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Agricultural Profile in Vellore District

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INTRODUCTION:

Vellore district is located in northern part of Tamil Nadu and it falls under the North Eastern Agro Climatic Zone of Tamil Nadu. The district is bound on the north by Karnataka State and Chithoor district of Andhra Pradesh State, on the east by Thiruvallur and Kancheepuram districts, on the south by Thiruvannamalai district and on the west by Krishnagiri district. There were nine taluks and 20 blocks. Also, there were seven agricultural divisions in the district.

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District Profile:

Geographical Position

North Latitude Between 12^0 15' and 13^0 15'

East Longitude Between 78^0 20' and 79^0 50'

Land Details :

S.No	Particulars	Area in ha	% to the total geographical area
01	Total geographical area	592018	100
02	Area under Forest	162286	27.4
03	Barren and uncultivable land	20445	3.45
04	Land put into non-agricultural uses	79980	13.5
05	Cultivable waste	5766	0.97
06	Permanent pastures and other grazing lands	4037	0.68
07	Miscellaneous tree crops and grooves not included in the net area sown	3061	0.51
08	Current Fallow	68613	1.15
09	Other Fallow	73134	12.35
10	Net Area Sown	174696	29.5
11	Area sown more than once	21545	3.63
12.	Gross Cropped Area	196241	33

Source :KVK Vellore District Profile 2012-13

Major crops for- 2012-13

S.No	Crop	Area (ha.)	Production (Metric tonnes)	Productivity (kg /ha)
1.	Paddy	37989	129770	3416
2.	Cholam	6107	5576	913
3.	Cumbu	1985	2517	1268
4.	Ragi	4732	14149	2990
5.	Samai	2334	2656	1138
6.	Red gram	10392	6121	589
7.	Green gram	1022	363	355
8.	Black gram	2157	878	407
9.	Horse gram	4748	2516	530
10.	Ground nut	42513	82730	1946
11.	Coconut	22680	2313*	102§
12.	Gingelly	6604	3124	473
13.	Sunflower	50	12063	603
14.	Sugarcane	15085	1176057**	77.962 §§
15.	Cotton	7143	16457	2304
16.	Chillies	916	549	599
17.	Turmeric	1824	5968	3272

*** - in lakh nuts § - in nuts per hectare**
**** - in terms of cane §§ - in tonnes per hectare**

Horticulture - Area (ha), production (tonnes /ha) and productivity (kg/ha) of major crops 2012-13

S. No.	Crop	Area (ha)	Production (tonnes)	Productivity (tonnes /ha.)
Fruit Crops				
18.	Banana	3498	144118	41.2
19.	Mango	13849	88633	6.4
20.	Guava	334	4208	12.6
21.	Sapota	461	9542	20.7
22	Cashew	3	45	15.1
23	Jack	72	2290	31.8
24	Coconut	22680	4127*	104 **
25	Papaya	12	240	20
Vegetable Crops				
26	Brinjal	1463	30723	21.0
27	Tomato	1303	19545	15.0
28	Greens	169	3380	20
29	Tapioca	212	6360	30.0
30	Moringa	38	1520	40.0
31	Onion	94	3760	40.0
32	Sweet potato	13	260	20.0
33	Ash gourd	4	60	15
34	Bitter gourd	20	300	15
35	Bottle gourd	12	180	15
36	Elephant yam	70	700	10
37	Ribbed gourd	9	135	15
38	Snake gourd	1	15	15
39	Water melon	20	400	20
Flower crops				
40	Jasmine	849	6792	8.0
41	Crossandra	127	254	2
42	Chrysanthemum	100	1000	10
43	Nerium	6	30	5
44	Marigold	14	210	15
Spices				
45	Chillies	1324	1324	1.0
46	Turmeric	1824	5964.48	3.27
47	Coriander	169	50.7	0.3
48	Curry leaf	27	5400	200
49	Mint	11	22	2.0
50	Tamarind	54	324	6.0
Plantation crops				
51	Arecanut	14	140	10.0

(Source: Office of the Joint Director of Agriculture, Vellore) * in lakh nuts;
** in nuts per tree/year

Climatic Condition:

The Vellore, Wallajah and Gudiyatham taluks, which are surrounded by hills are subjected to extreme climate conditions either

being very hot during summer or very cold during winter. The rainfall in this district is due to southwest and northeast monsoons. South – West monsoon provides more rain than the North - East monsoon. The normal mean rainfall of the district was 936.20 mm during the 2011-12 and the actual rainfall of the District was 897.10 mm. Good showers are rarely received. More than 70 per cent of the area cultivated is under rainfed conditions. As a result of erratic distribution of rainfall, crop production often fails causing economic loss besides unemployment problem. Drought is a regular phenomenon in this district.

Cropping Pattern :

The cropping pattern in the district indicated that ground nut was the predominant crop with 28.4 per cent of the total cropped area and it was followed by paddy (22.8 per cent), red gram (7.2 per cent), sugar cane (5.9 per cent), ragi (5.8 per cent) in that order during 2012-13. Food grains like cereals and pulses together accounted for 62 per cent of the total cropped area.

SWOT Analysis of the District (For Agricultural sector)

Strength

District, is well connected by rail and bus routes. A vast area under forest with a large number of sandalwood and red sandalwood trees is there in Javvadhu hills. As well irrigation is predominant in the district, a variety of agricultural and horticultural crops are grown round the year. Vellore district is known for the presence of leather and leather based industries.

Weakness

Vellore district is a drought prone district with erratic and less than normal rainfall recorded during the past several years. Most of the rivers in this district are dry for years together, and the major irrigation tanks which are mostly system tanks which are also dry for the most part of the year. This has resulted in over exploitation of ground water through open wells and deep bore wells. The area under the waste and fallow lands in the district also was around one – fifth of the total geographical area.

Opportunities

As there is a heavy demand for fruits, vegetables and flowers from the nearby Chennai city, farmers who cultivate these crops are much benefited. Surplus milk produced in this district is also being transported daily to Chennai from Vellore dairy unit. The industrial development is tremendous in the major towns of this district like Arakonam, Ranipet, Vellore and Thiruppathur, as there is a four lane National Highways and double line electrified rail track connectivity linking these towns with Chennai and Bangalore.

Threats

Vellore District is very near to Chennai and Bangalore cities and this has resulted in the large scale migration of farm labourers. This has resulted in a great demand for agricultural labourers and the farmers in this district face a lot of problems in getting farm labourers. Already Karnataka state has built a dam in Palar River and Andhra Pradesh is also taking steps to construct a dam across Palar. Hence, the irrigated lands of Vellore district depending on Palar water during monsoon season may totally become dry.

As leather industries earn huge foreign exchange through the export of leather and leather products, they may flourish more. At the same time, if the effluents produced are not properly treated and let out by them, then it would cause a wide spread soil and water pollution in the district. This in turn, would not only drastically reduce the crop productivity, but also create problems like scarcity of drinking water and skin diseases to those who live in areas polluted by the tannery effluents.

Compound Growth Rate of Area of Major crops grown in Vellore District

The net sown area accounted for only a less than one-third (29.60) per cent of the total geographical area of the district. Further, the gross cropped area had only a negative growth rate during the period from 1981-82 to 2010-11. This would indicate that intensive developmental efforts are needed at least to sustain the existing cropped area. However, the estimated compound growth rate of various crops grown in Vellore district would reveal that crops like greengram, blackgram, cotton, coconut, red gram, turmeric and mango had a positive CGR of less than one per cent per annum. Therefore, the commercial / horticultural crops like fruits and vegetables are also to be covered under larger area. (Vellore NADP Project Report, 2016)

Compound Growth Rate of Production Major crops grown in Vellore District

As far as the production of major crops grown in Vellore district were concerned, cumbu, blackgram, onion, gingelly, banana, mango and castor had a positive CGR, while the major crops like paddy, maize, sugarcane, groundnut, green gram, redgram, cotton, turmeric, coconut and chillies had negative growth rate in their production. Unless the average production of major food crops is not increased, it would be very difficult to ensure the food security. (Vellore NADP Project Report, 2016)

Compound Growth Rate of Productivity of Major Crops Grown in Vellore District

As far as the productivity of major crops grown in Vellore district were concerned, paddy, cumbu, ragi, redgram, blackgram horse gram, banana, , groundnut, gingelly, onion and castor had a positive CGR, while the other crops like cholam, green gram , horsegram, banana and mango had negative growth rate in their productivities, The productivities of pulses like redgram, black gram and green gram are very low in the district and further, the declining trend in the productivities of these crops is cause for a concern. Unless the average productivities of major food crops are

not increased, it would be very difficult to ensure the food security. (Vellore NADP Project Report, 2016)

Conclusion

The annual growth rates of areas and production for the period between 1981-82 and 2010-11 were negative for the selected major crops like paddy, groundnut, sugarcane, redgram, cotton, coconut, mango and banana. Therefore, planned efforts are utmost necessary to sustain the areas under these crops so as to enhance the agricultural production by means of raising the productivities of these crops in Vellore district.

For the strategies required to achieve high Production and Productivity in the Major crops grown in Vellore District, the following themes has to concentrate

- Timely supply of quality seeds /planting materials to farmers at a reasonable rate
- Technical assistance have to be provided to get more returns
- Judicious use of water resources at all levels
- Effective utilization of dry lands/fallow lands
- Reclamation of fallow and degraded lands.
- Linkage between production, market and consumers
- Demonstration plots have to be laid for all crops
- Storage godowns are needed for perishable crops
- Mechanization in Agricultural sector is required and to be strengthened and
- Priority is to be given for the income of farmers.

References:

1. Hand book of statistics. 2014, Department of Agriculture, Chennai.
2. Vellore District profile 2012-13, Agricultural Research station, Virinijipuram, Vellore.
3. Joint Director of Agriculture 2012-13, Vellore District.