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Export Led Growth in Agriculture and Food Industry in India

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Abstract

There are many contributors in the growth of a country such as export, employment, investment, well established infrastructure, govt. policies, globalization, education, etc. Among all these contributors export is a very main contributor. India is an agriculture based country. Most of the population is based on agriculture. So for the growth and development of our country government should think about the rate of export in agricultural products. Because this is a very important sector which plays an important role in growth of economic development of India. The report begins with an overview of the agriculture and food industry. It provides an introduction to the market and includes information regarding growth in agriculture, food consumption levels as well as the primary factors leading to a growing industry. The value chain in the market has been highlighted and includes the major sectors in the market. We have also discuss the factors which can limit the rate of economic growth.

1. INTRODUCTION

Export is considered as one of the very important contributors among contributors to economic growth. During 50s and 60s, most of the developing countries followed the import substitution policy for their economic growth. Since the mid-70s, in most developing countries, there has been considerable shift towards export promotion strategy. This approach postulates that export expansion leads to better resource allocation, creating economies of scale and production efficiency through technological development, capital formation, employment creation and hence economic growth. Agriculture is also one important sector which plays an important role in growth of economic development of India. The agriculture and food industry in India has been growing steadily with strong impetus from the government through various initiatives. Sectors that have witnessed strong private participation in the industry include seeds, fertilizer, farm equipments, warehousing, cold -chains, food processing and organic.

2. METHODOLOGY

The study is based on secondary source of data. The study concentrates on Indians food industry. The main source of data are various-

(a) economic surveys of India and Ministry of Commerce

(b) food industries data

(c) online data base of Indian economy

(d) ficci reports on food industries.

(e) Journals, articals , newspaper , magazines, etc.

3. OBJECTIVES

There is large demand of food and agriculture products in India and world wide. Hence, the primary objectives are -

- To identify the possibilities of positive change that can lead to growth of Indian economy.
- suggestions and strategies for reform in food industry.

4. LITERATURE REVIEW

In the 1950s and 1960s, many Latin America and Asian countries, such as Chile, Peru, Argentina, India and Pakistan followed IS strategy. By the late 1960s, African countries such as Ethiopia, Nigeria and Zambia began to pursue a similar strategy [Singer, 1950; Prebisch, 1950]. Theories by the structuralists [Singer, 1950; Prebisch, 1950] provided justification for a protectionist policy (SI) by considering the division of the world into a centre (the developed countries), and a periphery (the developing world), where trade acted as a source of impoverishment in the latter and as a source of enrichment in the former. According to these theories, trade brings growth for the industrialized countries with little or no gain at all for the developing countries. Some studies [Ocampo, 1986; Ocampo and Taylor, 1998] have also expressed their concerns on the ground that in return to the 'modest' benefit of liberalization; a country may have to pay a higher price in terms of slow productivity growth, worsening income distribution, and likely de-industrialization. According to Deraniyagala and Fine (2001), import liberalization strategy is less attractive for export expansion to generate positive influence on growth. They disclosed that, if selective protection is done properly, will be more efficient than complete trade liberalization.

Marxist writers went further and said that poor countries should not trade at all with the so-called "north" [Redding, 1999]. The principal reason for protection and thus inward-looking strategy is the infant industry argument [Bardhan, 1970] that underlines the need for protecting firms at the beginning of their lifetime. Traditional trade models [Dornbusch and Samuelson, 1977; Rodriguez, 1974] moreover, considered the possibility of an optimal level of protection for a country that could influence the terms of trade. It has also been shown that protection can raise income when there is no full employment (Brecher, 1974 and 1992, as cited in [Vamvakidis, 2002]. In spite of these anti-trade theories, there exists a vast literature on the links between trade and economic growth and development.

A lot of literature consists of analysis and testing of the outward-oriented export promotion policy or Export-Led Growth (ELG) hypothesis. This hypothesis states that promotion of the export sector is the best way to achieve economic growth. There are many explanations as to why exports are a crucial way to obtain growth [Giles and Williams, 2000; Santos-Paulino, 2000]. According to Giles and Williams [2000], export stimulates growth in a number of ways. These include supply/production and demand linkages, economies of scale (due to larger international markets), increased efficiency, adoption of superior technologies (embodied in foreign-produced capital goods), learning effects and improvement of human resources, increased productivity (through specializations and creation of employment).

The demand-side argument is that domestic markets severely limit the scope for sales of a domestically produced product, and that exports open domestic industries up to foreign markets, hugely increasing the potential demand for the product. This increase in potential market size can lead to increasing returns, while the home market may have been too small to achieve optimal scale. The economies of scale that can be achieved from exporting lead to increased capacity utilization, which results in greater product variety and productivity gains. Greater exposure to world markets may induce competitive pressures and may spur innovation and facilitate technological advancement and knowledge spill over's into the domestic economy, that lead to technological upgrading and efficiency gains in production and management practices [Giles and Williams, 2000].

Exports also generate much-needed foreign exchange, which can be used to provide the public funds needed to divert production towards the most growth-enhancing industries. This specialization towards more productive export industries and away from relatively inefficient sectors increases human capital through an increase in the general skill level of the country. Another argument for the ELG hypothesis is that it may be seen as part of the product and industry life cycle hypothesis. This hypothesis describes the economic growth as a cycle that begins with exports of primary goods. Over time, economic growth and knowledge change the structure of the domestic

economy, including consumer demand, which propels the more technology-intensive domestic industry to begin exporting. As domestic demand ebbs, economic growth arises from technologically advanced exports. Evidence of this effect, which will be cited quite regularly, comes in Giles and Williams [2000].

According to Krugman and Obstfeld, 2006, exports may benefit export growth through generating positive externalities on non-exports, increased scale economies, improved allocative efficiency and better ability to generate dynamic comparative advantage. Exports ease foreign exchange constraints and can thereby provide greater access to international market. The foreign exchange earnings from exports allow the import of high quality intermediate inputs, mainly capital goods, for domestic production and exports, thus expanding the economy's production possibilities [Krugman and Obstfeld, 2006].

Whilst practical evidence in support of export-led growth (ELG) may not be universal, rapid export growth has been an important feature of East Asia's remarkable record of high and sustained growth. In particular, the wave of growth in the four tigers (Hong Kong, South Korea, Singapore and Taiwan) and the Newly Industrialized Countries (such as Malaysia, Indonesia and Thailand) has been used to support the argument that carefully managed openness to trade through an ELG is a mechanism for achieving fast growth. The experiences of these countries have provided the impetus to the neoclassical economists' view that ELG strategy can lead to growth [Todaro &Smith, 2006].

The subject of ELG can as well be approached from the wider debate on openness (or trade) and growth. What appears to be gaining currency in recent years from cross- country growth differences is that most of the countries pursuing growth successfully are also the ones that have taken most advantage of international. These countries have experienced high rates of economic growth in the context of rapidly expanding exports and imports trade [Martin, 2001; Masson, 2001]. During the past twenty years, in accordance with export promotion strategy, numerous empirical studies of causation of exports and economic growth have been conducted on the economies of developing countries, using either cross-section or time-series analysis. The first group of studies including [Michaely, 1977; Feder, 1982; and Kavoussi, 1984]; employed cross-country data sets and concluded that the positive correlation between export growth and GDP growth was seen as an evidence of ELG hypothesis. However, Medina - Smith [2001] and Abu- Quarn and Abu Bader [2005] stated that this does not imply anything about the causality running from export growth to GDP growth or vice versa. More importantly, some studies, [Herzer *et al*., 2004] emphasis that utilizing cross-country data sets implicitly assumes that countries have similar economic structure and similar production technologies that might give us misleading results.

After all these criticisms, since the mid-1980s, Granger causality tests frequently have been used to find the relationship between export and economic growth [Gübe, 1997]. These studies began to employ Granger causality tests using individual country time series data sets. In view of the fact that, causality tests are very sensitive to the omitted variables, the empirical results are mixed and conflicting. Moreover, due to the national income accounting identity, export is a component of GDP. Hence, this means that there is biasness in favor of correlation. ELG hypothesis could be held for the certain export categories. The first study, using this methodology, was conducted by Jung and Marshall [1985]. They investigated the causal relationship between export and growth for 37 countries and found that export promotion policies just supported in 4 countries. Darrat [1987] investigated the ELG hypothesis for South Korea, Singapore, Hong Kong and Taiwan for the period 1955-1982. Although his findings indicated a positive relationship between export growth and economic growth under the investigated period, Granger causality test results did not support the ELG hypothesis for the three countries except for Korea.

There are some studies done about the recent Indian economic development whether this is caused by an increase in export. Nidugala [1991] attempted to find an answer whether the Indian economy is

moving in the right direction as far as economic growth is concerned. He found that export growth played a significant role in the shift in the GDP growth in 1980s, cointegration between the real GDP and the real export for all countries. Ghatak *et a*l., [1997], tested ELG for Malysia and he stresses that certain types of export could cause GDP growth yet this may not be found at the aggregate level of export. Ekanayake (1999) disclosed the ELG hypothesis for eight Asian developing countries for different time periods. He employed cointegration and error-correction modeling techniques to investigate whether ELG hypothesis holds for these countries in concerned time period. He found that there exists bi-directional causality between export growth and GDP growth for all eight Asian countries except for Malaysia. The evidence supports short run Granger causality running from economic growth to export in all cases except for Sri Lanka. Nevertheless, the strong evidence for long run Granger causality running from export growth to economic growth in all cases also exists.

The ELG hypothesis has also been tested by a number of studies in Turkey. One of these studies carried out by Özmen vd. [1999] using the quarterly data during the period 1983:1- 1997:2. They have tested the causality issue between export and output by applying the standard Granger [1969] causality method. The results show uni-directional causality from export to output under the consideration period. The ELG hypothesis is also tested by Al?c? and Ucal [2003] using quarterly data 1987:1-2002:4. They employed Toda and Yamamoto [1995] causality technique to test the hypothesis. The results indicate uni-directional causality running from export growth to output growth. Another study supporting the ELG hypothesis, using Johansen's methodology, is carried out by Do?anlar and Fisuno?lu [1999]. This study investigates the causal relationship between export and economic growth for seven Asian countries including Turkey for the period 1951-1995. They found that there is a bi-directional causality relationship between export and output growth for Turkey in long-run.

In the two recent studies, ELG hypothesis is investigated Latin American countries. Herzer *et al*. [2004], using Chilean time series data 1960-2001, employed single equation and system cointegration techniques to analyze the productivity effects of manufactured and primary exports. They found that exports of manufactured products are important for productivity and therefore for long-run economic growth. Zuniga [2000] investigated the export-led growth for Honduras and five other Latin American countries. He employed real GDP, real gross capital formation, labor in numbers and real exports for the 1970-2000 periods. His findings support ELG hypothesis only in El Salvador in short run and totality cases.

In a recent study, Sharma and Panagiotidis [2004] investigated the export rise in India for the period 1971-2001. They employed Engle-Granger causality and Johansen methodologies to test whether export and GDP are cointegrated and export growth leads to the GDP growth. The authors utilized real GDP, real net GDP (subtracted from export), real export, real import and real investment, population and employment in the formal sector. They failed to find the cointegration between both types of GDP and export. They also could not show that exports Granger causes for both GDP with exports and GDP without exports.

The ELG hypothesis is also tested for Asian developing countries. Rahman and Mustafa [1997] selected 13 Asian developing countries for different time periods. They included real GDP and real exports in their equation. They applied Granger causality test, and cointegration and error-correction models. They found Guatemala and for non agricultural sector of Honduras. Exports Granger causes economic growth in the long run and in totality for Nicaragua. For Costa Rica, Honduras and agricultural GDP sector of Honduras, the ELG hypothesis could not be supported.

Thus, much has been said in the literature regarding the role of the Export- Led Growth (ELG) to the overall economic performance. Therefore, it can be concluded from above discussions, that the empirical evidence has been rather mixed. While some studies support a causal linkage between exports and economic growth, others failed to support the existence

of a significant relationship between these two variables [Shan and Sun, 1998].

5. WHY TO INVEST IN FOOD SECTOR

(a) Vast source of raw material : India is one of the largest producer of rice and wheat. Coconuts, cashew nuts, ginger, turmeric and black pepper is widely grown in some parts of our country. India is the second largest producer of groundnuts, fruits and vegetables. That it accounts for about 12 per cent of the world's fruits production with the country topping in the production of mangoes and bananas.

Due to the high processing levels milk products offer a significant opportunity in India. India is the world's largest producer of milk owing to the strong business models formed through cooperative movements in the country. Milk and related products account for 19% of India's total expenditure on food. This segment enjoys liberal regulations as all milk products except malted foods are automatically allowed 51% foreign equity participation and all exports of dairy products are freely allowed.

Alcoholic beverages have been categorized as the new high opportunity sector in India. Liquor manufactured in India is categorized as Indian Made Foreign Liquor (IMFL). The sector is still barred from the import of potable alcohol as it is subject to government licensing. In the meanwhile, India has recently started producing wine for domestic consumption.

Meat and poultry has also gained popularity due to the emergence of producers that have integrated breeding, feed milling, contract growing and marketing facilities for improved productivity. Meat, fish, and poultry are in rural areas as they are easily affordable and provide necessary nutrients. India has the potential to be a leading global food supplier if it employs the right marketing strategies and creates an efficient supply chain

(b) Conventional farming to commercial farming : In recent years, there has been a shift from conventional farming of food grains to horticulture which include fruits, vegetables, ornamental crops, medicinal and aromatic plants, spices, plantation crops which include coconut, cashew nuts and cocoa and allied activities.

(c) Market in the form of large urban middle class : With a huge population of 1.08 billion and population growth of about 1.6 % per annum, India is a large and growing market for food products. Its 350 million strong urban middle class with its changing food habits poses a huge market for agricultural products and processed food.

(d) Low Production cost : The relatively low-cost but skilled workforce can be effectively utilised to set up large, low-cost production bases for domestic and export markets.

(e) Change in consumption patterns : Increasing incomes are always accompanied by a change in the food habits. Over the last three decades in India a shift in food habits have been observed. The report observes that the proportionate expenditure on cereals, pulses, edible oil, sugar, salt and spices declines as households climb the expenditure classes in urban India while the opposite happens in the case of milk and milk products, meat, egg and fish, fruits and beverages.

For instance, According to report of ICRA the proportionate expenditure on staples like cereals, grams and pulses declined from 45 per cent to 43 per cent in rural India while the figure settled at 32 per cent of the total expenditure on food in urban India.

A large part of this shift in consumption is driven by the processed food market, which accounts for 32 per cent of the total food market. It accounts for US$ 29.4 billion, in a total estimated market of US$ 91.66 billion. The food processing industry is one of the largest industries in India — it is ranked fifth in terms of production, consumption, export and expected growth.

According to the Confederation of Indian Industry (CII) the food-processing sector has the potential of attracting US$ 33 billion of investment in 10 years and generate employment of 9 million person-days.

(f) Government Assistance : The Government has introduced several schemes to provide financial

assistance for setting up and modernizing of food processing units, creation of infrastructure, support for research and development and human resource development in addition to other promotional measures to encourage the growth of the processed food sector.

(g) Foreign Direct Investment : Foreign direct investment (FDI) in the country's food sector is poised to hit the US$ 3-billion mark in coming years. FDI approvals in food processing have doubled in last one year alone. The cumulative FDI inflow in food processing reached US$ 2,804 million in March '06. In '05-06, the sector received approvals worth US$ 41 million. This figure is almost double the US$ 26 million approved in 2010-11.

The US-based private equity fund, New Vernon Private Equity Limited (NVPEL), has decided to invest Rs 45 crore in Kochi-based spice major, Eastern Condiments, which is the flagship company of Eastern Group.

(h) Food Parks : In an effort to boost the food sector, the Government is working on agri zones and the concept of mega food parks. Twenty such mega parks will come are proposed across the country in various cities to attract Foreign Direct Investment (FDI) in the food-processing sector.

(i) Conducive food processing policy environment : The national policy on food processing aims at increasing the level of food processing from the present 2 per cent to 10 per cent by 2010 and 25 per cent by 2025.

6. CREATING AN ENVIRONMENT

The government has allowed 100 per cent FDI in processing sector. The Policy will seek to create an appropriate environment for entrepreneurs to set up Food Processing Industries through:

- Fiscal initiatives and interventions like rationalization of tax structure on fresh foods as well as processed foods and machinery used for the production of processed foods.
- A concerted promotion campaign to create market for processed foods by providing financial assistance to Industry Associations, NGOs/Cooperatives, Private Sector Units, State Government Organization for undertaking generic market promotion.
- Harmonization and simplification of food laws by an appropriate enactment to cover all provisions relating to food products so that the existing system of multiple laws is replaced and also covering issues concerning standards Nutrition, Merit goods, futures marketing, equalisation fund etc.
- Efforts to expand the availability of the right kind and quality of raw material round the year by increasing production, improving productivity.
- Strengthening of database and market intelligence system through studies and surveys to be conducted in various States to enable planned investment in the appropriate sector matching with the availability of raw material and marketability of processed products.
- Strengthening extension services and to the farmers and co-operatives in the areas of post harvest management of agro-produce to encourage creation of pre-processing facilities near the farms like washing, fumigation, packaging etc.
- Efforts to encourage setting up of agro-processing facilities as close to the area of production as possible to avoid wastage and reduce transportation cost.
- Promotion of investments, both foreign and domestic.

Simplification of documentation and procedures under taxation laws to avoid unnecessary harassment arising out of mere technicalities.

7. INFRASTRUCTUAL DEVELOPMENT

The Policy will facilitate:

- Establishment of cold chain, low cost pre-cooling facilities near farms, cold stores and grading, sorting, packing facilities to reduce wastage, improve quality and shelf life of products.

- Application of biotechnology, remote sensing technology, energy saving technologies and technologies for environmental protection.
- Building up a strong infrastructural base for production of value added products with special emphasis on food safety and quality matching international standards.
- Development of Packaging Technologies for individual products, especially cut-fruits & vegetables, so as to increase their shelf life and improve consumer acceptance both in the domestic and international markets.
- Development of new technologies in Food Processing & Packaging and also to provide for the mechanism to facilitate quick transfer of technologies to field through a net work of R&D Institutions having a Central Institute at the national level with satellite institutions located strategically in various regions to cover up the whole Country and to make available the required testing facilities. This could be done by establishing a new institution or strengthening an existing one.
- Development of area-specific Agro Food Parks dedicated to processing of the predominant produce of the area e.g., apple in J&K, pineapple in North East, Lichi in Bihar, Mango in Maharashtra and Andhra Pradesh etc. etc.
- Development of Anchor Industrial Centre and/ or linkage with Anchor Industrial Units having network of small processing units.
- Development of Agro-industrial multi-products units capable of processing a cluster of trans-seasonal produces.

8. BACKWARD LINKAGE

The Policy will promote:

- Establishment of a sustained and lasting linkage between the farmers and the processors based on mutual trust, understanding and benefits by utilizing the existing infrastructure of cooperative, village panchayats and such other institutions.
- Mechanism to reduce the gap between the farm gate price of agro-produce and the final price paid by the consumer.
- Development of Futures Market in the best interest of both the farmers and the processors ensuring a minimum price stability to the farmer and a sustained supply of raw material to the processor.
- Setting up of an Equalization Fund to ensure sustained supply of raw material at a particular price level and at the same time to plough back the savings occurring in the eventuality of lower price to make the Fund self-regenerative.

9. FORWARD LINKAGE

The policy will promote:

- Establishment of a strong linkage between the processor and the market to effect cost economies by elimination of avoidable intermediaries.
- Establishment of marketing network with an apex body to ensure proper marketing of processed products.
- Development of marketing capabilities both with regard to infrastructure and quality in order to promote competitive capabilities to face not only the WTO challenge but to undertake exports in a big way.

Given the trends in the Indian food and beverage sector including key industry consideration, it is imperative for the Indian industry to leverage the emerging opportunities at once. These could be:

- Exploitation of the huge untapped potential in processed foods.
- Opportunities presented by contract farming, captive supplies of raw materials, disintermediation and direct access to farmers, availability of new and improved seeds and farm technology.
- Value addition to unprocessed categories of

food such as dairy, fruits and vegetable, staples and edible oils.

- Exploitation of increasing health and safety awareness of the Indian consumer - this would pave the way for value added products on a health platform.
- Investment in supply chain in order to improve costs, tighten supplies and minimize wastage.
- Investment in better packaging and cold chain infrastructure will aid the processed food and beverage sector as these would aid in processing of fruits and vegetables.
- Exploration of appropriate regional branding strategies in order to appeal to the deep rooted traditions, values and customs of the consumer
- Taking advantage of the inherent ethnic tastes and food habits of the Indian consumer — this provides the local food players a distinct advantage over foreign entrants into the sector and poses an entry barrier for the latter
- Exploitation of the increasing consumerism fuelled by new job opportunities, larger disposable incomes and the emerging boom in modern retail trade.
- Opportunities for growth through the inorganic route, both domestically and outbound this would provide access to new product categories, brands, markets and new technologies.
- The SEZ /AEZ opportunity would also provide players the added incentive to develop greenfield projects within these zones and enjoy additional fiscal benefits

The Indian Foods & Beverage industry is poised for a significant leap forward — these are interesting times and continued success will depend on a proper understanding of the landscape and challenges therein, quickly exploiting emerging opportunities, skillful execution of strategic mergers and acquisitions and effecting a seamless organization to evolve into truly global players.

10. VISION 2015

The vision 2015 of the Government of India for the food-processing sector aims at:

- Enhancing and stabilizing the income level of the farmers
- Providing choice to consumers in terms of wide variety and taste including traditional ethnic food
- Providing greater assurance in terms of safety and quality of food to consumers
- Promoting a dynamic food processing industry
- Enhancing the competitiveness of food processing industry in both domestic as well as international markets
- Making the food processing sector attractive for both domestic and foreign investors
- Achieving integration of the food processing infrastructure from farm to market
- Having a transparent and industry friendly regulatory regime
- Putting in place a transparent system of standards based on science

11. SCOPE OF FOOD PROCESSING IN INDIA/GROWTH OF FOOD PROCESSING INDUSTRIES IN INDIA

(i) Grain Processing

Due to the efforts made by the Department from time to time, the number of modern/modernised rice mills has gone up from practically nil in 1970 to 35088 as on 01.01.2001. The Rice Milling Industry (Regulation) Act, 1958 has since been repealed. The information about the number of modern/modernised rice mills etc. are not forthcoming from State Governments/UTs. State-wise number of all the rice mills is given at annexure-II (p-49). As a result of improved availability of bran from these modern and modernised mills, the processing of bran is estimated to be around 34 lakh tonnes in 1999-2000.

Thirteen Regional Extension Service Centres have been set up in various states with Agricultural Universities/Research institutions for propagating the benefits of modernisation of rice milling industry and by-product utilisation through organising seminars,

group discussions/setting up demonstration units and preparation of technical literature etc. Post Harvest Technology Centre at Indian Institute of Technology (IIT), Kharagpur offers training courses on long term duration leading to M.Tech., Ph.d & Post Doctoral Degree and also short term courses for managers/mill operators etc. At present 11 M.Tech., 11 Ph.d are undergoing courses at the centre. Besides teaching activities, the centre is also engaged in Research & Development work on the engineering aspects of the rice processing and byproduct utilisation etc. The centre also undertakes research and development projects as per need of the industry. During the year, the centre had also conducted two training programmes on "Home Scale Food Processing & Preservation techniques" and "Processing of minor Millet" and also organised seminars on "Oilseeds" and Kodo puffing & popping".

No licence is required for manufacture of wheat products. There are no controls on price and distribution of wheat products. The mills have been given a free hand to obtain their requirements of wheat from any source, thereby avoiding their dependence on government for supply of raw materials. Nearly 10.5 million tonnes of wheat is converted into various wheat products by about 820 roller flour mills in the country every year against an installed capacity of 19-5 million tonnes.

(ii) Consumer Food Industries

The consumer food industry mainly consists of ready-to-eat or ready-to-cook products such as pasta products, cocoa based products, bakery products, biscuits, soft drinks, etc.

(a) Bakery : Bakery industry in India is probably the largest among the processed food industries, production of which has been increasing steadily in the country. The two major bakery industries, viz., bread and biscuit account for about 82% of the total bakery products. The annual production of bakery products which includes bread, biscuits, pasteries, cakes, buns, rusk, etc., most of which are in the unorganised sector, is estimated to be in excess of 30 lakh tonnes. The production of bread and biscuits in the country, both in the organised and unorganized sectors is estimated to be around 15 lakh tonnes and 11 lakh tonnes respectively. Of the total production of bread and biscuits, about 35% is produced in the organised sector and the remaining is manufactured in the unorganised sector.

Another wheat based product known by its generic name, pasta products, comprising of noodles, vermicelli, macaroni and spaghetti is gaining popularity.

(b) Cocoa Products : There are 20 units engaged in the manufacture of cocoa products like chocolates, drinking chocolates, cocoa butter, cocoa butter substitutes, cocoa based malted milk foods with a production of approximately 34 thousand tones.

(c) Soft Drinks : The estimated production of soft drinks nave increased from 6230 million bottles in 1999-2000 to 6540 million bottles during the year 2000-2001.

(d) Beer & Alcoholic Drinks : At present, there are 36 units manufacturing beer under license from Govt. of India having an estimated output of 4.00 lakhs KL per annum. On the other hand, the production of alcoholic drinks from non-molasses sources is very small in the country compared to the total production of alcoholic drinks. However, with various foreign companies producing non-molasses alcoholic drinks such drinks are gaining popularity in the domestic market.

(iii) Fruit & vegetable Processing Industries

The estimated installed capacity of fruit and vegetable processing industries has increased from 21.00 lakh tonnes in 1999 to 21.10 lakh tonnes in 2000. The production of processed fruits and vegetables in the country has increased from 9.8 lakh tonnes in 1999 to 9-9 lakh tonnes in 2000. During the same period the number of licenses issued under Fruit Product Order (FPO), 1955 has increased to 5293 from 5198.

(iv) Milk & Milk Products

India's milk production is expected to touch 81 million tonnes during 2000-2001 from 78 million tonnes during last year.

There has been increase in the estimated

production of milk powder including infant milk food from 2.25 lakh tonnes in the year 1999 to 2.30 lakh tonnes in the year 2000 and the estimated production of malted food product has increased from 66,000 tonnes in the year 1999 to 67,000 tonnes in the year 2000. The production of cheese in the organised sector in the year 2000 has been estimated as 7,500 tonnes. The estimated production of condensed milk has increased from 11,000 tonnes in the year 1999 to 11,500 tones in the year 2000.

(v) Meat & Poultry Processing

The production of meat and meat products has shown steady increase from the year 1994 till the year 1998. The details of production of meat and meat products from 1994 to 1998 is as under:

(in thousand tonnes)

	1994	1995	1996	1997	1998
1. Mutton & Goat Meat	637	647	669	670	675
2. Pork Meat	366	420	420	420	420
3. Poultry Meat	442	578	480	580	600
4. Cattle Meat (Beef)	1290	1292	1292	1292	1295
5. Buffalo Meat	1200	1204	1204	1205	1210

The total meat production in the country is of the tune of 4.5 million tonnes per annum. This includes meat products also. The slaughtered rate in relation to the population of animals is about 6% in the case of cattle, 10% in the case of buffalo, 99% in case of pigs, 31% in case of sheep and 39% in case of goat. The production of value added meat and meat products is also steadily increasing.

(vi) Broiler & Egg Production

With the growth of poultry in the country, there has been a sharp rise in the availability of egg and broilers. The production of eggs and broiler meat from 1989 to 2000 is given below:

With the increase in availability of eggs in the country and demand of egg products in Europe, Japan and other countries, six egg processing units were established in the year 1994 to 1996. These units have started exporting egg products like egg powder, albumin powder and frozen yolk. Though initially there was a boom in the export of egg products but in 1997, a sudden downfall occurred in the demand of egg products. The export has got a setback and only three units in the country are running with 20 to 25 % capacity.

Year	Egg Production (in millions)	Broiler production
1989-90	20204	190
1990-91	21101	215
1991-92	21983	210
1992-93	22929	235
1993-94	24203	275
1994-95	26049	330
1995-96	27275	350
1996-97	27530	400
1997-98	28567	450
1998-99	29000	475
1999-00	30000	500

(vii) Fish Processing

55% of the production of fish in India is from marine sources. Production of fish from both marine and inland sources has decreased from 5.39 million tonnes in 1997-98 to 5.26 million tonnes in 1998-99.

Processing of marine products into canned and frozen forms is carried out almost entirely for the export market. In all, there are 388 freezing units, 12 caning

units, 156 ice-making units, 12 fish meal plants and also about 482 frozen storage units in this sector (up to September, 2000).

EXPORTS

Exported Item	1999-2000 (Rs. In crores)	2000-2001 (Rs. in crores)
Processed fruits and vegetables	656	525
Animal products	879	950
Processed foods (including cereal based products)	6335	4895
Marine products	5117	5875

12. INVESTMENTS

In the era of economic liberalization where the private, public and co-operative sectors are to play their rightful role in development of food processing industries. The Department acts as a catalyst for bringing in greater investments into this sector.

Since August 1991 till December 2000, 6427 Industrial Entrepreneur Memorandas (lEMs) envisaging an investment of Rs. 53,819 crores and direct employment of approximately 11.38 lakh persons have been received for various sectors of food processing. Out of the lEMs filed during this period, 5631 lEMs envisaging an investment of Rs. 47,205 crores and direct employment of 10.61 lakh persons are for non-urban areas. About 39% of these investments are for backward areas. 678 lEMs envisaging an investment of Rs. 7517 crores and direct employment of 87416 persons have already been implemented.

Apart from these the Government bas also approved 1135 proposals of Industrial Licences and 100% Export Oriented Units envisaging an investment of Rs. 19,401 crores and direct employment of approximately 2.76 lakh persons. Out of these 250 proposals envisaging an investment of Rs.4,227 crores and direct employment of approximately 0.96 lakh persons have already been implemented. Out of the total proposed investment of Rs.73,207 crores, foreign investment envisaged is Rs. 10,992 crores, the actual inflow till October, 2000 is over Rs.2,595 crores. (Annexure-V p. 52)

13. CONCLUSION

For the growth and development of our country SOME limitations should be removed, after that the industry will grow and the growth of any industry is ultimately will be the result of growth of its nation, its people, its society. Infrastructure such as transportation system, power, water supply, energy, telecommunication and port should be developed properly. Because without these basic facilities or infrastructure no industry will grow. And saving should be increased for high investment. Another problem is corruption that is a very big problem in our country, until it will not end we can not think of full development and growth.

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