

A Study on Production of Groundnut in Various Developing Countries

Dr. B. Madhusudhana

*Lecturer in Economics, Dept. of Economics,
S.S.B.N Degree & P.G.College, Anantapuramu- 515 001 (A.P), India.
Email:madhubasetty1982@gmail.com*

Abstract

This study has been carried out to discuss the groundnut production and marketing problems of groundnut cultivators in India and world. It analyzed the production of groundnut in major cities in India during the period of 2004-2005 to 2006-2007. The data on groundnut production in various seasons like kharif and Rabi in India is collected and studied the trends during the period of time. Groundnut Area, Yield and Production in Various Developing Countries in Africa, Asia and Latin America during the last Decade were presented graphically. The Production and Average Yield of groundnut in the Major Producing States during 2004-05 to 2006-07 were collected and presented graphically. Based on the results collected some conclusions are made about the improving the production of groundnut crop.

KeyWords: Groundnut, cost rate, production,demand, supply and market Demand.

1. INTRODUCTION

Various research based studies were undertaken in the past on the problem of groundnut growers and they are mostly concentrated at a macro level. Apart from this, less concentration has been undertaken so far to enquire into the various problems experienced in groundnut cultivation in Anantapuram district of Rayalaseema region in Andhra Pradesh. Though there are few studies on the problems of groundnut growing farmers.

In the initial stages, barring some isolated individual researchers' efforts, the major initiative and effort was taken by the Directorate of Marketing and Inspection, a government agency created for the purpose. As pointed out by Shah, these studies have some limitations. They provide, largely, a descriptive account of the stages in

marketing along with other information regarding production and supply. Information in these reports is broad and very general as it tries to encompass India/State as a whole. Nevertheless, they have served two purposes.

Narasimham's (1982) study on 'Marketing of Groundnut' examined the price mechanism from terminal to primary markets. Goswami, H.G. (1982) examined the role of regulated markets in agricultural marketing as compared to that of the unregulated markets. It focused on the extent to which regulated markets were helping the producer-seller in the marketing activity and examined the loopholes in the functioning of regulated markets.

In (1993), Patel and Agarwal also examined the price behaviour of groundnut in Gujarat. The inter-year price variations for groundnut crop revealed that during the last one and a half decade, price increased by more than 10 percent per annum in the different markets of the Gujarat State.

The study focused the need to minimize the price rise for this commodity. Gupta, A.P. and Mukesh Shrivatsava (1993) stated that "Rural marketing must not be viewed by prospective entrants as mere expansion of business. The rural marketing participants have a much bigger role to play as compared to what they have been in the urban areas". Sangoju Manohara Chary (1994) studied market arrivals and prices of agricultural products.

The study revealed that the extent of fluctuations in market arrivals largely contribute to the price instability of major crops. G.N. Patel and R.L. Shinani (1994) examined the growth rates of farm harvest prices and gross income from important food grain crops in Gujarat State. The variability in the gross income and contribution of price and productivity in the incremental gross income. Pant, D.C. and Pradeep Pal., (2004) studied to examine the economic aspects of groundnut processing in Southern Rajasthan. A.Jothirajan (2005), studied an analysis of the cost and returns structure, per acre net income distribution among different group of farmers.

They found that the new technology had a significant impact on the output of cereals during the first phase of the programme. In the case of oilseeds and pulses, a part of the progress could be attributed to soil conservation and yield increasing methods and in the case of fibers impact could not be realized. S.P.Singh (1992) in their study, Second Phase of Green Revolution: Rainfed Agriculture made an attempt to examine the production trends in the present agricultural scenario.

However, no study has been concentrated on the efficiency of groundnut growing farmers' and their problems in a drought prone district of Anantapuram in Rayalaseema region of Andhra Pradesh. Hence, the present study has been carried out to discuss the groundnut production and marketing problems of groundnut cultivators in Anantapuram district of Rayalaseema region. ICRISAT deals with its own specialty in its publication on Markets for Semi-Arid Tropical Crops in Andhra Pradesh. Hence, the present investigation has been carried out to discuss various problems and prospects of groundnut growers in a drought prone Anantapuram district of Andhra Pradesh.

SCENARIO OF GROUNDNUT CROP

Cultivated groundnut belongs to genus *Arachis* in sub tribe *Stylosanthinae* of tribe

Aeschynomene of family Leguminosae. It is a self-pollinated, tropical annual legume. At locations where bee activity is high, some cross-pollination can occur. Cultivated groundnut has two subspecies, hypogaea and fastigiata, which in turn have two botanical varieties (var hypogaea and var aequatoriana). Each of these botanical varieties have different plants, pod and seed characteristics. However, most of the commercially cultivated varieties belongs to the hypogaea (common name/market type: Virginia or runner), fastigiata (Valencia), and vulgaris (Spanish) botanical variety groups.

2 ORIGIN AND USES OF GROUNDNUTS

It has been reported that South America was the place from where cultivation of groundnut originated and spread to Brazil, Southern Bolivia and North-western Argentina. Groundnut was introduced by the Portuguese from Brazil to West Africa and then to south-western India in the 16th century. Almost every part of groundnut is of commercial value.

The groundnut oil has several uses but it is mainly used as cooking oil. It is used in many preparations, like soap making, fuel, cosmetics, shaving cream, leather dressings, furniture cream, lubricants, etc. Groundnut oil is also used in making vanaspati ghee and in fatty acids manufacturing. It is also used as a medium of preservation for preparation of pickles, chutney, etc. The groundnut oil is used in making different types of medicated ointments, plasters, syrups and medicated emulsion. It is mainly used as animal feed and fuel and in preparation of compost. The green leaves and stems of plants are used as animal feed. The shells of pods obtained during threshing are also used as cattle feed.

3 IMPORTANCE OF GROUNDNUT

Groundnut is called as the 'king' of oilseeds. It is one of the most important food and cash crops of our country. While being a valuable source of all the nutrients, it is a low-priced commodity. Groundnut is also called as wonder nut and poor men's cashew nut.

4 ECONOMIC AND SOCIAL IMPACT OF GROUNDNUT

Groundnut is cultivated on about 26.5 million hectares in the world, with an average annual production of 35.7 million Metric tones. The average yield world over is 1348 kg/ha. India is one of the largest producers of oilseeds in the world and occupies an important position in the Indian agricultural economy. It is estimated that nine oilseeds, namely, groundnut, rapeseed-mustard, soyabean, sunflower, safflower, sesame, niger, castor and linseed, accounted for an area of 23.44 million hectares with the production of 25.14 million tons during the year 2004-05.

China and India together are the world's leading groundnut producers accounting for nearly 60 percent of the production and 52 percent of the crop area. India cultivates about 7.74 million hectares and produces 7.61 million tons of groundnut

with the productivity level of 991.80 kg per hectare. South Africa is the major producer in Africa, while in Latin America almost one half of the total groundnut produced in that region may be credited to Argentina. Among the developing countries, Egypt has the highest productivity and capacity to produce groundnuts (Table 4.4).

Table 4.1: Groundnut Area, Yield and Production in Various Developing Countries in Africa, Asia and Latin America during the last Decade

Countries	Area (000 ha)	Yield (t ha ⁻¹)	Production (000 t)
Africa			
Nigeria	1 798	1.10	1 917
Sudan	960	0.69	663
Senegal	829	0.83	684
Mozambique	279	0.39	109
Niger	207	0.37	83
Uganda	191	0.73	141
Zimbabwe	181	0.50	95
Mali	174	0.90	155
Tanzania	113	0.62	70
Egypt	38	2.70	107
Asia			
China	3 658	2.6	9 737
India	7 740	0.98	7 609
Indonesia	661	1.70	1 159
Myanmar	493	1.0	506
Vietnam	239	1.20	302
Thailand	97	1.50	143
Pakistan	98	1.0	99
Turkey	30	2.4	75
Syria	13	2.2	28
Latin America and Caribbean			
Argentina	214	2.2	464
Brazil	93	1.7	164
Mexico	82	1.3	112
Paraguay	32	1.0	35

Source: FAOSTAT, database 2000 to 2006, each figure is average for the period from 2000-2006.

4.2 MAJOR GROUNDNUT PRODUCING COUNTRIES

Groundnut is grown on a large scale in almost all the tropical and subtropical countries of the world. The most important groundnut growing countries are India, China, Nigeria, Sudan and USA. It is grown over an area of 24.7 million hectares with

a total production of 33 million tons in the whole world. India occupies the first place in acreage and second in production.

The table depicts that during 2006-07, groundnut occupied an area of 26,462.86 thousand hectares with production of 35,658.43 thousand tons in the world. Groundnut is mainly produced in Asian countries. During the year 2006-07, China was the largest producer of groundnuts accounting for 37.71 per cent of the total world production followed by India (21.03 per cent). China and India, together, accounted for about 58.74 per cent of world groundnut production. Nigeria (7.57 per cent), USA (5.27 per cent), Indonesia (3.86 per cent) and Sudan (3.37 per cent) were the other major groundnut producing countries. In area, India ranked first with 30.23 per cent share in the world, followed by China (19.37 per cent), Nigeria (10.58 per cent) and Sudan (7.18 per cent). However, in productivity, United States of America stood first with 3540 kg/ha followed by China (2624 kg/ha), Argentina (2018 kg/ha) and Indonesia (2016 kg/ha) during 2006-07.

Table 4.2: The Major Groundnut Growing Countries in Asia

Country	Area (000 ha)	Production (000 mt)	Yield (kg/ha)
China	5,125	13,448	2,623
India	8,000	7,500	938
Indonesia	683	1,377	2,016
Myanmar	730	730	1,270
Pakistan	100	106	1,060
Thailand	132	132	1,517
Vietnam	240	400	1,665

Source: Market Survey, Department of Agriculture, Govt. of India.

Table 4.3: The Major Groundnut Growing Countries in Africa

Country	Area (000 ha)	Production (000 mt)	Yield (kg/ha)
Chad	480	450	938
Ghana	350	450	1,286
Malawi	206	158	767
Nigeria	2,800	2,700	964
Senegal	900	900	1,000
Sudan	1,900	1,200	632
Uganda	211	150	711

Source: Peanut in Local and Global food Systems Series Report No.5, Dept. of Anthropology, University of Georgia, 2007.

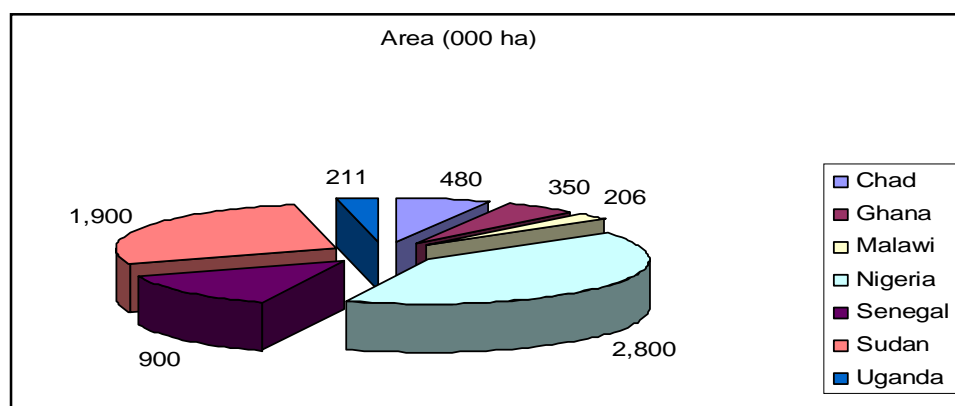


Fig. 4.1: The Major Groundnut Growing Countries in Africa (in area)

Table 4.7 reveals the data relating to area, production and productivity of groundnut in the major groundnut growing countries of Africa. The place of different countries of Africa in regarding to the area under groundnut crop is shown diagrammatically in figure 4.3. The area, production and productivity of groundnut crop in the major groundnut growing countries in North and Central America are presented in the following table 4.8. The groundnut area in these countries is small. The yields are very high in United States of America for the reason that groundnut is cultivated under irrigation with best management practices. This indicates the potential of the crop under good management. The place of different countries of North and Central America regarding to the area under groundnut crop is shown diagrammatically in figure 4.4.

Table 4.4: Groundnut Growing Countries in North and Central America

Country	Area (000 ha)	Production (000 mt)	Yield (kg/ha)
Argentina	156	316	1,348
Brazil	85	177	2,082
Mexico	62	75	1,204
US of America	531	1,880	3,540

Source: Peanut in Local and Global food Systems Series Report No.5, Dept. of Anthropology, University of Georgia, 2007.

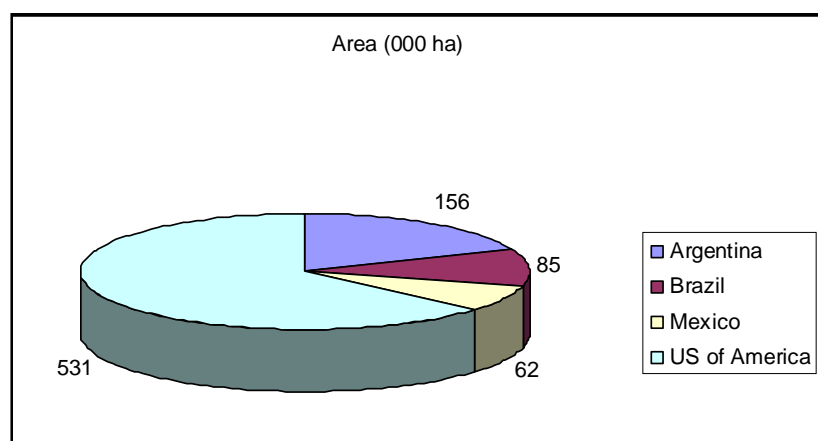


Fig. 4.2: Groundnut Growing Countries in North and Central America (in Area)

5 GROUNDNUT PRODUCTION IN INDIA

India is the second largest producer of groundnuts after China. Groundnut is the largest oilseed in India in terms of production. It accounted for 35.99 per cent of the oilseeds production of the country during 2007-08. Gujarat is the largest producer contributing 25 per cent of the total production followed by Tamil Nadu (22.48 per cent), Andhra Pradesh (18.81 per cent), Karnataka (12.64 per cent) and Maharashtra (10.09 per cent) during 2006-07.

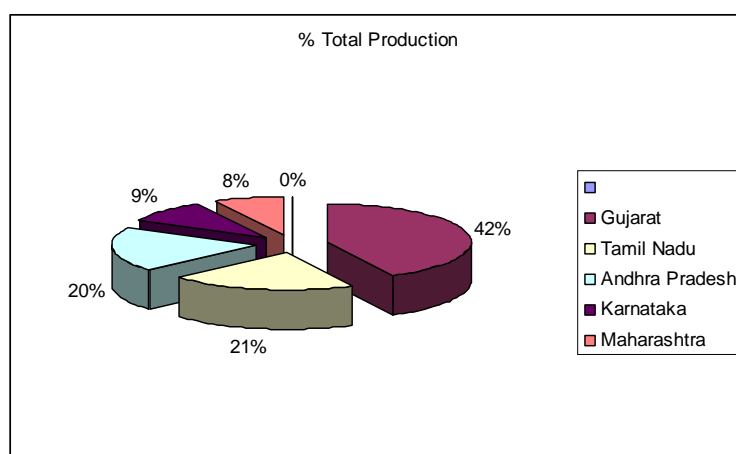
Groundnut contains on an average 40.10 per cent of fat and 25.30 per cent of protein and is a rich source of calcium, iron and vitamin 'B' complex like thiamine, riboflavin, niacin and vitamin 'A'. It has multifarious usages. It is used not only as a major cooking medium for various food items but also for manufacture of soaps, cosmetics, shaving creams and lubricants. In fact, it plays a pivotal role in the oilseed economy of India.

India exports groundnut kernels, shell, hand picked selected (HPS) groundnut and oil cake forms. Groundnut haulms and leaves serve as a rich source of cattle feed and raw material for preparation of silage. Being a leguminous crop, groundnut is also grown in crop rotation as it synthesizes atmospheric nitrogen and adds 100-120 kg of nitrogen in the field per hectare per season. It maintains the fertility of soil and helps in reducing soil erosion. The major groundnut growing states in India and the area under groundnut, percentage of area under groundnut and production details are shown in table 4.9. The place of the major groundnut producing states of India in regarding to the percentage of total production of groundnut crop is diagrammatically shown in figure 4.5.

Table 1.5.1: Major Groundnut Producing States in India

State	Area	% Total Area	Production	% Total Production	yield	% irrigated area
Gujarat	1.92	30.00	2.71	37.59	1412	9.60
Tamil Nadu	0.77	12.08	1.33	18.48	1724	35.00
Andhra Pradesh	1.69	26.42	1.25	17.32	739	17.30
Karnataka	0.86	13.36	0.60	8.32	702	20.20
Maharashtra	6.70	6.70	0.49	6.82	1147	26.70

Source: Peanut in Local and Global food Systems Series Report No.5, Dept. of Anthropology, University of Georgia, 2007.

**Fig. 1.5.1:** The Place of Major Groundnut Growing States in Total Production of Groundnut Crop

The groundnut production in India under different climatic conditions is shown in Table 1.5.1. It shows that the total groundnut production recorded significant fluctuations between 1993-94 and 2007-08. The average groundnut production in India during the period was 72.93 lakh tonnes, with kharif at 56.32 lakh tonnes and rabi at 16.61 lakh tonnes. The trends in the production of groundnut crop in India during 1993–2008 are shown graphically in figure 1.5.1.

Table 1.5.2: Groundnut Production in Various Seasons in India

Year	Season		Total Production of Groundnut	Total Seeds Production	% of total production
	Kharif	Rabi			
1993-94	57.10	21.20	78.30	215.00	36.42
1994-95	60.60	20.00	80.60	213.40	37.77
1995-96	60.50	15.30	75.80	221.00	34.30
1996-97	69.40	17.00	86.40	243.80	35.44

1997-98	59.00	14.70	73.70	213.20	34.57
1998-99	69.10	20.70	89.80	247.50	36.28
1999-00	38.00	14.50	52.50	207.10	25.35
2000-01	49.10	15.00	64.10	184.40	34.76
2001-02	56.22	14.05	70.27	206.62	34.01
2002-03	30.95	10.26	41.21	148.38	27.77
2003-04	68.60	12.67	81.27	251.86	32.27
2004-05	52.62	15.12	67.74	243.54	27.81
2005-06	62.98	16.95	79.93	279.79	28.57
2006-07	32.94	15.69	48.63	242.89	20.02
2007-08	77.70	26.04	103.74	288.25	35.99
Average	56.32	16.61	72.93	227.12	32.11

Source: Peanut in Local and Global food Systems Series Report No.5, Dept. of Anthropology, University of Georgia, 2007.

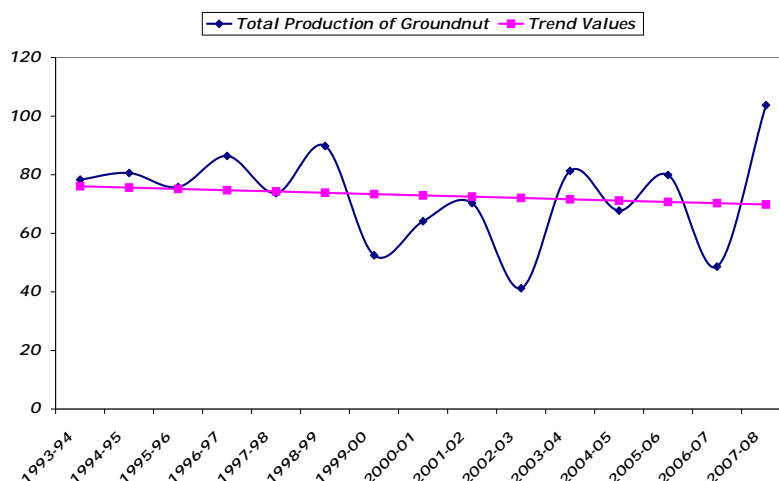


Figure 1.5.2: Trends in Groundnut Production in India (1993–2008)

Table 1.5.3: Area, Production and Average Yield of groundnut in the Major Producing States during 2004-05 to 2006-07

State	2004-05		2005-06		2006-07		% of World in 2006-07		Yield (kg/ha)		
	Area	Production	Area	Production	Area	Production	Area	Production	2004-05	2005-06	2006-07
Gujarat	1.75	0.69	1.89	2.65	2.03	1.09	34.12	25.00	395	1402	539
Tamil Nadu	0.70	1.36	0.66	1.25	0.55	0.98	9.24	22.48	1942	1885	1784
Andhra Pradesh	1.87	2.14	1.69	1.25	1.47	0.82	24.71	18.81	1144	739	558
Karnataka	1.06	1.08	0.85	0.59	0.84	0.55	14.12	12.61	1017	685	648
Maha-rashtra	0.49	0.47	0.43	0.49	0.42	0.44	7.06	10.09	959	1146	1041
Rajasthan	0.20	0.18	0.24	0.30	0.24	0.17	4.03	3.90	924	1227	687
Madhya Pradesh	0.21	0.23	0.22	0.24	0.19	0.12	3.19	2.75	1059	1121	635
Uttar Pradesh	0.12	0.10	0.11	0.09	0.07	0.05	1.18	1.15	835	839	662
Odissa	0.07	0.06	0.06	0.06	0.06	0.05	1.04	1.15	794	985	870

Others	0.09	0.11	0.11	0.11	0.08	0.09	1.31	2.06	--	--	--
All India	6.56	6.41	7.03	7.03	5.95	4.36	100	100	977	1127	733

Source: Handbook of Grading of Foodgrains and Oilseeds, agricultural Statistics in Various Journalsd and reports.

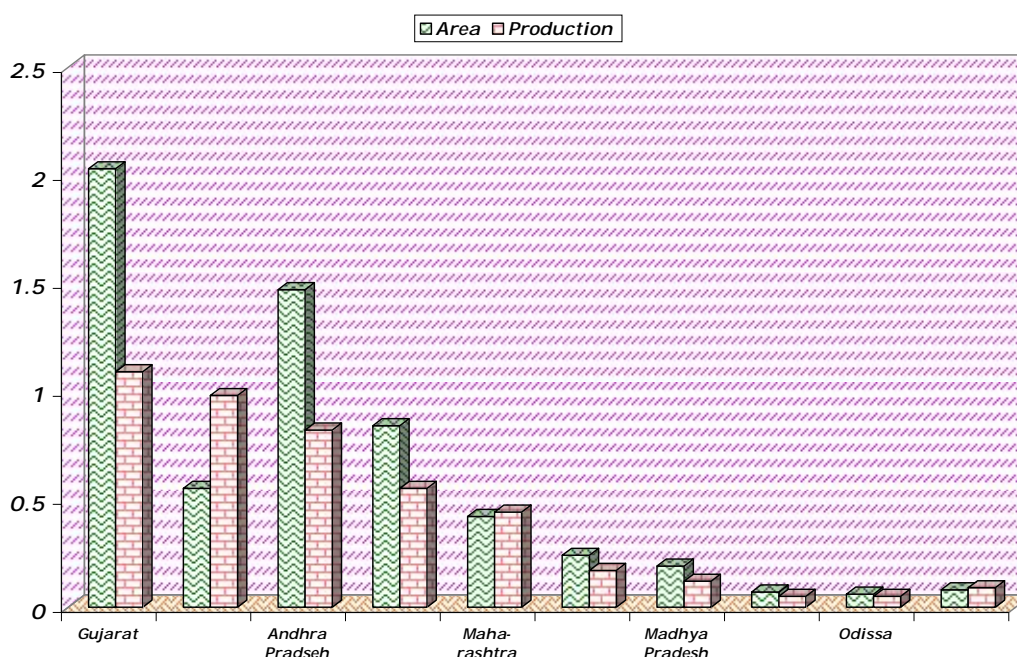


Fig. 1.5.3: Area and Production of Groundnut crop in the Selected States during 2006-07

The highest production of 103.74 lakh tons was obtained during the year 2007-08, with kharif at 77.70 lakh tons and rabi season at 26.04 lakh tons. Groundnuts assumed a significant position in India's oilseeds production during the years 1993-94 to 2007-08. In 1993-94, the total oilseeds production of India was 215 lakh tons, of which 36.42 per cent was contributed by groundnuts. In India groundnut is grown over an area of 6.9 million hectares with total production of 5.3 million tons. Its cultivation is mostly confined to south Indian states, viz., Gujarat, Andhra Pradesh, Karnataka, Tamil Nadu and Maharashtra. The other important states where it is grown are Madhya Pradesh, Rajasthan, Uttar Pradesh and Punjab.

The area, production and average yield of major groundnut producing states in India during the years 2004-05 to 2006-07 are shown in Table 2.11. Gujarat was the largest groundnut producer (25 per cent) during 2006-07, followed by Tamil Nadu (22.48 per cent), Andhra Pradesh (18.81 per cent), Karnataka (12.61 per cent) and Maharashtra (10.09 per cent).

In area, it ranked first with 34.12 per cent of total area during 2006-07, followed by Andhra Pradesh (24.71 per cent), Karnataka (14.12 per cent), Tamil Nadu (9.24 per cent) and Maharashtra (7.06 per cent), whereas in productivity, among major

producing states, Tamil Nadu stood first with 1784 kg/ha during 2006-07, followed by Maharashtra (1041 kg/ha) and Orissa (870 kg/ha). The area and production of groundnut crop in different states of India during 2006–07 is shown diagrammatically in figure 4.7.

6. CONCLUSIONS

It has been reported that South America was the place from where cultivation of groundnut originated and spread to Brazil, Southern Bolivia and North-western Argentina. Groundnut was introduced by the Portuguese from Brazil to West Africa and then to south-western India in the 16th century. Almost every part of groundnut is of commercial value. The groundnut oil has several uses but it is mainly used as cooking oil. It is used in many preparations, like soap making, fuel, cosmetics, shaving cream, leather dressings, furniture cream, lubricants, etc. Groundnut oil is also used in making vanaspati ghee and in fatty acids manufacturing.

The groundnut oil is used in making different types of medicated ointments, plasters, syrups and medicated emulsion. It is also used to make various food preparations like butter, milk, candy and chocolate, chutney, groundnut pack, laddu, barfi (chukii), etc. Groundnut shell has great potential for commercial use. It is used as a fuel, filler in cattle feed, hard particleboard, cork substitute, activated carbon, etc. Groundnut straw is mainly used as animal feed and fuel and in preparation of compost. The green leaves and stems of plants are used as animal feed. The shells of pods obtained during threshing are also used as cattle feed.

Groundnut is essentially a tropical plant. It requires a long and warm growing season. The most favourable climatic conditions for groundnuts are a well-distributed rainfall of at least 50 centimeters during growing season, abundance of sunshine and relatively warm temperature.

Groundnut is called as the 'king' of oilseeds. It is one of the most important food and cash crops of our country. While being a valuable source of all the nutrients, it is a low-priced commodity. Groundnut is also called as wonder nut and poor man's cashew nut. Groundnut is cultivated on about 26.5 million hectares in the world, with an average annual production of 35.7 million metric tones. The average yield of world is 1348 kg/ha. India is one of the largest producers of oilseeds in the world and occupies an important position in the Indian agricultural economy.

China and India together are the world's leading groundnut producers accounting for nearly 60 percent of the production and 52 percent of the crop area. India cultivates about 7.74 million hectares and produces 7.61 million tons of groundnuts with the productivity level of 991.8 kg per hectare. South Africa is the major producer in Africa, while in Latin America almost one half of the total groundnut produced in that region may be credited to Argentina.

India exports groundnut kernels, shell, and handpicked selected (HPS) groundnut and oil cake forms. Groundnut haulms and leaves serve as a rich source of cattle feed and raw material for preparation of silage. Being a leguminous crop, groundnut is also grown in crop rotation as it synthesizes atmospheric nitrogen and adds 100-120 kg of nitrogen in the field per hectare per season.

Groundnuts assumed a significant position in India's oilseeds production during the years 1993-94 to 2007-08. In 1993-94, the total oilseeds production of India was 215 lakh tonnes of which 36.42 per cent was contributed by groundnuts. In India, groundnut is grown over an area of 6.9 million hectares with total production of 5.3 million tons. Its cultivation is mostly confined to south Indian states, viz, Gujarat, Andhra Pradesh, Karnataka, Tamil Nadu and Maharashtra. The other important states where it is grown are Madhya Pradesh, Rajasthan, Uttar Pradesh and Punjab. The share of groundnuts in shell was 39,779.84 thousand kg valued at Rs. 11,039.43 lakh.

REFERENCES

- [1] Patel, G.N., and N.L. Agarwal, (1993), *Price Behaviour of Groundnut in Gujarat*", *Indian Journal of Marketing*, Vol.7, No.2, July-December, p.144.
- [2] Gupta, A.P. and Mukesh Srivastava, (1993), *Marketing Strategies for the Rural Sector- Some Issues*, *Indian Journal of Commerce*, Vol,XLXI, NO.177, December p.79.
- [3] Patel, G.N. and R.L. Shingani, (1994), *Agricultural Price Policy and Its Impact on Farm Income – A Case Study of Foodgrain Crops*, *Indian Journal of Agricultural Economics*, Vol.XLVX, No.3, July-September, p.143.
- [4] Pant, D.C. and Pradeep Pal, (2004), *Comparative Economics of Agro-processing units for Groundnut in Southern Rajasthan*, *Indian Journal of Agricultural Marketing*, Vol, 18, No.1, January-April, p.50-57.
- [5] Jothirajan, A., (2005), *An Economic Study of Oil Seed Production with reference to Groundnut Cultivation in Madurai District*, (Unpublished Ph.D. thesis), Tamil Nadu; Madurai Kamraj University. Tamil Nadu, pp. 27-39.