Available online @ www.selptrust.org/www.iaraindia.com SELP Journal of Social Science ISSN : 0975-9999 (P) 2349-1655 (O) Impact Factor : 3.655(CIF), 2.78(IRJIF), 2.77(NAAS) Vol. IX, Issue. 38 / Julu - September 2018 © Author

# STUDY ON SELECTED FOOD GRAIN PRODUCTION IN TAMIL NADU

**V.Johnrose** 

Ph. D Scholar, Department of Economics, S.T.Hindu College – Nagercoil (Manonmanium Sundaranar University, Abishekapatti, Tirunelveli 627 012, Tamil Nadu, India)

#### Dr. A.Vinayagaram

Assistant Professor, Department of Economics, S.T.Hindu College – Nagercoil (Manonmanium Sundaranar University, Abishekapatti, Tirunelveli 627 012, Tamil Nadu, India)

## Abstract

Agriculture is the livelihood for every farmer and consequently the economy of the State is primarily focused on agriculture. The role of agriculture in shaping the economy could be reflected from the large proportion of population that depends on agriculture for their livelihood and the significant contribution of agriculture to the State's income. The present study focused on secondary data. The study suggested that Success of Agriculture depends very largely on optimum usage of water and assured irrigation. Hence, the Government is taking intensive efforts to popularize the Micro Irrigation system which helps in bringing more crops per drop.

Keywards: Land, Water and Food Grain Production, Micro Irrigation System, GDP, Water Resources

## Introduction

Agriculture is the livelihood for every farmer and consequently the economy of the State is primarily focused on agriculture. The role of agriculture in shaping the economy could be reflected from the large proportion of population that depends on agriculture for their livelihood and the significant contribution of agriculture to the State's income. Tamil Nadu is one of the well developed states. It is the second largest state in economic activity after Maharashtra and the fifth largest contribution to India's GDP. Tamil Nadu is the eleventh largest state in India by area and the seventh most populous state. It is the second largest state economy in India as of 2012. But the case of the agriculture sector Tamil Nadu is one of the water starved states in India: it is endowed with three percent of water resources in India. The efforts of the Government to introduce bouquet of frontier technologies, quality seeds, bio-fertilizers helped to achieve a quantum jump in food grain production and the State was honoured with "Krishi Karman" award for having attained total food grain production of 101.52 Lakh Metric Tonnes by Government of India (GoI) during the year 2011-12. Since the food grain production surpassed 100 Lakh Metric Tonnes, the Government of Tamil Nadu (GoT) was given "Krishi Karman" award for

SELP Journal of Social Science

36

July - September 2018

the best performance in pulses production of 6.14 Lakh Metric Tonnes during 2013-14 and for coarse cereals production of 40.79 Lakh Metric Tonnes for the year 2014-15.

## Issue

The role of agriculture sector in the Indian economy is major andneeds no emphasis. There have been important developments in Indianagriculture, especially, in the context of farm mechanization, use of hybrid and genetically modified seeds and adoption of market driven cropping patternsthereby, leading to increase in crop yields and emerging of new cropping patterns. Demographically, agriculture sector is the broadest economicsector and play a significant role in the overall socio-economic fabric of thecountry. It accounted for around 18 percent of the Gross Demotic Product (GDP) at current prices in 2015-16. However, the share of this sector is showing a declining trend except in the year 2013-14. Slowing down of agriculture growth, decline in the number of operational holdings from 11.17 lakh during 1990-91 seven lakhs during 2000-07 indicated that large portion of the rural masses in now seeking job opportunities outside the agricultural sector (Vatta Kamal and Garg, 2008). The present study focuses the bold objectives of to study land use pattern and selected food grain production in Tamil Nadu

### Methods

The study based on secondary data. The secondary data collected from agriculture censes agricultural statistics at glance year book from 2011 to 2018.

## Analysis and discussion

Tamil Nadu is geographically located between8°5' and 13°35' North latitude and between76°15' and 80°20' East longitude. As a resultof this geographical position, Tamil Nadu enjoyssemi-arid to dry sub humid climate, whichpermits higher crop productivity under irrigation.Tamil Nadu is one of the most

## ISSN: 0975-9999 (P), 2349-1655 (O)

waterstarved states endowed with only three per cent ofthe nation's water resources putting high stresson irrigation water availability and vulnerable toseasonal fluctuations causing uncertainty inagriculture production.140 million hectares of land is used as agriculture area, as of 2012-2013(Agricultural statistics at Glance, 2015). Over the years, this area has been fragmented into smaller pieces of land. The Tamil Nadu land use pattern as per thelatest statistical report (2016-17) is given below

Table- 1	: Land	Use	Pattern	in	Tamil Nadu
----------	--------	-----	---------	----	------------

SI No	Details	Area (lakh Ha)	% With Reference to Geographical Area	
1	Forest	21.57	16.55	
2	Net cropptedarea (*)	43.47	33.35	
3	Area under Misc. Tree crops	2.32	1.78	
4	Permanent pastures	1.08	0.83	
5	Current fallow	13.61	10.44	
6	Other fallow	18.47	14.17	
7	Cultivable waste	3.23	2.48	
8	Land put to non-agricultural use	22.01	16.89	
9	Barren and uncultivable land	4.58	3.51	
	Total Geographical Area	130.33	100.00	
	Cropping intensity (%)	118	-	

(\*) Difference between Gross Cropped Area (51.29 Lakh Hectare)

and Area sown more than once (7.82 Lakh Hectare)

The number of marginal land holdings (less than one hectare) increased from 36 million in 1971 to 93 million in 2011 (Agriculture Censes, 2010-11). Of the total agriculture area under operation, 10 percent of land has been given out on agriculture leases with the percentage of leased out land varying across states (NITI Aayog, 2016). According to the Agriculture censes 2010-11, the number of operational land holders in theState is 81.18 lakh, operating cultivable landof 64.88 Lakh Hectare. Small and Marginalholders account for 92 percent of the total holdingsoperating 61 percent of the area occupied. The average size of the land holding in the State is 0.80 hectare which is lesser than the averagesize of land holding of the country(1.15 hectare).

The average annual rainfall of the State

**SELP** Journal of Social Science

37

July - September 2018

## Vol. IX, Issue. 38

isaround 921 mm which is less than the Nationalaverage of 1,200 mm. The quantum of rainfallreceived during Winter (January -February), Summer (March - May), South-West Monsoon(June - September) and North-East Monsoon(October - December) is three percent, 14 percent, 35 percent and 48 percent respectively. The per capita availability ofwater is 750 cubic meters per year as compared to the all India average of 2,200 cubic meters. About 51 percent of the agriculture are cultivating food grains is covered by irrigation (Ministry of Agriculture and Famers Welfare, 2015). There is a need to improve the efficiency of water use, especially in agriculture. Irrigation currently consumes about 84 percent of the total available water in the country (NITI Aayog, 2015). The details of net area irrigated using varioussources of irrigation across the state (2016-17) are as follows:

Table – 2: Water Source Wise Net AreaIrrigated

Source	Availability (Nos)	Net Area Irrigated (l.Ha)	% with Reference to Net Area Irrigated		
Canals	2239	5.27	22.10		
Tanks 41127		3.02	12.66		
Wells	1872088	15.54	65.16		
Others		0.02	0.08		
Total		23.85	100.00		

The area irrigated by wells accounted for65 percent followed by Canals (22 percent) and Tanks(13 percent). Out of Gross Cropped Area (GCA) underirrigation (28.45 Lakh ha.) 77 percent is broughtunder food crops and 23 percent under non-foodcrops in the State. Tamil Nadu is the only State across the countrywhere 100 percent subsidy is extended for Smalland Marginal farmers and 75 percent subsidy forother Farmers. As of now, the coverage of microirrigation is one per cent of total irrigated areaand hence the Government is taking variousinnovative measures to expand the area undermicro irrigation in Tamil Nadu with higher fundallocation.It leads to save the production of food grain crops in Tamil Nadu.

During 2016-17, due to various

#### ISSN: 0975-9999 (P), 2349-1655 (O)

naturalimpediments such as failure of South West aswell as North East Monsoon, nonrelease of Cauvery water from Karnataka, poor storageposition in all major reservoirs, Vardah cyclone, and most importantly severe drought, the Statewitnessed lesser area under major crops besides damage to the standing crops and hencefood grain production reached a low level of 52.38 Lakh Metric Tonnes in 2016-17.

Table -3: Food Grain Production in TamilNadu

	Food Grain Production (lakh metric tones)						
Crop	2011-	2012- 13	2013-14	2014-15	2015-16	2016- 17	2017- 18
	12						
Rice	74.59	40.50	71.15	79.49	73.75	35.54	65.92
Millets	23.24	13.42	32.73	40.79	34.25	13.45	37.36
Pulses	3.69	2.13	6.14	7.67	5.85	3.39	6.09
Total Food Grains	101.52	56.05	110.02	127.95	113.85	52.85	109.37

Majority of the farmer did not have marketable surplus. Major problems faced by the farmer paddy grower were lack of capital or fund, weak market infrastructure, limited transport facilities and fluctuating market prices (Vijay Kumar et al., 2008). The National Food Security Mission for rice is implemented with an objective o increase the production of Paddy through areaexpansion and productivity enhancement, enhancing the farm level economy and to restore the soil fertility and productivity at theindividual farm level in eight identified districtsviz., Pudukkottai, Tiruvarur, Nagapattinam, Ramanathapuram, Sivagangai, Thanjavur, Tiruvannamalai and Cuddalore. During 2017-18, the components such as Cluster demonstrations, cropping system based demonstrations, distribution of certified quality seeds of HighYielding Varieties (HYV), hybrids, production enhancinginputs, integrated nutrient and plant protectionmeasures, farm machineries and resourcesconservation techniques besides croppingsystem based trainings were implemented with abudget outlay of Rs.14.84 Crore. The schemewill be continued during 2018-19 also.

Millets are multigrain gluten free small seedsoften called poor man's cereals which gained theprivilege of farmers to change in

SELP Journal of Social Science

38

## Vol. IX, Issue. 38

consumers' preference resulting in inclusion of milletspoignant from Traditional Foods Basket (TFB) toCommercial Food Baskets(CFB)in Tamil Nadu. Milletsare providing multiple securities such as foodsecurity, fodder security, health and nutritional security and livelihood security. Millets such asMaize, Sorghum, Cumbu, Ragi, Thinai, Varagu, Samai, Kudiraivali etc., are cultivated in TamilNadu with a normal area and production of 8.013 Lakh Ha and 28.88 Lakh Metric Tonnesrespectively. Considering the importance of millets and its consumption, in order to increase the milletproduction, various efforts were taken thus resulted 9.17 lakh ha has been broughtunder Millet cultivation during 2017-18. This resulted in increased coverage of 1.157 lakh ha more, when compared tonormal area.

The cereals and pulses occupy about 3/4<sup>th</sup> of the gross cropped area under cultivation. Millets and pulses registered an increase in productivity to the extent of 30-35 percent increase (Agriculture Statistics at a Glance, 2014). The millets are commonly cultivated in thedistricts of Villupuram, Cuddalore, Tiruppur, Salem, Namakkal, Erode, Perambalur, Ariyalur, Theni, Dindigul, Virudhunagar, Tirunelveli, Thoothukudi, Tiruvannamalai, Dharmapuri and Krishnagiri.Sensitizing the farmers on various local and indigenous technologies, supply of critical inputs, generating consumers' demand for millet basedfood products through awareness creation and processing and value addition techniques are implemented in a massive way under variousongoing and new programmes.

Pulses are the important sources of dietaryprotein and play a vital role in improving the soilfertility. Red gram, Black gram, Green gram and Horse gram are the major pulses cultivated inTamil Nadu covering a normal area of 7.53 lakhha. Pulses being a short duration, less waterconsuming and less input intensive

## ISSN: 0975-9999 (P), 2349-1655 (O)

crops, it iscultivated in all the seasons throughout TamilNadu. In order to attain the self sufficiency inpulses production by bridging the yield gap andto increase the cropping intensity for creatingadditional income to the farmers, constantefforts are being taken by the GoT in a mission mode approach foryears.As a result, the area which was 6.37 Lakh Hain 2010-11 has increased to 8.84 Lakh ha in2014-15 and production which was only2.45 Lakh Metric Tonnes in 2010-11 hasescalated to insurmountable record of 7.67 LakhMetric Tonnes in 2014-15.

The productivity which was hovering around 385 Kg/Ha alsoincreased to 868 Kg/ha in 2014-15 and set anew bench mark in the production & productivityof pulses in Tamil Nadu. The efforts werecontinued during 2015-16 and 2016 - 17 and as aresult, the pulses area was sustained to anextent of eight Lakh Ha despite severe occurrence offlood and drought. The innovative activities were being carriedout in a mission mode approach to bring an area of 9.4 Lakh ha and a production of six Lakh MetricTonnes with a productivity of 632 Kg/ha during2017-18 and covered 8.78 Lakh ha area.Besides, farmers are being integrated intogroups to form Farmer Producer Organisation(FPO) through various programmes such as Mission on Sustainable Dryland Agriculture and Collective (MSDLAC) farming for ensuring easy access to inputs and services at lesser price and as well as facilitate them to get additional income throughvalue addition.

## Conclusion

Agriculture growth has been fairly volatile over the past decade, ranging from 5.8 percent in 2005-06 to 0.4 percent in 2009-10 and -0.2 percent in 2014-15. Overcoming the constraints faced by the agricultural sector in Tamil Nadu, and accelerating growth in agricultural production and the rate of rural poverty reduction will require appropriate policies and investments in four priority areas: improving

SELP Journal of Social Science

39

## Vol. IX, Issue. 38

the efficiency of water use, increasing the effectiveness of public expenditure and agricultural extension, spurring the development of agricultural markets, and maximizing the real income growth of the rural poor. Success of Agriculture depends very largelyon optimum usage of water and assuredirrigation. Hence, the Government is taking intensive efforts to popularize the MicroIrrigation system which helps in bringing morecrops per drop.

#### Reference

- 1. Agriculture Statistics at a Glance (2015), "Agriculture Land by use in India", Agriculture Statistics.
- Agriculture Statistics at a Glance, (2014), Directorate of Economics and Statistics, Ministry of Agriculture, Directorate of Economics and Statistics -http:// eands.dacnet.nic.in

#### ISSN : 0975-9999 (P), 2349-1655 (O)

- 3. Henry Pandian etal., (2011), "Energy Use Pattern in Paddy Cultivation in Tamil Nadu", *Southern Economist*, 50 (4):8-10.
- 4. Narwade, S.S (2010), "Agriculture Performance in Orissa: Post Economic Reforms", *Southern Economist*, 36 (1):23-27.
- 5. NITI Aayog (2015), "Raising Agriculture Productivity and Making Farming Remunerative For Farmers", *NITI Aayog*, December 16.
- 6. NITI Aayog (2016), "Report of the Expert Committee on Land Leasing", NITI Aayog, March 31.
- 7. Packet Book of Agriculture Statistics, 2015, Ministry of Agricultural and Famers Welfare.
- 8. Vatta, Kamal and Garg B.R (2008), "Rural Non-Farm Sector in Punjab: Pattern and Access to Employment and Income",*International Journal* of Agricultural Economics, 63 (2): 224-242.
- 9. Vijay Kumar et al., (2008), "A Study of Marketing Behaviour, Profile and Suggestion of Respondent Paddy Grower of District Sitamarthi in Bihar", *Agriculture Update*, 3 (3&4):244-246.

visit our website www.iaraindia.com to refers and download

the previous issue of

# SELP JOURNAL OF SOCIAL SCIENCE,

# **RESEARCH EXPLORER, THAMILAIVU SANGAMAM**

at free of cost