

Agriculture production trends in SPSR Nellore district of Andhra Pradesh

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Abstract

Andhra Pradesh economy is mainly based on agriculture and livestock. In this paper has examined to compare agriculture production in Andhra Pradesh and SPSR Nellore district of selected major crops during 2013-14 and to examine the Area, Production and yield of major crops during 2011-12 to 2013-14 in SPSR Nellore district. The data was collected from the Handbook of Statistics SPSR Nellore District 2014. In SPSR Nellore district the rice cultivated area were recorded 225 hectares when compare to Andhra Pradesh it was noted 2583 Hectares. The production of paddy were in the district noted 911 tonnes in 2013-14, compared to Andhra Pradesh the production of paddy were recorded 7993 tonnes in 2013-14. Rice crop cultivated land were used area and production has recorded 254572 hectares and 1031426 tonnes during 2011-12 and this production were declined to 224893 hectares and 911108 tonnes during 2013-14, during these period the percentage rate of area and production was registered negative accounting -12 per cent respectively. Bengalgram production were recorded 16339 tonnes during 2011-12, these was also fallen to 9680 tonnes during 2013-14. Redgram and Greengram are noted positive trend, accounting from 369 tonnes and 1983 tonnes in 2011-12 to 1286 tonnes and 4421 tonnes in 2013-14 respectively. Recently, in the SPSR Nellore district the production and area under cultivation of watermelon crop were increased. Another important fruit crop production was increased in SPSR Nellore district that is Papaya. In the district, papaya crop area in 2013-14 is 105 hectares; compared in 2011-12 area under cultivation of papaya is only 2 hectares. We're observing in production of papaya recorded 285 tonnes in 2011-12 and this production was rose to 10279 tonnes in 2013-14 respectively, which means the papaya is fast growing and commercial crop in the SPSR Nellore district.

Keywords: Agriculture, Area, Production, Yield, Andhra Pradesh, SPS Nellore district

1. Introduction

In February 2014, the Andhra Pradesh Re-organisation Act, 2014 bill was passed by the Parliament of India for the formation of Telangana state comprising ten districts. Hyderabad will remain as a joint capital for 10 years for both Andhra Pradesh and Telangana. The new state of Telangana came into existence on 2nd June 2014 after approval from the President of India. The formation of a new state named Telangana from Andhra Pradesh is not considered an amendment to the Constitution of India per article 3 and 4 of that document.

Geographically, Andhra Pradesh has varied topography ranging from the hills of Eastern Ghats and Nallamala Hills to the shores of Bay of Bengal that supports varied ecosystems, rich diversity of flora and fauna. There are two main rivers namely, Krishna and Godavari, which flow through the state. The state has two regions Coastal Andhra and Rayalaseema. The plains to the east of Eastern Ghats form the Eastern coastal plains. The coastal plains are for the most part of delta regions formed by the Godavari, Krishna, and Penna rivers. The Eastern Ghats are discontinuous and individual sections have local names. The Eastern Ghats are a major dividing line in the state's geography. The Kadapa Basin formed by two arching branches of the Eastern Ghats is a mineral-rich area. The Ghats become more pronounced towards the south and extreme north of the coast. Most of the coastal plains are put to intense agricultural use. The Rayalaseema region has semi-arid conditions. Lambasingi (or Lammasingi), a village in the Chintapalli Mandal of Visakhapatnam district is situated at

1000 meters above the sea level. It is the only place in South India which has snowfall and is also nicknamed as Kashmir of Andhra Pradesh. Throughout the year the temperature here ranges from 0 °C to 10 °C. Andhra Pradesh Forest Department deals with protection, conservation and management of forests. The total forest cover of the state after the bifurcation is left with an area of 22,862 km². The forest in the state can be broadly divided into four major biotic provinces. They are Deccan Plateau, Central Plateau, Eastern Highland and East Coastal Plains.

Andhra Pradesh economy is mainly based on agriculture and livestock. Four important rivers of India, the Godavari, Krishna, Penna, and Thungabhadra flow through the state and provide irrigation. 60 per cent of population is engaged in agriculture and related activities. Rice is the major food crop and staple food of the state. It is an exporter of many agricultural products and is also known as "Rice Bowl of India". The state has three Agricultural Economic Zones in Chittoor district for mango pulp and vegetables, Krishna district for mangoes and Guntur district for chilies. Besides rice, farmers also grow wheat, jowar, bajra, maize, minor millet, coarse grain, many varieties of pulses, oil seeds, sugarcane, cotton, chili pepper, mango nuts and tobacco. Crops used for vegetable oil production such as sunflower and peanuts are popular. There are many multi-state irrigation projects under development, including Godavari River Basin Irrigation Projects and Nagarjuna Sagar Dam.

Livestock and poultry is also another profitable business, which involves rearing cattle in enclosed areas for commercial purposes. The state is also a largest producer of eggs in the

country and hence, it is nicknamed as "Egg Bowl of Asia". Fisheries contribute 10 per cent of total fish and over 70 per cent of the shrimp production of India. The geographical location of the state allows marine fishing as well as inland fish production. The most exported marine exports include Vannamei shrimp and are expected to cross \$1 billion in 2013-14. The state has merited visits of world leaders for its impressive achievements. Known as the rice bowl of the South, Andhra Pradesh has an excellent conducive climate for growing food and non-food crops. Paddy, pulses, oilseeds, millets are major food crops while tobacco, cotton, chillies, vegetables, fruits, are other commercial and horticulture crops. The state is a leading producer of many of these crops.

2. Objectives

In this paper researcher has examined two main objectives. The first objective of the paper is to compare agriculture production in Andhra Pradesh and SPSR Nellore district of selected major

crops in 2013-14. The second objective of the study is to examine the Area, Production and yield of major crops during 2011-12 to 2013-14 and their percentage rate of change in SPSR Nellore district of Andhra Pradesh. In view of this the data was collected from the handbook of statistics SPSR Nellore district 2014.

3. Results and discussions

3.1 Area and Production of the major crops in Andhra Pradesh and SPSR Nellore district 2013-14

In SPSR Nellore district and the Andhra Pradesh state comparisons of crops area and production during the year 2013-14 presented in table-1, the rice cultivated area were recorded 225 hectares when compare to Andhra Pradesh it was noted 2583 Hectares during the above said year. The production of paddy were in the district noted 911 tonnes in 2013-14, compared to Andhra Pradesh the production of paddy were recorded 7993 tonnes in 2013-14.

Table 1: Area and Production of the major crops in Andhra Pradesh and SPSR Nellore district 2013-14

Crops	Area Under (In '000' Hect.)		Production ('000 Tonnes)	
	State	District	State	District
Rice	2583	225	7993	911
Jowar	118	1	266	6
Maize	352	2	2213	13
Redgram	184	1	104	1
Greengram	134	5	82	4
Blackgram	265	11	207	9
Bengalgram	472	7	648	10
Groundnut	1176	15	881	45
Sunflower	80	3	68	2
Chillies	131	1	602	5
Onion	26	0	513	1
Sugarcane (Gur)	153	0	1203	0
Cotton	677	7	2188	8
Tobacco	143	11	276	9

Source: Chief Planning Officer, Nellore.

3.2 Area, Production and Yield of all crops in SPSR Nellore district of during the period 2011-12 to 2013-14

In SPSR Nellore district Area, Production and yield of crops during 2011-12 to 2013-14 and their percentage rate of change were presented in the table-2 & 3 Rice crop cultivated land were used area and production has recorded 254572 hectares and 1031426 tonnes during 2011-12 and this production were declined to 224893 hectares and 911108 tonnes during 2013-14, during these period the percentage rate of area and production was registered negative accounting -12 per cent respectively. Production of Jowar was increased from 2283tonnes in 2011-12 to 5538 tonnes in 2013-14. The area of Jowar was used for this production in 2011-12 noted 498 hectares and it was increased to 1206 hectares in 2013-14. The percentage of growth of rice was increased area and production registered 142 per cent and 143 per cent during 2011-12 to 2013-14 respectively.

In SPSR Nellore district gram production are very popular and high, area of the Blackgram were recorded 41660 hectares, followed by Bengalgram 11944 hectares, Greengram 3982 hectares and Redgram 697 hectares during 2011-12 respectively. The Blackgram area were declined to 11400 hectares, Bengalgram area also were declined to 7429 hectares, Greengram and Redgram area has rose to 5008 hectares and

1339 hectares in 2013-14 respectively. The production of Blockgram has recorded 23718 tonnes in 2011-12 this production was fall to 9388 tonnes in 2013-14. Bengalgram production were recorded 16339 tonnes during 2011-12, these was also fallen to 9680 tonnes during 2013-14. Redgram and Greengram are noted positive trend, accounting from 369 tonnes and 1983 tonnes in 2011-12 to 1286 tonnes and 4421 tonnes in 2013-14 respectively.

The Chillies area, production and yield are registered negative trend in SPSR Nellore district. In 2011-12 the area, production and yield of Chillies were recorded 2121 hectares, 9741 tonnes and 4593 kg per hectares, these were declined to area 1218 hectares, production 5186 tonnes and yield 4258 kg per hectares respectively. In SPSR Nellore district, the area of Green Chillies were recorded 728 hectares in 2011-12, this cultivated area was increased 1184 hectares in 2013-14. The production of Green Chillies were recorded 15923 tonnes in 2011-12, this production were increased to 17877 tonnes in 2013-14. The yield of Green Chillies crop was noted 21872 kg per hectares during 2011-12, this yield were declined to 15099 kg per hectares during 2013-14.

Recently, in the SPSR Nellore district the production and area under cultivation of watermelon crop were increased. In the

year 2011-12, the area of watermelon cultivation was registered 993 hectares and this area was increased to 1128 hectares in 2013-14. The production of watermelon crop registered 12214 tonnes during 2011-12, and this production was rose to 22341 tonnes during 2013-14. The percentage of growth was recorded 83 per cent respectively. Another one more fruit crop production was increased in SPSR Nellore district that is Papaya. In the district, papaya crop area in 2013-14 is 105 hectares; compared in 2011-12 area under cultivation of papaya is only 2 hectares. Were observing in production of papaya recorded 285 tonnes in 2011-12 and this production was rose to 10279 tonnes in 2013-14 respectively, which means the papaya is fast growing and commercial crop in the SPSR Nellore district. In SPSR Nellore district one more important commercial and oilseed crops is groundnut. The area under cultivation of groundnut were recorded 11401 hectares during 2011-12, this cultivated area were increased to 15069 hectares during 2013-14. The production of groundnut crop is noted 30781 tonnes in 2011-12 and this production was increased to 44931 tonnes in 2013-14. Yield of groundnut crop were recorded 2700 kg per hectare and this yield were rose to 2982 kg per hectare in 2013-14 respectively.

In SPSR Nellore district another important oilseed crop is sunflower, this crop is noted negative trend in area during the last three years. The area of sunflower were recorded 2862 hectares in 2011-12, this cultivated area was declined to 2764 hectares in 2013-14. but in the production and yield of this crop were recorded positive trend during the last three years. The production of sunflower were recorded 1983 tonnes in 2011-12, this production were increased to 2224 tonnes in 2013-14. The yield of sunflower crop is noted 693 kg per hectares during 2011-12, this yield were increased to 805 kg per hectares during 2013-14. This means in the district the production and yield levels are increased even in declined in cultivated area during the last three years.

The area of Seasmum were recorded 2586 hectares in 2011-12, this cultivated area was declined 2145 hectares in 2013-14. The production of Seasmum were recorded 582 tonnes in 2011-12, this production were fallen to 437 tonnes in 2013-14. The yield of Seasmum crop was noted 225 kg per hectares during 2011-12, this yield were declined to 204 kg per hectares during 2013-14. This Seasmum crop in the SPSR Nellore district almost all the fields are downward trend.

Table 2: Area, Production and Yield per Hectare during the period 2011-12 to 2013-14 (Area in Hectares, Production in tonnes and Yield in Kgs per Hectare)

Crops	2011-12			2012-13			2013-14			% growth from 2011-12 to 2013-14		
	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
Rice	254572	1031426	4052	251269	1026432	4085	224893	911108	4051	-12	-12	0
Jowar	498	2283	4584	3085	12308	3990	1206	5538	4592	142	143	0
Bajra	653	1552	2377	755	2645	3503	1153	4189	3633	77	170	53
Maize	1426	10222	7168	1437	9666	6727	1917	13064	6815	34	28	-5
Ragi	124	166	1339	119	158	1328	94	96	1021	-24	-42	-24
Horsegram	71	30	423	122	68	557	216	99	458	204	230	8
Greengram	3982	1983	498	3706	2382	643	5008	4421	883	26	123	77
Blackgram	41660	23718	569	29726	21283	716	11400	9388	824	-73	-60	45
Redgram	697	369	529	1312	1035	789	1339	1286	960	92	249	82
Bengalgram	11944	16339	1368	11533	13597	1179	7429	9680	1303	-38	-41	-5
Cowgram	98	78	796	127	116	913	106	87	821	8	12	3
Chillies	2121	9741	4593	1407	8311	5907	1218	5186	4258	-43	-47	-7
Turmeric	280	2102	7507	99	656	6626	167	1112	6659	-40	-47	-11
Tamarind	35	155	4429	35	125	3571	35	106	3029	0	-32	-32
Amala (Usiri)	75	525	7000	116	894	7707	116	478	4121	55	-9	-41
Jujubies (REGU)	6	69	11500	4	50	12500	4	25	6250	-33	-64	-46
Papaya	4	285	71250	12	1307	108917	105	10279	97895	2525	3507	37
Sapota	466	4338	9309	442	5835	13201	438	4120	9406	-6	-5	1
Water melon	993	12214	12300	1110	21590	19450	1128	22341	19806	14	83	61
Pomegranate	14	135	9643	6	80	13333	6	87	14500	-57	-36	50
Chamagadda	329	5381	16356	105	2375	22619	213	4812	22592	-35	-11	38
Sweet potatoes	175	2250	12857	183	1425	7787	139	1219	8770	-21	-46	-32
Ridge gourd (Beera)	36	190	5278	32	117	3656	16	76	4750	-56	-60	-10
Green Chillies	728	15923	21872	995	15024	15099	1184	17877	15099	63	12	-31
Onions	148	2189	14791	71	1356	19099	58	1092	18828	-61	-50	27
Cucumber	55	378	6873	113	1290	11416	127	1108	8724	131	193	27
Bhendi	484	5110	10558	419	4080	9737	430	3878	9019	-11	-24	-15

Source: Director, Directorate of Economics and Statistics, Hyderabad.

Table 3: Area, Production and Yield per Hectare during the period 2011-12 to 2013-14 (Area in Hectares, Production in tonnes and Yield in Kgs per Hectare)

Crops	2011-12			2012-13			2013-14			% growth from 2011-12 to 2013-14		
	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
Bean	53	237	4472	26	227	8731	29	209	7207	-45	-12	61
Gokara	14	40	2857	6	12	2000	4	6	1500	-71	-85	-47
Brinjal	604	5898	9765	648	6704	10346	589	3799	6450	-2	-36	-34
Green leafy vegetables	332	5310	15994	290	3483	12010	231	2774	12009	-30	-48	-25
Tomatoes	24	306	12750	50	825	16500	22	308	14000	-8	1	10
Bottle gourd	1	15	15000	16	347	21688	8	258	32250	700	1620	115
Drum stick	16	341	21313	7	92	13143	0	0	0	-100	-100	-100
Coccinea (Donda)	9	517	57444	4	191	47750	22	727	33045	144	41	-42
Groundnut	11401	30781	2700	14410	42513	2950	15069	44931	2982	32	46	10
Seasum (Gingelly)	2586	582	225	1237	294	238	2145	437	204	-17	-25	-9
Sunflower	2862	1983	693	2672	1759	658	2764	2224	805	-3	12	16
Soyabean	0	0	0	6	11	1833	6	10	1667	0	0	0
Palm oil	694	14820	21354	701	11208	15989	695	15604	22452	0	5	5
Castor	103	55	534	18	9	500	18	15	833	-83	-73	56
Tobacco	10882	17531	1611	9482	8040	848	11267	8878	788	4	-49	-51
Betel leaves	292	6769	23182	309	7613	24638	309	9244	29916	6	37	29
Rose	18	176	9778	20	175	8765	29	236	8137	61	34	-17
Jasmine (Malli)	49	54	1102	99	480	4848	103	474	4602	110	778	318
Sampangi	40	380	9500	116	1183	10198	200	1768	8840	400	365	-7
Lilly	13	412	31692	29	595	20517	33	572	17333	154	39	-45
Sugarcane cane	9061	976456	107765	9896	972280	98250	7835	817711	104366	-14	-16	-3
Mangoes	9433	77775	8245	9458	74756	7904	8577	72561	8460	-9	-7	3
Batavia	2474	63325	25596	2360	34812	14751	3011	62599	20790	22	-1	-19
Acid lime (Nimma)	15668	97361	6214	12726	68720	5400	14051	94029	6692	-10	-3	8
Guava	360	3351	9308	176	3792	21545	156	2815	18045	-57	-16	94
Coconut('000nuts)	723	10770	14896	735	12558	17086	543	9000	16575	-25	-16	11
Cotton kapas	14681	17852	1216	7195	9548	1327	6785	8481	1250	-54	-52	3

Source: Director, Directorate of Economics and Statistics, Hyderabad.

Generally Tobacco is an important commercial crop grown in India, Andhra Pradesh, particularly in SPSR Nellore District. The area of Tobacco were recorded 10882 hectares in 2011-12, this cultivated area was increased to 11267 hectares in 2013-14. The production of Tobacco were recorded 17531 tonnes in 2011-12, this production were fallen to 8878 tonnes in 2013-14. The yield of Tobacco crop was noted 1611 kg per hectares during 2011-12, this yield were declined to 788 kg per hectares during 2013-14. The Tobacco production and yield in the SPSR Nellore district noted downward trend even lift to cultivated area. The production of Sugarcane were recorded 976456 tonnes in 2011-12, this production were fallen to 817711 tonnes in 2013-14. The area of sugarcane were recorded 9061 hectares in 2011-12, this cultivated area was declined to 7835 hectares in 2013-14. The yield of Sugarcane crop was noted 107765 kg per hectares during 2011-12, this yield were declined to 104366 kg per hectares during 2013-14. The Sugarcane crop area, production and yield in the SPSR Nellore district noted downward trend

The production of Acid lime (Nimma) were recorded 97361 tonnes in 2011-12, this production were fallen to 94029 tonnes in 2013-14. The area of Nimma crop were recorded 15668 hectares in 2011-12, this cultivated area was declined to 14051 hectares in 2013-14. The yield of Nimma crop was noted 6214 kg per hectares during 2011-12, this yield were declined to 6692 kg per hectares during 2013-14. The Nimma crop area, and

production are downward trend and yield in the SPSR Nellore district noted upward trend.

The area of Mangoes crop were recorded 9433 hectares in 2011-12, this cultivated area was declined to 8577 hectares in 2013-14. The production of Mangoes were recorded 77775 tonnes in 2011-12, this production were fallen to 72561 tonnes in 2013-14. The yield of Mangoes crop was noted 8245 kg per hectares during 2011-12, this yield were declined to 8460 kg per hectares during 2013-14. The Mangoes crop area and production are downward trend and yield in the SPSR Nellore district noted upward trend.

4. Conclusions

Andhra Pradesh economy is mainly based on agriculture and livestock. Four important rivers of India, the Godavari, Krishna, Penna, and Tungabhadra flow through the state and provide irrigation. 60 per cent of population is engaged in agriculture and related activities. Rice is the major food crop and staple food of the state. It is an exporter of many agricultural products and is also known as "Rice Bowl of India". The state has three Agricultural Economic Zones in Chittoor district for mango pulp and vegetables, Krishna district for mangoes and Guntur district for chilies.

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References

1. Narasimha Rao, P Suri KC. Dimensions of Agrarian Distress in Andhra Pradesh, Economic & Political Weekly, 2006, 1546-1552.
2. Sai. Flow of Institutional Credit to Agriculture in Deltaic Regions – A Case of West Godawari District, Andhra Pradesh, Indian Journal of Agricultural Extension. 1988; 43(3):398-401.
3. Chakrabarty KL. Agricultural Productivity and Credit-Issues and way forward. At the National Seminar on Production in Indian Agriculture at CAB, Pune, rbi.org.in/scripts/Bsspeeches, 2011.
4. Desai, Institutional Credit Requirements for Agricultural Production 2000 AD. Indian Journal of Agricultural Extension. 1988; 43(3):327-358.
5. Directorate of Economics and statistics, Department of Agriculture, Cooperation and Farmers Welfare Ministry of Agriculture and Farmers Welfare, Govt. of India (<http://eands.dacnet.nic.in>).
6. Hand book of statistics of SPSR Nellore district, 2014.
7. GOI. Agricultural Statistic at Glance, Directorate of Economics and Statistics, 2011.
8. Banerjee PK. Indian Agricultural Economy, Chaitanya Publication, New Delhi, 1970.