract farming. Farmers obtain inputs such as seeds, fertilizers and pesticides from the contracting firms.
- b. Gherkin is a short-duration crop that can be grown through inter-cropping.
- c. All the exporting units are also processing units which procure the raw materials from contracted farmers. Thereby, a high level of vertical integration exists in this sector.
- d. All the processing firms are 100% EOUs.
- e. There is practically no domestic demand for gherkins in India.

The subsystem diagram of the Gherkin sector is given below in Fig. 4.

Fig 4. Subsystem diagram of the Gherkin sector in India
Gherkin cultivation in the country is undertaken in an unrestricted manner
with no specific legal provisions or policies governing this activity. The EOUs
operate under the provisions of customs and central excise laws. The EOUs
obtain various benefits such as duty-free imports (of seeds, fertilizers and
chemicals for pre and post harvest treatment such as micro nutrients, plants
and growth regulators, organic and inorganic substances used for plant
nutrition, insecticides, fungicides, weedicides, herbicides, irrigation filters,
driplines, drip-fittings, micro sprinklers, agricultural sprinklers, fertilizer
tanks, valves, fertilizer pumps and chemical injections, crates, drums and

preservation media (Such as acetic acid and vinegar)) and tax incentives that are permitted under the various export promotion schemes. The gherkin-exporting EOUs are allowed to sell upto 50% of their production (in value terms) in the domestic tariff area (within India) subject to positive net foreign exchange earnings. The foreign trade policy 2004-09 (Anon 2006), with reference to contract farming, subject to some conditions, provided for the movement of inputs and equipments to farms. The EOUs obtain import duty exemptions on processing equipments under the EPCG scheme and also obtain subsidies under schemes of the Ministry of food processing industries. The local procurement of preservatives (such as brine, vinegar, acetic acid) and packing materials (bottles, labels, cartons, caps) is at market-determined prices. Self clearance is permitted for the regularly-exporting 100% EOUs and the movement of inputs across processing units is restricted by customs provisions.

It can be concluded that the growth of the gherkin sector is primarily due to the liberalised policy environment prevailing with respect to cultivation, processing and exports of gherkins. The benefits obtained by the 100% EOUs, in a situation of absence of domestic demand, have also helped the industry's growth. The market-based structures in the sector along with the development of specific supplier networks have contributed positively. The future growth of the sector would be facilitated by policies and interventions that would consider stakeholder preferences and manage stakeholder interests.

## 6. Outlook for Indian non-traditional agricultural exports and gherkin exports

Indian agriculture (especially, the horticulture subsector) is currently passing through a stage of intense structural changes due to the entry of many large corporate firms in agricultural production and trade, and evolution of commodity trading systems. The liberalised trade environment, for both external and domestic trade, has opened up immense opportunities in agriculture with firms vying with each other to exploit information technology and improved production technologies. Many corporate firms have opted for backward integration and entered into production contracts with farmers for specific products of desired grades and quality. This has led to higher farmer awareness about efficient production systems and the need to align production so as to meet market demand. Supported by favourable policies and growth in domestic demand (triggered by increasing consumer incomes) for products such as fruits and vegetables, a gradual shift of resources in favour of export oriented agriculture can be expected in the years to come.

Although the gherkin sector has performed well with minimal direct Governmental support, the sector is experiencing margin squeeze due to the flat prices of processed products and the increasing costs of cultivation.

Some exporters are of the opinion that Indian gherkin exports could achieve a sustainable level of 300000 MTs as the extensive cultivation of gherkins would render it as a competitor to crops that ensure food security to farmers. Also, it is felt that the advent of new packing technologies could displace demand for bottled gherkins that is currently driving many