

# The Role of Subsidies in Agricultural Development programmes in India

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## **Abstract**

*The every year's government of India spends lot of money in various agriculture subsidies schemes for growth of agriculture sector. The Government of India uses a different of policy instruments in attempting to achieve these Agriculture goals, including, Domestic subsidies to inputs, outputs, explicit and implicit, transportation, machinery equipments, storage, electricity, irrigation, fertilizer, and consumption to reduce producer costs and consumer prices. Input subsidies are the most expensive aspect of India's food and agriculture policy regime, requiring a steadily larger budget share. The current economic research also highlights the important role of agricultural subsidies in India. In order to examine the linkage between agriculture subsidies and agricultural development programmes or scheme in India and Karnataka. Used statistical tools like table chart ect. This study is based on secondary data collected from NABARD, Budget estimation India, ministry of Agriculture and finance, economic survey of Karnataka ect. Suggested some government policies & programmes.*

**Key Words:** Agriculture Subsidies Programmees, Schemes, Input Subsidies.

## **I. Introduction**

Indian agriculture is facing difficulties some would even argue that it is facing a crisis manifested in several dimensions. Agricultural output growth rate has stagnated. As a consequence agricultural employment growth has been low and aggregate unemployment has risen. Slow growth in agriculture has reduced the rate of poverty decline, once corrections are made for the non comparability of data for the 55th Round of the National Sample Survey (NSS).

The agriculture subsidies plays very important role in agriculture sector in every country. India subsidizes agricultural inputs in an attempt to keep farm costs low and production high. Government of India intended result is for farmers to benefit from lower costs, but also for them to pass some of the savings on to the consumers in the form of lower food prices. Government of India pays fertilizer producers directly in exchange for the companies selling fertilizer at lower than market prices. Irrigation and electricity, on the other hand, are supplied directly to

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farmers by Government of India at prices that are below the cost of production. Border measures such as subsidies, tariffs, quotas, and non-tariff measures to protect domestic producers from import competition, manage domestic price levels, and guarantee domestic supply.

Introduce of the high yielding varieties (HYV) seeds programmes in the 1960s demanded a high priority to supplying irrigation water and ensure that they were accessible and affordable. Subsidy on fertilizer is provided by the central government whereas subsidies on water are provided by the state government. The government gives different types of subsidies to farmers like fertilizer, irrigation, equipments, credit subsidies, seeds subsidies, export subsidies ect.

### **Meaning of Subsidies:**

Defining a subsidy is not a straight forward proposition; subsidy has been used by the economists with different meanings and connotations in different contexts.

The Oxford Dictionary defines: it as money granted by state, public body ect, to keep down the commodities price ect.

In generally, subsidies are advocated in the presence of positive externalities. In such a case, the social benefit from the consumption of a particular commodities or services is greater than the sum of the private benefit to the consumer. Example: for positive externalities are primary education, preventive health care, and research and development are prime ect. In the case private valuation of the benefits from such goods or services is less than their value to society and normal pricing mechanism will not produce efficient outcomes. Subsidies have also been advocated for redistribution objectives, especially to ensure minimum level of food and nutrition to all sections of society. Subsidies are one of the powerful fiscal instruments, besides taxes and others, by which the objective of growth and social justice may be achieved. The main purpose of this study examines the linkage between agriculture subsidies and agricultural development programmes or scheme in India and Karnataka. Methodology: This study is based on secondary data collected from NABARD, Budget estimation India, ministry of Agriculture and finance, economic survey of Karnataka. Used statistical tools such like as table, charts and diagrams ect.

## **II. Review of Literature**

Won W. Koo & P. Lynn Kennedy (2006) they studied the impact of agricultural subsidies on global welfare. This article theoretical indicates that both domestic and export subsidies distort trade flows of agricultural goods from exporting countries to importing countries. Ashok Gulati (1989) the author explained the input subsidies in Indian agriculture, a state wise analysis. The main objectives of these studies are to quantify level & spread of subsidies on major agricultural inputs across states in India during 1980s. Marion Desquilbet & Herve Guyomard (2002) this paper theoretical analysis the taxes and subsidies in vertically related markets. They assume that the government wishes to transfer income to both bulk commodity & processed good producers. This analysis is concerned with efficient redistribution. Lani Sinclair (1987) explained the government irrigation subsidies result in

huge economics and environmental losses worldwide. From this report the government subsidies of irrigation systems in the united states and developing countries cost taxpayers billions of dollars annually, waste water and erode the environment, a new world resources institute research report has found. The report say subsidies are inefficient, inequitable, fiscal disastrous, wasteful of increasingly scare water & environmental harmful. Jagrup Singh Sidhu & D.S. Sighu (1985) they studied the price support versus fertilizer subsidies: An evaluation. The main purpose of this paper was to evaluate the relative merits of the price support versus fertilizer subsidies policy for food self sufficiency in India. Jaime Quizon (1985) he studied the withdrawal of fertilizer subsidies: an economic appraisal. This article considers the economic costs and returns of alternative uses of public funds expended on subsidizing the consumption of fertilizers in India. Particularly this paper looks at the current fertilizer subsidies in India.

### **III. Result and Discursion:**

The programme and scheme implemented by the state government : centrally sponsored schemes national food security mission(NFSM) which was started during 11<sup>th</sup> five year plan, has been continued for the 12<sup>th</sup> five year plan also during 12<sup>th</sup> plan, in the state, it has been programmed to achieve higher production and productivity of coarse cereals & commercial crops (cotton, sugarcane) in addition to rice & pulses for which NFSM rice, pulses, coarse cereals schemes & commercial crops are being implemented in the state during 2017-18 also.

NFSM- Rice: under this scheme provision has been made for 100 hectares area cluster demonstrations on rice production technologies & cropping systems, distribution of improved varieties hybrid seeds, inputs for integrated nutrient & pest management, agricultural machinery, pump sets, drip-irrigation sets & pipes for carrying water, post harvesting equipment under subsidy & organization of trainings.

NFSM- Pulses: under this scheme provision has been made for 100 hectares area cluster demonstration on improved technologies & cropping systems, distribution of improved varieties seeds, inputs for integrated nutrient & pest management, agricultural machinery, pump sets, drip irrigation sets & pipes for carrying water , postharvest equipments under subsidy & organization of trainings & farmers to other states.

NFSM-Coarse cereals: under this scheme provision has been for 100 hectares area demonstrations on improved production technologies.

NFSM-commercial crops: cotton, under this scheme demonstrations on inter cropping integrated crop management & intercropping management of leaf reddening in bt cotton efficient weed management.

NFSM-Sugarcane: provision is made for demonstration on intercropping, state level training, supply of tissue culture plantlets.

NFSM programme progress for the year 2017-18 (centre: state) Rs. In lakhs

Sl.no	Programme	Budget allocated as per annual action plan	Grants released by GOI	Total grants available	Expenditure up to end of November 2017	Expected expenditure up to end of march 2018
1	NFSM-Rice	1353.95	467.15	778.58	826.68	1353.95
2	NFSM-Pulses	15140.33	5225.19	8708.66	6280.74	11355.26
3	NFSM-Coarse cereals	3461.56	1356.73	2261.22	1436.94	2596.19
4	NFSM-Commercial crops	150.92	45.27	75.44	68.74	124.38

Source: economic survey of Karnataka 2017-18

The above table shows the department of agriculture implements various programmes and scheme under the central and state government for overall welfare of the farming community & ensures timely supply of essential inputs. The programme of NFSM-rice budget allocated as per annual action plan was 1353.95 lakhs by GOI and the grants released by GOI is 467.15 lakhs and the total grants available is 778.58 lakhs, the expenditure up to the end of the November 2017 was 826.28 lakhs and the total expected expenditure up to end of the march 2018 is 1353.95 lakhs. The highest budget allocated programme of coarse cereals plan was 15140.33 lakhs & stotal expected expenditure was 2596.26 lakhs. the programme of commercial crop budget allocated was 150.92 lakhs and the grants released by government of india was 45.27 lakhs.

#### Subsidy sharing pattern for micro- irrigation programme (2017-18)

Category of farmers	Up to 2 hectares		2.0 hectares to 5 hectares			
	Central govt. in %	State govt. in %	Total subsidy in	Central govt. in	State govt. in	Total subsidy in %

	%		%	%	%	
Small & marginal. (SC/ST)	33	57	90	33	17	50
Others or general	27	63	90	27	22	50

Source: Economic survey of Karnataka 2017-18

The above figure explain the subsidies sharing pattern for various categories for micro irrigation programme in order to promote efficient use of water in the agriculture production, micro-irrigation programme is being implemented since 2003-04. Under this programme subsidy is providing for installation of drip & sprinkler irrigation units to all categories of farmers. Government of India is also providing funds for micro irrigation programme for different categories. The sharing of central govt. subsidies for small and marginal farmers (SC/ST) is 33% up to 2 hectares. State govt. share (SC/ST) is 57% and the total subsidy (SC/ST) is 90%. From 2.0 hectares to 5 hectares central govt. share (SC/ST) is 33% and (GC) is 27%. State govt. share (SC/ST) is 17% and (GC) is 22%, the total subsidy (SC/ST) is 50%, and (GC) is 50%.

Programme & progress of micro-irrigation & various scheme for the year 2017-18 (Rs. In lakhs)

Sl.no	Scheme	Allocation	Releases	Expenditure
1	PMKSY	43763.35	24774.82	17363.97
2	RIDF	7466.44	1225.00	871.02
3	Farm mechanization state sector.	13000.00	11293.30	---
4	SMAM	9995.20	1557.00	---

Source: Economic survey of Karnataka 2017-18

The above tables show in the year 2017-18 the micro-irrigation programme is being implemented under prime ministers krishi sinchayee yojana (PMKSY) & rural infrastructure development fund (RIDF). During 2017-18 the pmksy scheme allocation is 43763.35 lakhs & total expenditure was 17363.97 lakhs highest expenditure of this scheme. Under ridf scheme the govt. expenditure was 871.02 lakhs & allocation is 7466.44 lakhs in the year of 2017-18. Mechanization of farm operations helps to reduce drudgery of farm operations, save time and improves efficiency and farm productivity. Farm mechanization programme is being implemented both under state and central sector. The general farmers are provided with a subsidies of 50% and 90% subsidies is provided to the farmers belonging to SC/ST to Rs 1.00lakh the amount provide the subsidy. During the 2017-18 under the farm

mechanization scheme the state govt. allocation was 13000.00 lakhs. submission on agricultural mechanization (SMAM), this scheme is being implemented to promote the usage of farm mechanization and increase the ratio of farm power to cultivable unit area up to 2.0 hectares. Under this scheme govt. release Rs.1557.00 lakhs.

Krishi prerana: incentivizing farmers through direct beneficiary transfer (DBT) for adopting specific technology for the first time in the state farmers will be incentivized through DBT for adoption of specific, advanced and cost effective technologies in price, pulses, millets & oilseeds, further incentives will also be given to the technology promoters. Provision of Rs. 1.0 lakhs has been made in the state budget with Rs. 3750.00 as purely state share besides Rs. 6350.00 lakhs as GOI share under NFSM.

Rashtriya krishi vikas yojana : special additional central assistance scheme is being implemented from 2007-08 by govt. of India in order to reorient the agriculture development strategies the state to increase public investment in agriculture and allied sectors & aims at achieving the goal of reducing the yield gaps in important crops and thus maximizes returns to the farmers.

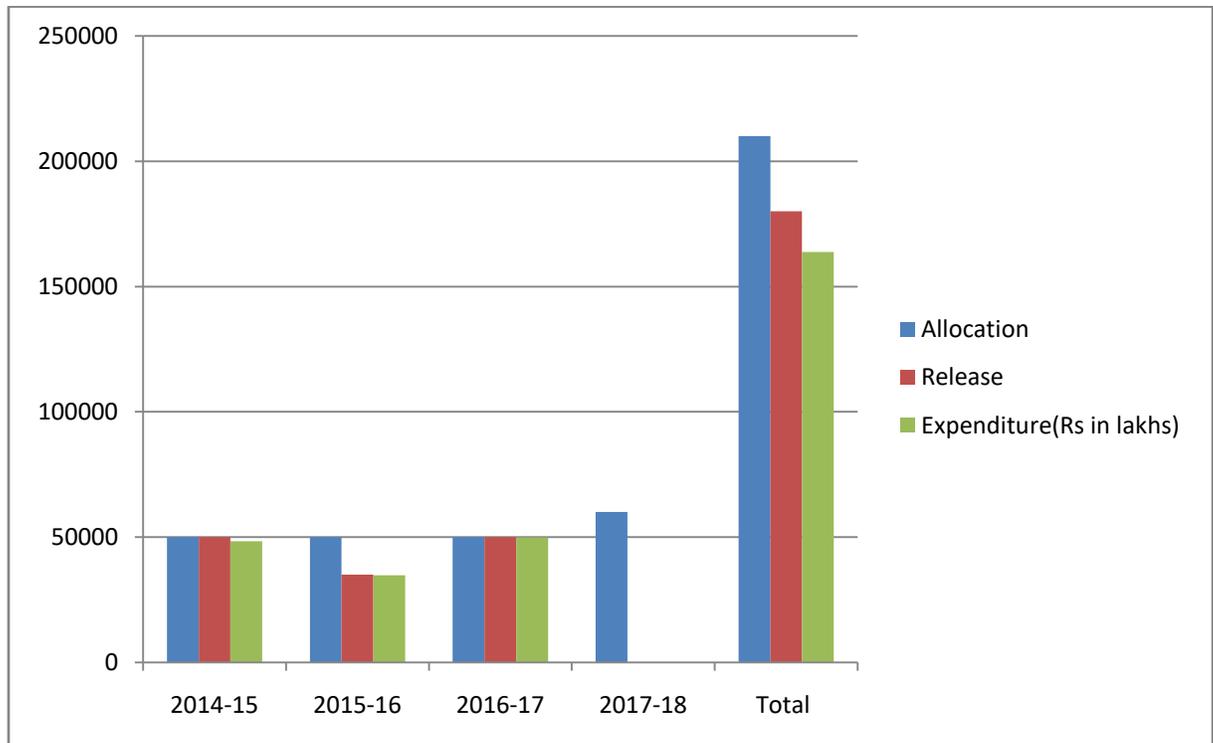
National mission for sustainable agriculture (NMSA): main interventions rainfed area development programme (RADP), micro irrigation, soil health management (SHM) & soil health card scheme (SHC), and paramparagath krishivikas yojana (PKVY), climate change & sustainable agriculture.

Allocation, releases & expenditure under Krishi Bhagya scheme from 2014-15 to 2017-18

Year	Allocation	Release	Expenditure(Rs in lakhs)
2014-15	50000.00	50000.00	48417.25
2015-16	50000.00	35100.00	34755.85
2016-17	50000.00	50000.00	49925.00
2017-18	60000.00	45000.00*	30652.00*
Total	210000.00	180100.00	163750.10

Source: Economic survey of Karnataka 2017-18

\*release & expenditure up to the end of November 2017.



Krishi bhagya scheme is being implemented in the form of package from the year 2014-15 to 2016-17. The components provided to farmers under subsidies for this year are construction of farm pond to collect the runoff water, lining of ponds with polythene lining to avoid percolation losses, distribution of diesel pump sets to lift the stored water, distribution of micro irrigation (sprinkler/drip) sets to irrigate the crops & shade net around the farm ponds to avoid evaporation & accidental deaths. Allocation releases & expenditure under krishi bhagya from 2014-15 to 2017-18 totally 1.89 lakh farmers have been taken the benefits of the scheme by utilizing Rs. 1637.49 crore. Ponds 163196 & convergence with watershed dept. 23676 & 2460 poly house. This programme was implemented in 23 districts of the state during 2014-15 covering 107 taluks of 5 major dry land areas & further during the year 2015-16 the scheme was extended to 131 taluks of 25 districts. Where the average annual rainfall was less than 850mm. during 2016-17 another taluk was added making the total 132 taluks across 25 districts.

#### IV. Conclusion:

The agricultural and cultivable land has marginally declined from 185.16 million hectare in 1980-81 to 181.95 million hectare in 2012-13 the agricultural and cultivable land are decreasing every year the government of India has been implemented various agricultural subsidies programmes and schemes have been put to cultivations leading to a net sown area of around 140 million hectare in last decades. During the eleventh five year plan developed 81.70 million hectare area of undertake the those programmes- rashtriya krishi vikas yojana. The integrated watershed management program (IWMP) has been merged with pradhan mantra krishisinchayee, yojana, bhoochetana scheme, under this scheme the farmers adopt specific technologies in specific crops to reduce the cost

of cultivation & increase the usage of farm machineries by converging ongoing schemes, crop insurance scheme is compulsory for loaner farmers & voluntary for non-loan farmers. The insurance companies will quotes commercial rates of premium but farmers will pay the fixed rates of premium as below & remaining premium will be shared equally by both govt. of Karnataka & govt. of India. Agriculture farmer's welfare purpose Indian government providing so many agricultural subsidies related programmes and scheme. Huge number of farmers is taking various subsidies scheme and programme benefits and they are improving their socio and economic conditions.

### References:

1. Ashok Gulati & Anil Sharma (1994), Agriculture under GATT: What it holds for India. Economic & political Weekly ,vol.29, no. 29, pp.1857-1863
2. Ashok Gulati (1989), input subsidies in Indian agriculture. economic & political weekly. Vol.24, No.25, PP. A57-A65. Jun 1989.
3. Deepak Nayyar & Abhijit Sen (1994), international trade & the agricultural sector in India. Economic and political weekly, vol.29. no.20, pp-1187-1203.
4. Economic survey of Karnataka.
5. Economy report of the president.
6. Government of India, Fertilizers Association, Fertilizer Statistics, various issues, New Delhi.
7. Government of India, State Electricity Boards, Annual Reports, Various Years.
8. Hand book of statistic on Indian economy.
9. Hanumanthappa K.m (2010), A classification of the concept of agricultural productivity in Karnataka. International journal of innovate research and development. Vol.3 issue 7.
10. Jagrup Singh Sidhu & D.S, Sidhu (1985), price support versus fertilizer subsidy: an evaluation. Economic & political weekly. Vol. 20, No.13, PP. A17-A22. Mar.1985.
11. Jaime Quizon (1985), withdrawal of fertilizer subsidies: an economic appraisal.
12. Lani Sinclair (1987), government irrigation subsidies result in huge economics & environmental losses worldwide. Ambio, Vol.16, No.231, PP. 149-151.
13. Marion Desquilbet & Herve Guyomard (2002), taxes and subsidies in vertical related markets. American journal of agricultural economics. Vol.84, No.4, PP. 1033-1041. Nov 2002.
14. Ministry of statistic programmes in India.
15. Nick Groesman & Dylan Carlson (2011), Agriculture policy in India: the role of subsidies USITC executive briefings on trade March 2011.
16. State of Indian Agriculture 2015-16. Govt of India ministry of agriculture & farmers welfare Department of Agriculture, cooperation 7 FARMERS WELFARE Directorate of Economics & statistics New Delhi.
17. Sudipto Mundle & Govinda Rao M (1994), pure public goods with other social or economic services. Economic & political weekly, vol. 29. No.44, p.2838.

18. Venkatachalam (2003), Infrastructure & agricultural development in Karnataka State. Agricultural development and rural transformation unit institute for social & economic change Nagarabhavi, Bangalore.
19. Won W. Koo & P Lynn Kennedy (2006), impact of agricultural subsidies on global welfare. American journal of agricultural economics, Vol.88, No.5 PP. 1219-1226. Dec 2006.