International Research Journal of Education and Technology
Peer Reviewed Journal
ISSN 2581-7795

MAJOR AGRICULTURAL FOOD CROPS DEVELOPMENT YIELD IN INDIA: AN ANALYSIS PERSPECTIVE

***Dr. SEELAM RAVI, ACADEMIC CONSULTANT, DEPARTMENT OF ECONOMICS, YOGI VEMANA UNIVERSITY, KADAPA, ANDHRA PRADESH**

****Dr.A.T.VINAYAKUMAR, ACADEMIC CONSULTANT, DEPT.OF POLITICAL SCIENCE AND PUBLIC ADMINISTRATION,YOGI VEMANA UNIVERSITY, KADAPA, ANDHRA PRADESH**

*****Dr.Y.RAMAIAH, ACADEMIC CONSULTANT, DEPT.OF POLITICAL SCIENCE AND PUBLIC ADMINISTRATION, YOGIVEMANA UNIVERSITY, KADAPA, ANDHRA PRADESH**

ABSTRACT :

Agricultural sector occupies a key position in the Indian economy. Though agriculture has now shrunk as a proportion of gross domestic product (GDP) to around 13 per cent, it is a vital sector and provider of livelihood for two-third of India's working population. Although Indian agriculture is way back compared to the levels in developed countries, some notable developments have occurred since Independence in 1947. Large areas which suffered from repeated failures of rainfall have received irrigational facilities and new crops have come to occupy a significant position in the country's production and trade. Problems of rural indebtedness and the exploitative practices of the village moneylenders are much less. While there have been farmers-friendly efforts—such as those to promote institutional credit to rural areas, improved access to inputs, subsidies on fertilizers and electricity, minimum support prices etc.—but these have not been fully successful in protecting the interest of the farmers in general, and small/marginal farmers in particular. Marginal and small farmers have borne the brunt of the adverse circumstances in agriculture. The spate of suicides by farmers in many areas is the most disconcerting manifestation of this distress. Accelerating the rate of growth of agricultural production must be seen as central to a more inclusive growth.

KEY WORDS: Agricultural Development , Major Food Crops, Irrigation

International Research Journal of Education and Technology
Peer Reviewed Journal
ISSN 2581-7795

INTRODUCTION

Over the years, India has made rapid progress in the production of food. The annual growth rate of food production including non-cereal food increased from 2.1 per cent during the 1960s to 3.0 per cent in the subsequent decade and further to 3.8 per cent during the 1980s. Between 1960 and 1980, food production barely kept pace with the population but in the 1980s per capita food production increased at a satisfactory rate of 1.6 per cent per annum. There seems to have been some diversification in food production in the 1980s on account of the impressive growth of output of oilseeds and livestock products. The diversification of food production more or less conforms to the growth pattern of domestic demand.

India achieved near self-sufficiency in the availability of food grains by the mid-seventies. The trend rate of food grain production improved from 2.3 per cent during the 1960s and 1970s to 2.9 per cent in the eighties. It is particularly noteworthy that India could build enough buffer stocks to cope with year-to-year variations in food grain production. Field studies reveal that during the 1987 drought, stable food grain prices, and the availability of consumption credit enabled drought affected villages to maintain their consumption at the same level as in normal years (Acharya, 1989; Bidinger, *et al*., 1990). The annual fluctuations in the per capita availability of food grains declined in the eighties and nineties when compared to the previous period (Rao and Radhakrishna, 1997) and there was a decline in the seasonal as well as regional variations in the prices of food grains (Bhalla, 1994)

OBJECTIVES:1. To study thefood crops in India.
2. To know the irrigation facilities in India

HYPOTHESES:1**.** Thefood crops in India is not significant
2.The irrigation facilities in India is not significant

METHODOLOGY:
The data are collected mostly from secondary sources by way of access to various Government policies/ programs including published Annual Reports, Journals, Books and available official websites. Internet, magazines, books, averages, total and percentages, tables, figures gives a qualitative approach towards this research framework.

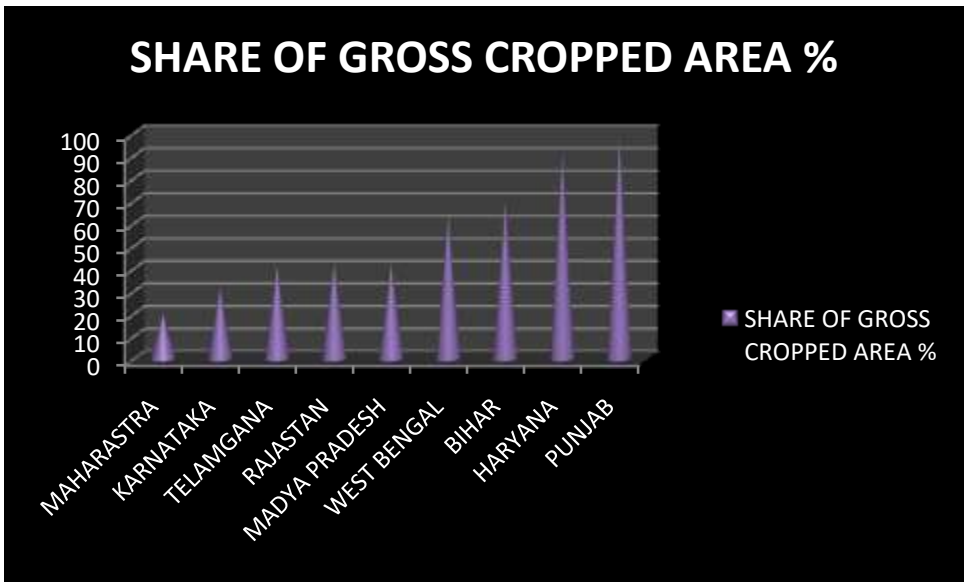
International Research Journal of Education and Technology
Peer Reviewed Journal
ISSN 2581-7795

TABLE -1
COVERAGE OF IRRIGATED AREA UNDER PRINCIPAL CROPS IN SELECTED STATES DURING 2019-20

S.NO	STATE	SHARE OF GROSS CROPPED AREA %
1	MAHARASTRA	20.2
2	KARNATAKA	31.2
3	TELAMGANA	41.4
4	RAJASTAN	42.2
5	MADYA PRADESH	42.3
6	WEST BENGAL	64.0
7	BIHAR	69.3
8	HARYANA	91.4
9	PUNJAB	98.6
All India average		49.0

SOURCE:GOVERNMENT OF INDIA 2021,TABLE 13.4

FIGURE -1



One of the factors was inadequate sources of irrigation more than five decades after the green revolution technology was introduced . Table -1 and diagram -1, explain in 2015-16, 49% of the gross cropped area under principal crops was irrigated, increasing from 43% a decade earlier, thus bringing an additional 12 million hectares under irrigation .The above mentioned numbers are somewhat deceptive since there is considerable variation among the states in the availability of irrigation facilities. Some of the major states like maharastra, madya Pradesh and Karnataka were well below the national average as regards the coverage of irrigated area under principal crops during 2015-16. Of the 29 states and union territories for which data were available, in 21 states, coverage of irrigated area under principal crops was lower than the national average.

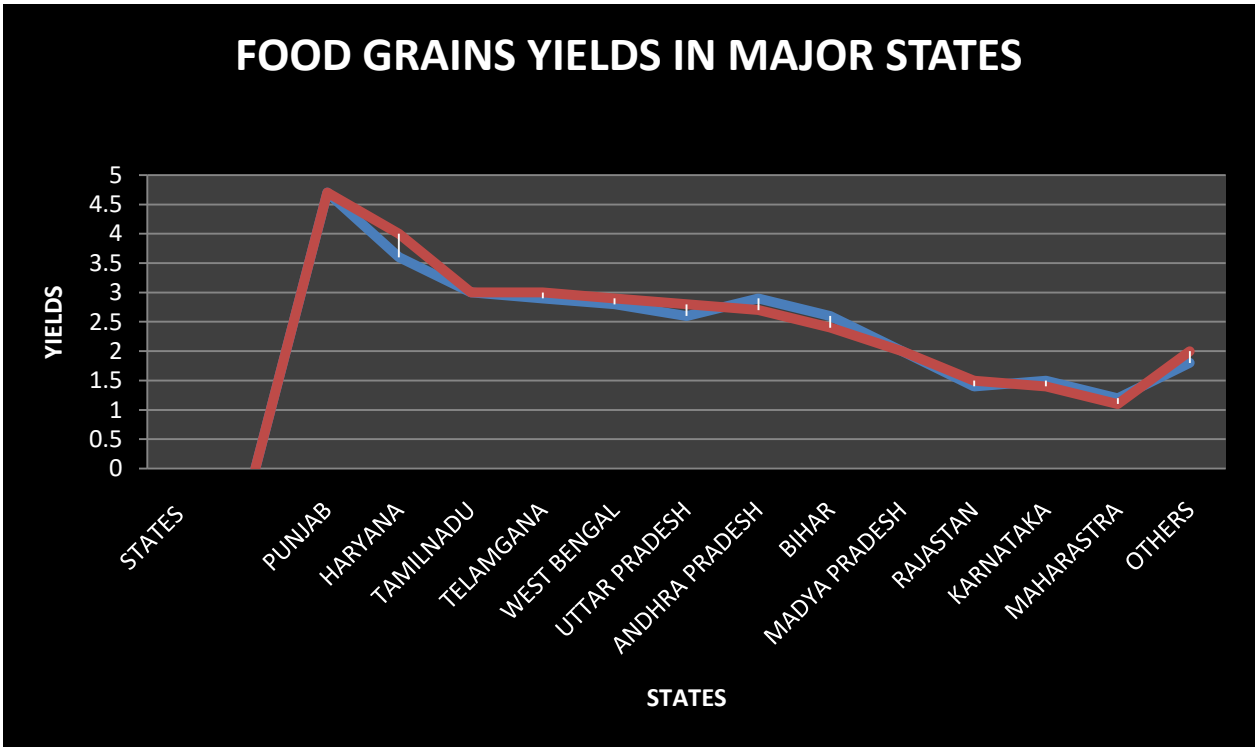
TABLE-2
FOOD GRAINS YIELDS IN MAJOR STATES

S.NO	STATES	YIELDS(TONNES/HECARES)	
		2019-20	2021-22
1	PUNJAB	4.7	4.7
2	HARYANA	3.6	4.0
3	TAMILNADU	3.0	3.0
4	TELAMGANA	2.9	3.0
5	WEST BENGAL	2.8	2.9
6	UTTAR PRADESH	2.6	2.8
7	ANDHRA PRADESH	2.9	2.7
8	BIHAR	2.6	2.4
9	MADYA PRADESH	2.0	2.0
10	RAJASTAN	1.4	1.5
11	KARNATAKA	1.5	1.4
12	MAHARASTRA	1.2	1.1
13	OTHERS	1.8	2.0
ALL INDIA		2.2	2.3

SOURCE: AGRICULTURALSTATISTICS ATA AGLANCE 2023 TABLE 4.5(B)

International Research Journal of Education and Technology
Peer Reviewed Journal
ISSN 2581-7795

FIGURE-2



The table -2 and diagram -2 explains a comparison of state wise food grains yields brings this out clearly. Yields brings this out clearly. Yields in Punjab and Haryana have historically, been significantly higher than all india average. In 2018-19, the latest period for which data are available, food grain yields in Punjab and Haryana were 4.7 tonnes /hectares and 4.0tonnes/hectares as compared to just 2.3 tonnes/ hectares at the all India level.

MAJOR FOOD CROPS

Major Crops A variety of food and non food crops are grown in different parts of the country depending upon the variations in soil, climate and cultivation practices. Major crops grown in India are rice, wheat, millets, pulses, tea, coffee, sugarcane, oil seeds, cotton and jute, etc.

Rice: It is the staple food crop of a majority of the people in India. Our country is the second largest producer of rice in the world after China. It is a kharif crop which requires high temperature, (above 25°C) and high humidity with annual rainfall above 100 cm. In the areas of less rainfall, it grows with the help of irrigation. Rice is grown in the plains of north and north-eastern India, coastal areas and the deltaic regions. Development of dense network of canal irrigation and tubewells have made it possible to grow rice in areas of less rainfall such as Punjab, Haryana and western Uttar Pradesh and parts of Rajasthan.

Wheat: This is the second most important cereal crop. It is the main food crop, in north and north-western part of the country. This rabi crop requires a cool growing season and a bright sunshine at the time of ripening. It requires 50 to 75 cm of annual rainfall evenlydistributed over the growing season. There are two important wheat-growing zones in the country – the Ganga-Satluj plains in the northwest and black soil region of the Deccan. The major wheat-producing states are Punjab, Haryana, Uttar Pradesh, Bihar, Rajasthan and parts of Madhya Pradesh.

Millets: Jowar, bajra and ragi are the important millets grown in India. Though, these are known as coarse grains, they have very high nutritional value. For example, ragi is very rich in iron, calcium, other micro nutrients and roughage. Jowar is the third most important food crop with respect to area and production. It is a rain-fed crop mostly grown in the moist areas which hardly needs irrigation. Major Jowar producing States were Maharashtra, Karnataka, Andhra Pradesh and Madhya Pradesh in 2011-12.

Bajra grows well on sandy soils and shallow black soil. Major Bajra producing States were: Rajasthan, Uttar Pradesh, Maharashtra, Gujarat and Haryana in 2011-12. Ragi is a crop of dry regions and grows well on red, black, sandy, loamy and shallow black soils. Major ragi producing states are: Karnataka, Tamil Nadu, Himachal Pradesh, Uttarakhand, Sikkim, Jharkhand and Arunachal Pradesh.

Maize: It is a crop which is used both as food and fodder. It is a kharif crop which requires temperature between 21°C to 27°C and grows well in old alluvial soil. In some states like Bihar maize is grown in rabi season also. Use of modern inputs such as HYV seeds, fertilisers and irrigation have contributed to the increasing production of maize. Major maize-producing states are Karnataka, Uttar Pradesh, Bihar, Andhra Pradesh, Telangana and Madhya Pradesh

Pulses: India is the largest producer as well as the consumer of pulses in the world. These are the major source of protein in a vegetarian diet. Major pulses that are grown in India are tur (arhar), urad, moong, masur, peas and gram. Can you distinguish which of these pulses are grown in the kharif season and which are grown in the rabi season? Pulses need less moisture and survive even in dry conditions. Being leguminous crops, all these crops except arhar help in restoring soil fertility by fixing nitrogen from the air. Therefore, these aremostly grownin rotation with other crops. Major pulse producing states in India are Madhya Pradesh, Uttar Pradesh, Rajasthan, Maharashtra and Karnataka.

CONCLUSION

Enhanced institutional credit to farmers. Promotion of scientific warehousing infrastructure including cold storages and cold chains in the country for increasing shelf life of agricultural produce, approved access to irrigation through Pradhan Mantri Krishi Sichayee Yojana. Provision of Price Stabilization Fund to mitigate price¬ volatility in agricultural.

Setting up of Agri-tech Infrastructure fund "Bhoomi Heen Kisan" through NABARD. Development of indigenous cattle breeds and promoting inland fisheries. sustainable management of ground water resources with cost of Rs 6,000 crore. The Soil Health Card Scheme for judicious use of fertilizers. A policy for conversion of city waste into compost the Swachh Bharat Abhiyan. At least 5 lakh farm ponds, dug wells and 10 lakhs compost pits for organic manure. To boost the safety of farmers' crops and ensure maximum benefit of crop insurance reaches to farmers, the Government of India has allocated Rs 16000 crores for Pradhan Mantri Fasal Bima Yojana (PMFBY)for the fiscal year 2021-22. This is a budgetary increase of around Rs 305 crore as against the previous fiscal year 2020-21, which reiterates the government's commitment towards growth of agriculture sector in the country.

REFERENCES

1.Acharya, S.S.(1989), *Socio-economic Impact of 1987 Drought in Rajasthan*, Department of Agricultural Economics, Rajasthan Agricultural University, Jaipur.

2.Bhalla, G.S.(1994), "Policies for Food Security in India", in Bhalla, G.S. (ed.) *Economic Liberalisation and Indian Agriculture*, Institute for Studies in Industrial Development, New Delhi.

3.Rao, C.H.H. and R.Radhakrishna (1997), "National Food Security: A Policy Perspective for India", Plenary Paper, 27th *International Conference of Agricultural Economists*, August 10-16, Sacramento, California and published in G.H. Peter and J.V. Braun (ed.) *Food Security, Diversification and Resource Management: Re-focussing the Role of Agriculture*, Ashgate, 1999.

4.Agricultural NCERT report .2020

5.Visal Sharma :Major Agricultural Problems of India and Various Government initiatives, july 2020, DOI:10.13140/RG.2.2.33455.76968