ISSN: 2349 - 4891
International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)

PROGRESS AND PERFORMANCE OF AGRO-BASED INDUSTRIES IN INDIA

***Dr. M.Purushothama Reddy, Researcher, Dept of Economics, SV University, Tirupati-517502**

****Dr.Lakshmi Kantha Reddy Chitla Ph.D, Associate Professor, Priyadarshini College of Business Management, Affiliated to Osmania University, Hyderabad- 5000016**

Abstract: Agro-based industries are those processing industries which use large quantities of agricultural raw materials such as rice milling, wheat flour processing, textiles, sugar, tea, jute, coffee, paper, rubber production etc. India is one of the largest producer of rice, wheat, fruits, and vegetables in the world. The agro industry helps in processing agricultural products such as field crops, tree crops, livestock and fisheries and converting them into edible and other usable forms. The global market is mammoth for sugar, coffee, tea and processed foods such as sauce, jelly, honey etc. The market for processed meat, spices and fruits is equally gigantic.Food, food grains, dairy products, frozen food, fish, meat, poultry, the Indian agro industry has a huge potential, the significance and growth of which will never cease. Sea fishing, aqua culture, milk and milk products, meat and poultry are some of the agro-sectors that have shown marked growth in India over the years.

Key words: Agro-based industries**,**processing, area, production.

Introduction: Post independence era in India witnessed rapid growth in agro-processing sector specifically during 1980s. It followed the first phase of the Green Revolution that had resulted in increased agricultural production and the need for its post harvest management. The importance of the sector was realized by the business community leading to diversification from grain trading to processing. Agro-processing activities were initiated by the rice processing industry, followed closely by wheat milling, paper and pulp industry, milk processing sector, jute industry, sugarcane processing and oils extraction through solvent plants. In some areas like the solvent extraction industry, the growth in installed processing capacity has been far higher than the supply of the raw materials. However, in other areas like fruits and vegetable processing, the growth has not been encouraging on account of poor demand for processed products by the consumers. In such cases, the industry has also not been able to develop the demand adequately.[1]

Objectives: To study the progress and performance of various agro-based industries in India.

Hypotheses: To study the progress and performance of various agro-based industries in India is not a significant.

ISSN: 2349 - 4891
International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)
IJRRAS

Methodology

The information collected in this paper is based on the secondary data by using internet, websites, magazines, books, journals, charts, averages and percentages, compound growth rate, CAGR gives a qualitative approach towards this research framework.

The commodity-wise growth of agro-processing industries in India has been as given below

1.Global Context: Rice Production

Rice is a staple food for global countries in general and India, in particular. From Kerala to Kashmir, rice is grown and part of dish also or plate. The following table provides a birds eye view of Rice production at global level.

TABLE.1
INDIA'S RICE PRODUCTION IN GLOBAL CONTEXT-2013

Year	World Production in MT	Indian production in MT	India's share (in %)
2002	399	93	23.9
2003	380	72	18.9
2004	390	89	22.7
2005	405	84	20.5
2006	423	92	21.7
2007	427	94	21.8
2008	438	97	22.0
2009	459	99	21.6
2010	457	89	19.4
2011	449	96	21.3
2012	456	104	22.8
2013*	463	103	22.2

Source: Department of Agriculture and Co-operation, 2014, pp. 4 to 5.

The table-1 reveals that Rice production in India has seen a remarkable growth in the last few decades which has led the country to be the second largest producer of the world. India's share in global rice production has been 22.8 percent during the financial year 2012. India has the largest harvest area in the world and yet her production of rice is trailing China. India's yield rate per hectare is lower than some other developing countries such as China and Indonesia.

2. Wheat Processing Industry

Wheat is a major crop of India. In the year 1950-51, the country produced 6.5 MTs of wheat that had increased to 76 MTs by the year 2000-2001. India has emerged as the second largest producer of this cereal in the world. Wheat contains 12% bran, 3% embryo and 85% flour. It is mainly processed for flour (*atta*), *maida, suji*and *dalia.* In last 50 years, harvest and post harvest technology of wheat has advanced substantially. The most significant

ISSN: 2349 - 4891
International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)

development has been the use of self propelled harvester combines used for harvesting and threshing of wheat. There were about 27 lakh *attachakkis*(7.5-10 KW rating) and 700 roller flour mills in the country. This number rose from 53,000 *attachakkis*and 200 roller flour mills in 1971-72. The figures were much lower 50 years back. A number of commercial organizations have been offering processing units for handling, cleaning, grading, drying, storage, treatment and bagging of wheat for seed and food applications. Wheat is now increasingly beingused in the form of bread,biscuits, *suji*and *atta*. Wheat flakes and puffed wheat as breakfast cereals have been gradually picking up. Traditionally used smaller size *attachakkis*may face problems of declining clientele. Better mechanized chakkis (with lower pollution level and better energy efficiency) are likely to increase in number. The number of roller flour mills is also likely to increase steadily; however, majority of the mills may continue facing the problems of low capacity utilization and working capital constraints. These units would need to function through vertical integration of operations for sustaining profitability and achieve cost reduction through appropriate automation and computerization. Increase in demand is also expected in grain handling machinery, silo systems in grain markets and seed processing machinery. Trends in consumer preferences suggest increasing demand for baked products. Demand for bread is likely to grow faster than demand for biscuits. Presently bread is consumed mostly in large cities. Its consumption is expected to grow in smaller towns also. States with higher per capita income would continue to lead in the consumption of baked products. Among diversified products, full bran wheat bread has also been gaining popularity.Wheat is leading food in North India. Which extending to south also slowly. The following tables .2 explain the development of wheat production in India.

TABLE.2
WHEAT CROP CULTIVATED AREA AND PRODUCTION: 2011-2015

Year	2011	2012	2013	2014	2015
Area (lakh hectares)	14.8	15.2	15.5	15.2	15.7
Production (lakh tones)	86.8	94.8	93.5	95.8	88.9

Source: Directorate of Economics & Statistics, Ministry of Agriculture & Farmers Welfare 2014-2015.

The table-2 above has revealed that the area is almost around 16.0 lakh hectares stagnated but production is also around 96 lakh tones, the climate has helped for North India.

3. Processing of Pulses

India produced 8.4 Mt of pulses in the year 1950-51. The production grew to a level of about 14 Mt by the year 2000-2001. Starting with nearly 500 dal mills in the country in 1950-51, there were about 15,000 dal mills of 100-500 TPD capacity in the year 2000-2001. Pulses were generally stored in gunny bags or in small tin containers under straw cover during 1950s. By the year 2000-2001, metal bins and gunny bags (with profilectic treatment by insecticides) were in use. Research has revealed that pulse grains need to be stored at 20-22 degree Celsius in partially airtight containers at 8-10 per cent moisture content for long duration storage. A number of plant-based mild insecticides and insect repellents (such as, neem seed powder) have been developed for safe storage of seeds. In the area of milling of pulses, CFTRI developed a dal mill that has the advantage of not being dependent on natural sun shine. It involves subjecting the pulse grain to high temperature (120 degree Celsius) for

ISSN: 2349 - 4891
International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)

short time and the de-husking by carborundum rollers resulting in higher dhal recovery. For small entrepreneurs in rural areas, dal mills have been designed. These units in specific regions have gained popularity as these are low investment machines which can be owned and operated with low risk. In a number of dhal mills, improved machinery including cleaners, graders, magnetic separators, washers, driers, polishers, colour sorters and packaging systems are being used. With complete phasing out of hand operated dal chakkis, commonly used during 1950s, the technology has turned fully mechanized. There is a need to evolve more efficient machines and processes for pre-treatment of the grain, de-husking, sorting, polishing and packaging in order to improve dal recovery and to consume less energy. Also, there is a need for product diversification and development of technology for quick cooking and ready-to-eat dal.Day by day pulses demand has been ever increasing as population growth also raised. For human good health, protein food is indispensable. The following table analyses the pulses Growth.

TABLE.3
PULSES CROP CULTIVATED AREA AND PRODUCTION: 2011-2015

Year	2011	2012	2013	2014	2015
Area (lakh hectares)	13.4	12.4	12.0	12.6	17.7
Production (lakh tonnes)	18.2	17.0	18.3	19.2	17.1

Source: Directorate of Economics & Statistics, Ministry of Agriculture & Farmers Welfare 2014-2015.
Note:- Data for food grains, oil seeds and commercial crops are as per fourth advance estimates for 2014-2015.

The table no-3 above has informed that area of pulses is also stagnated almost in five years around 18 lakh hectares, especially in 2015 year is higher. The production around 19 lakh tones is constant.

4. Oilseeds Processing

Besides animal based fat specifically obtained from milk and milk products, edible plant oils have been the major source of oils and fats for most of the population in the country. In the year 1950-51, the country produced 5.2 MTs of oilseeds. Production by the year 2000-2001 had increased to 24.5 MTs. In the year 1950-51, most of the oilseeds were crushed in either bullock operated oil ghanies or a few mechanical oil expellers. Both of these resulted in high volume of edible oil left in the cake. By the year 2000-2001, there were nearly 2.5 lakh oil ghanies, 60,000 oil expellers and 700 solvent extraction plants. Besides, there were 200 oil refining units in the country and 100 units for production of hydrogenated oil (Vanaspati). Per capita availability of edible oils is still very low at 8.0 kg per capita per year in the country. Out of this, 2.0 kg/capita is imported oil. Research and Development Institutions in the country have been working on pre-treatment of oilseeds for higher recovery of oil. Steaming has been found as one of the most useful methods for pre-treatment. Due to shortage of edible oil in the country, efforts have also been directed to obtain edible oil from non-traditional sources including rice bran and oil palm. On refining, the quality of these oils has been reported satisfactory for edible purposes. In the area of packaging of edible oils,

ISSN: 2349 - 4891
International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)

significantly rapid growth has been recorded specifically in commercial sector. Polypacks and plastic containers have gained popularity over traditionally used metal containers about 30-35 years ago. The future areas of research include application of bio-technology for enhancing yield of edible oil from different oilseeds, application of de-oiled cake for food purposes through protein isolation and health applications of edible oil for treating various physiological disorders. Production of oilseeds is 24.5 million tonnes. Out of the total production, 7% is used for seed, 8% for food, and 85% for oil extraction. Export of meal/oilseeds cake has been worth Rs. 15,000 million. Refinement of meal/ cake for food products development could be of high importance. Oil expellers with lighter weight have, high energy efficiency and capable of extraction up to 90% oil and above need to be developed for decentralized oil milling. Hydraulic press, batch solvent extraction, extrusion-expelling and physical refining also need to be considered and tried. Besides other oilseeds, soya bean has gradually become an important crop of India. Its production is around 5.3 million tonnes. Soya bean is a special legume. It has 40% protein and 20% oil. India has 154 solvent extraction plants and 60 soya food units. Average recovery is 17.7% for oil and 82.4% for meal. Soya meal contains about 48% protein. Its export has been worth Rs.15, 000 million/ year. Soya foods are nutritious and economical and must be promoted. A strategic plan for expanded and diversified use of soyabean for food and feed in India for the next 25 years should be made and implemented. This crop has a great potential to enhance nutrition and health of the people and to alleviate poverty.

Day by day, Indian people are demanding more oils in cooking and catering in a diversified oils. Inspite of fatty contents and doctors advices not to take much, people are having habit of eating more oils. The following table explains the development of oil seeds production.

TABLE .4
OIL SEEDS CROP CULTIVATED AREA AND PRODUCTION: 2011-2015

Year	2011	2012	2013	2014	2015
Area (Lakh hectares)	13.8	13.4	13.7	14.0	13.0
Production (Lakh tonnes)	32.4	29.8	30.9	32.7	26.6

Source: Directorate of Economics & Statistics, Ministry of Agriculture & Farmers Welfare 2014-2015.

Note: - Data for food grains, oil seeds and commercial crops are as per fourth advance estimates for 2014-2015.

The table no.4 above emphasized that area of oil seeds cultivation is almost found up and down around 33 lakh tonnes. Per hectare yield rate was more than 2 tonnes only, which is lesser than developed countries.

5. Processing of Fruits and Vegetables

Joint effort of R&D institutions, farmers, government agencies and the trade arrangements has resulted into India emerging as a major producer of fruits and vegetables in the world. In the year 2000-2001, the country produced about 45 milliontonnes of fruits and 80 milliontonnes of vegetables. It was next to China in production of vegetables and in production of fruits it topped the countries. However, the growth in post harvest sector has

ISSN: 2349 - 4891
International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)

not kept pace with the production. Even during the year 2000-2001, there were only 6,000 fruits and vegetable units in the country that had grown from a figure of about 1,000 during 1950-51. Less than one per cent of the total produce was processed, though the installed capacity of the processing industry has grown steadily from 0.27 Mt in 1980 to about 3 Mt in 2000-2001. Significant developments in technology include better understanding of the process of ripening of fruits, optimum harvesting time, pre-cooling of freshly harvested produce, cold storing of the raw fruits and vegetables, sorting, cleaning, waxing and packaging technology for fruits. Most significant work has been recorded in the technology for ripening of the fruits under controlled conditions. Production of juices and value-added products including jams, jellies, pickles, canned products etc. have become a commercial success. The industry using indigenous technology includes units engaged in juice extraction, concentration of juices, canning and production of several products like jams, jellies, canned fruits, dried vegetables etc. Technology is still being imported for establishment of large scale export except-oriented units for production of items like banana paste, concentrates of various fruit juices, sorting, cleaning, washing, waxing and packaging of raw fruits and vegetables. By the year 1998-99, share of different products in the total processed fruits and vegetables was; pulp and juice 27%, jams and jellies 10%, pickles 12%, ready to serve beverages 13%, syrups 8%, squashes 4%, tomato products 4%, by canned/vegetables 4% and other products 18%. The industry has been facing problems of low capacity utilization, technological obsolescence and marketing. It has to work under the constraints of high fluctuations in raw material quality and fluctuating market price, poor technology for handling and storage, inadequate R&D support for product development, high cost of energy and uncertainty in the availability of adequate quantity for processing purposes, inadequate and expensive cold chain facilities and varying requirement of processing conditions from one material to another. Future R&D has to focus on the issues of economically producing value-added products and product diversification, besides the issues mentioned above. Today the demand and supply of fruits and vegetables were part of food and ever increasing. Aged people are eating fruits and vegetables only than rice and wheat products. The following table informs the growth rates of fruits and vegetables.

TABLE .5
ANNUAL GROWTH OF FRUITS AND VEGETABLES: 2009-2013

Year	Fruits		Vegetables	
	Area (Lakh hectares)	Production (Lakhtonnes)	Area (Lakh hectares)	Production (Lakh tonnes)
2009	4.1	4.4	1.7	0.5
2010	3.8	4.5	0.1	3.6
2011	-1.4	4.4	6.4	9.6
2012	5.0	2.1	5.8	6.7
2013	4.1	6.4	2.4	3.7

Source: Horticulture Division, Department of Agriculture & Co-operation, Ministry of Agriculture, 2014, pg.12.

The table no-5 above found that in five years period of 2009-2013, area and production of fruits were shown up and down, but maximum area was 4.1 lakh hectares and production 6.4 lakh tonnes, i.e per hectare 1.5tonnes. The area and production of vegetables

ISSN: 2349 - 4891
International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)

in maximum was 6.4 lakh hectares and production 9.6 lakh tones, per hectare 1.5 tonnes. However the yield rates are lower than international rates.

6. Processing of Medicinal and Aromatic Products

The plant based pharmaceuticals, herbal medicines, perfumery, cosmetics, fragrances and food flavour industries have recorded a phenomenal expansion in the last 50 years and as a result, this sector figures in high annual growth rate industries in agri-business. The market for plant based pharmaceuticals in the year 1994 was estimated to range between US$ 32-43 billion. The world essential oil production at raw materials level was estimated to be about Rs. 32 billion of which 55-60% goes to food flavours, 15-20% as fragrances and the remaining is broadly used as starting raw material for isolation of aromatic chemicals. The thrust has been harvesting of the plants, curing/drying, and extraction of the medicinal and aromatic substances. The export earnings could be increased by innovations in the field of post harvest technology for increasing productivity and improving quality. In case of medicinal plants, studies need to be conducted to develop testing procedures/analytical facilities to meet stringent international standards and to carry out product/process development for low cost chemicals from both raw materials and other by-products.[2]

A. High Demand for Herbal Seeds

As natural farming is becoming a healthy habit for sustainable agriculture. Farming has been shifted from chemical agriculture to spiritual farming. Corporate agriculturists entered into seed cultivation. The following table explains the developments of herbal seeds production.

TABLE .6
HERBAL SEEDS CULTIVATED AREA AND PRODUCTION: 2005-2014

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Area (In‘000HA)	131	262	324	397	430	509	510	506	557	493
Production (In‘000MT)	139	202	178	396	430	573	605	566	918	895

Source: All India 2013-14 (financial estimates) Department of Agriculture& Co-operation

The table no.6 above informs a decadal growth of herbal seeds cultivation. The area during 2005 to 2014 has raised three fold and production was four fold. This exhibits ever increasing herbal seeds cultivation in India.

7.Floriculture

Flowers and plants have always been an integral part of human living. Besides their aesthetic importance, they are also useful in improving the quality of life. Ornamental plants play a very important role in environmental planning of urban and rural areas for abatement of pollution, social and rural forestry, wasteland development, aforestation and landscaping of outdoor and indoor spaces. Floriculture is also an important agri-business with potential for export trade. The area under floriculture in India has increased to nearly 40,000 ha, which constitutes around 17% of total global acreage. In spite of such a large area, production value is still very low. The quality of the produce of Indian produce is poor and not acceptable in international market. The produce quality deteriorates further due to improper packaging, storage and transportation. Floriculture is largely an export oriented agro industry. There are

ISSN: 2349 - 4891
International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)

14 flowers in the world cut flower trade. The trade is growing at the rate of 15% per annum. Yet Indian exports are limited only to a few flowers namely, Gladiolus, Chrysanthemums, Jasmine and Orchids. India's share in the world floriculture trade is a minuscule with 0.59% exports during 1992-93 valued at Rs. 149.1 million. Cultivation of high quality varieties under protected conditions, proper tools and equipment, appropriate packaging and storage can create a niche for Indian flowers in the world market.[3]

A. Acceleration of Floriculture

As lifelong rituals either for religious purpose or ceremonious, we are using flowers abundantly. The cost and market value also ever increasing in India and also abroad. The following table provides a brief development of horticulture in India.

TABLE.7
YEAR WISE FLOWERS CULTIVATED AREA, PRODUCTIONAND EXPORT OF FLOWERS FROM INDIA: 2011-2014

Year	Area (Lakyhectares)	Production (Laky tones)	Exports of Flowers	
			Quantity (MT)	Value (Rs. Laky)
2011	191	1031	28906.8	29604.0
2012	254	1652	30926.0	36532.0
2013	233	1729	27121.8	42344.6
2014	255	2297	22485.2	45590.6

Source: 1.APDEA website, June 2014
2. All India 2013-14 (financial estimates) Department of Agriculture& Cooperation.

The table no.7emphasized that in last four years 2011-2014 the area and production was ever increased. The production was doubled.Whereas exports of flowers were seen up and down, but value was raised lesser than doubled. However a significant development was found in the growth of floriculture.

8.Sugar Industry

The sugar industry is the most important industry among the various agro-based industries. The life of approximately 2.5 crores of people in the rural areas is dependent on this industry. Almost Rs. 2200 crore worth revenue is collected from the sugar industry alone. In the process of sugar production, almost 5000 people are involved, right from the cultivation of sugarcane to the delivery of sugar in the market. One sugar factory means employment for 5000 personnel. These figures substantiate the importance of sugar industry. There are total 202 registered sugar factories (including some that are either closed or in financial difficulties), with a turnover of approximately 12,000 crore of rupees. There is an increase in the production of sugar every year and in 2012, it reached an all time high of almost 1050 lakh tonnes. The sugar factories in India have a 60-year old tradition. Dr. VitthalraoVikhe-Patil established the first co-operative sugar factory in Ahmed Nagar district of Maharashtra. The cooperative sugar factories in the State have not just remained an industry, but they have become a movement. The establishment of sugar factories in India has led to speedy development of basic amenities in its neighborhood. It has also led to the tradition of starting major educational complexes just next to the sugar factories. Many irrigation schemes, lift irrigation as well as many schools, colleges, hospitals and other social-

ISSN: 2349 - 4891
International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)
IJRRAS

welfare schemes were initiated by these sugar factories. This has resulted in social as well as educational development along with industrial progress.[4]

Indian sugar industry has welcomed the Rangarajan Committee Report on decontrol of the sugar sector. The industry is hopeful that the Government will implement the recommendations as early as possible and free the sugar industry from all controls as other sectors of industries.[5] The table-8 explains about the area under cultivation Sugarcane production and its production of sugar industry. In India from 2005-06 to 2014 -15.

TABLE-8
YEAR WISE CLASSIFICATION OF SUGARCANE CULTIVATED AREA, PRODUCTION AND PRODUCTIVITY OF INDIAN SUGAR INDUSTRY: 2006-2015

Year	Area (lakh hectares)	Sugarcane production (lakh tones)	Sugar production (lakh tonnes)	Sugarcane (Tones/ hectares)
2005-06	42.0	2811.7	193.2	66.9
2006-07	51.5	3555.2	282.0	69.0
2007-08	50.6	3481.0	263.0	68.8
2008-09	44.2	2850.3	146.8	64.5
2009-10	41.7	2923.0	188.0	70.0
2010-11	48.8	3423.8	243.5	70.0
2011-12	50.4	3610.4	263.4	71.6
2012-13	49.9	3412.0	258.5	68.2
2013-14	50.1	3521.4	245.5	69.8
2014-15	50.3	3549.5	250.4	70.8
CAGR	3.1	3.9	6.0	1.2

Source: Department of Food and Public Distribution (for sugar production) and Agricultural Statistics (for production area of sugarcane)
Note: Compound Annual Growth rate (CAGR)

- India's sugar production had increased by 6.0 per cent from 2005-06 to 2014-15.
- During same period, India's sugarcane production had increased at CAGR of 3.9 per cent and area under cultivation at CAGR of 3.1 per cent

9.Textile Industry

The textile industry using modern methods started in India 150 years ago. The first cotton mill was started in Mumbai in 1854. Mumbai is the biggest centre of the textile industry in India. As the city is close to the sea, its humid climate is suitable for the production of textiles. This is why the textile industry has beencentered in Mumbai on a large scale. Specific types of textiles are also produced in Nashik, Kolhapur, Sangli, Solapur and Nagpur. For example, Paithani Saris and Peetambars from Yeole (Nashik), blankets from Solapur as well as cotton textiles from Nagpur. chalkaranji (Kolhapur) and Malegaon (Nashik) are also famous for handlooms and machine looms.[6]

India's textile industry is one of the largest economies. In 2000-01, the textile and garment industries accounted for about 4 per cent of GDP, 14 per cent of industrial output, 18 per cent of industrial employment, and 27 per cent of export earnings (Hashim). India's textile industry is also significant in a global context, ranking second to China in the

ISSN: 2349 - 4891
International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)
IJRRAS

production of both cotton yarn and fabric and fifth in the production of synthetic fibers and yarns.In contrast to other major textile-producing countries, India's textile sector is characterized by mostly small-scale, non-integrated spinning, weaving, cloth finishing, and apparel enterprises, many of which use outdated technology. Some, mostly larger firms, operate in the "organized" sector where firms must comply with numerous government labour and tax regulations. Most firms, however, operate in the small-scale "unorganized" sector where regulations are less stringent and more easily evaded.

The unique structure of the Indian textile industry is due to the legacy of tax, labor, and other regulatory policies that have favored small-scale, labour intensive enterprises, while discriminating against larger scale, more capital intensive operations. The structure is also due to the historical orientation towards meeting the needs of India's predominately low-income domestic consumers, rather than the world market. Policy reforms, which began in the 1980s and continued upto the 1990s, have led to significant gains in technical efficiency and international competitiveness, particularly in the spinning sector. However, broad scope still remains for additional reforms that could enhance the efficiency and competitiveness of India's weaving, fabric finishing, and apparel sectors.[7]

A. Place of Textiles Industry in Global Exports

After food, the next highest demand is textiles. As fashion technology is ever increasing, textile demand also accelerated. Since 2005 year, the textile exports are given below.

TABLE.9
INDIAN TEXTILE INDUSTRIES AND SHARE OF EXPORTS: 2005-2013

Year	Exports
2005	17.0
2010	27.1
2011	33.4
2012	32.7
2013	40.2
CAGR 2005-2013	**11.3**

Source: Golden Decade for India's Textiles Industry, Dec 2014, pg.8.

The table no-9 analyses the exports of textiles to different countries during 2005-2013. The wonder is that since 2005 year onwards, the exports growth is ever increasing from 17 per cent to 40 per cent i.e more than double. The Indian textile industry, estimated at around US $ 108 billion, is expected to reach US$ 141 billion by 2021.The industry is the second largest employer after agriculture, providing direct employment to over 45 million and 60 million people indirectly.The Indian textile industry contributes approximately 5% to GDP and 14% over index of industrial production.[8]

Findings

1. India's share in global rice production has been 22.8 percent during the financial year 2012.
2. Wheat cropped area is almost around 16.0 lakh hectares stagnated but production is also around 96 lakh tones.
3. Area of pulses is also stagnated almost in five years around 18 lakh hectares, especially in 2015 year is higher.

ISSN: 2349 - 4891
International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)
IJRRAS

4. Area of oil seeds cultivation is almost found up and down around 33 lakh tonnes. Per hectare yield rate was more than 2 tonnes only.
5. Area and production of fruits were shown up and down, but maximum area was 4.1 lakh hectares and production 6.4 lakh tonnes, i.e per hectare 1.5 tonnes. The area and production of vegetables in maximum was 6.4 lakh hectares and production 9.6 lakh tones, per hectare 1.5 tonnes.
6. Area during 2005 to 2014 has raised three fold and production was four fold.
7. India's sugar production had increased by 6.0 per cent from 2005-06 to 2014-15.During same period, India's sugarcane production had increased at CAGR of 3.9 per cent and area under cultivation at CAGR of 3.1 per cent.
8. Indian textile industry exports growth is ever increasing from 17 per cent to 40 per cent i.e. more than double.

Result: To study the progress and performance of various agro-based industries Indiais a significant.

Conclusion: Rice is a staple food for global countries in general and India, in particular.From Kerala to Kashmir, rice is grown and part of dish also or plate. India has emerged as the second largest producer of this cereal in the world.Day by day, Indian people are demanding more oils in cooking and catering in a diversified oils.Joint effort of R&D institutions, farmers, government agencies and the trade arrangements has resulted into India emerging as a major producer of fruits and vegetables in the world.The industry has been facing problems of low capacity utilization, technological obsolescence and marketing. It has to work under the constraints of high fluctuations in raw material quality and fluctuating market price, poor technology for handling and storage, inadequate R&D support for product development, high cost of energy and uncertainty in the availability of adequate quantity for processing purposes, inadequate and expensive cold chain facilities and varying requirement of processing conditions from one material to another.The thrust has been harvesting of the plants, curing/drying, and extraction of the medicinal and aromatic substances. The export earnings could be increased by innovations in the field of post harvest technology for increasing productivity and improving quality. In case of medicinal plants, studies need to be conducted to develop testing procedures/analytical facilities to meet stringent international standards and to carry out product/process development for low cost chemicals from both raw materials and other by-products.The plant based pharmaceuticals, herbal medicines, perfumery, cosmetics, fragrances and food flavour industries have recorded a phenomenal expansion in the last 50 years and as a result, this sector figures in high annual growth rate industries in agri-business.Flowers and plants have always been an integral part of human living. Besides their aesthetic importance, they are also useful in improving the quality of life. Ornamental plants play a very important role in environmental planning of urban and rural areas for abatement of pollution, social and rural forestry, wasteland development, aforestation and landscaping of outdoor and indoor spaces.The sugar industry is the most important industry among the various agro-based industries. The life of approximately 2.5 crores of people in the rural areas is dependent on this industry.The unique structure of the Indian textile industry is due to the legacy of tax, labor, and other regulatory policies that have favored small-scale, labour intensive enterprises, while discriminating against larger scale, more capital intensive operations. The structure is also due to the historical orientation towards meeting the needs of India's predominately low-income domestic consumers, rather than the world market.

ISSN: 2349 - 4891
International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)

References

1. Desai, B.M. et.al, (1991), "Food Processing Industries: Development and Financial Performance", Oxford IBH Publishing Co., New Delhi, pp 43-51.
2. A.Ganesh-Kumar, et.al., (2006),"Reforms in Indian Agro-processing and Agriculture Sectors in the Context of Trade Agreements", IGIDR, Mumbai, pp. 11-17.
3. Kaul, G.L. (1997), 'Horticulture in India- Production, Marketing and Processing", Indian Journal of Agricultural Economics, Vol.52, No.3, July- Sept., pp561-573.
4. Dr. Arpita Sharma, op.cit. p.11.
5. Dinkar P. Takale, "Progress and Problems of Agro-Based Industries in India: As Study of Sugar Industry", Indian Streams Research Journal, Volume 3, Issue.1, February-2013.
6. Ibid. p.12.
7. India's Textile and Apparel Industry: "Growth Potential and Trade and Investment Opportunities", March 2001, Publication 3401Vern Simpson, Director, Office of Industries, pp1-72.
8. A Brief Report on Textiles Industry in India, July 2015, pg.2.