
The Union Budget for 2018-19 had announced the pre-determined principle to keep MSP at levels of one and half times of the cost of production. Accordingly, Government has increased the MSP for all mandated Kharif, Rabi and other commercial crops with a return of at least 50 per cent of cost of production for the agricultural year 2018-19 and 2019-20.

From time to time, some farmers and farmers' organizations have been agitating and making certain demands like increase in MSP for agricultural crops on the basis of C2 system.

Cost of production is one of the important factors in the determination of MSPs. While recommending its price policy, the CACP considers all costs in a comprehensive manner which is based on the methodology recommended by Expert Committees from time to time.

CACP considers both A2+FL and C2 costs while recommending MSP. CACP
reckons only A2+FL cost for return. However, C2 costs are used by CACP primarily as benchmark reference costs (opportunity costs) to see if the MSPs recommended by them at least cover these costs in some of the major producing States.

Government's price policy is to ensure remunerative prices to farmers by offering to procure their produce at MSP. However, farmers are free to sell their produce to the Government procurement agencies at MSP or in the open market whichever is advantageous to them.

Apart from increasing MSP, Government has taken several steps to provide remunerative prices to farmers for their produce which include undertaking procurement through designated procurement agencies, implementing e-National Agriculture Market (eNAM), enacting the Model Agricultural Produce and Livestock Marketing (Promotion & Facilitation) Act, 2017 and promoting Farmer Producer Organizations (FPOs).

The Government is working on market architecture so as to ensure that farmers get remunerative prices on their produce. These include setting up of Gramin Agricultural Markets (GrAMs) with a view to promote 22,000 number of retail markets in close proximity of farm gate; competitive and transparent wholesale trade at APMC through e-NAM.

The recently launched Umbrella Scheme “Pradhan Mantri Annadata Aay Sanrakshan Abhiyan (PM-AASHA)” provides for a holistic arrangement for assurance of a remunerative price for farmers. This Umbrella Scheme comprises Price Support Scheme (PSS) for pulses, oilseeds and copra, Price Deficiency Payment Scheme (PDPS) and Pilot of Private Procurement & Stockist Scheme (PPSS) for oilseeds to ensure MSP to the farmers.

MSP operations are given wide publicity through pamphlets, banners, sign boards, radio, TV and advertisements through print & electronic media. In addition to that farmers are made aware of the quality specifications and purchase system to facilitate the farmers to bring their produce conforming to the specifications.

Subsidies provided in Agricultural Sector

Some of the component/schemes through which the Government provides subsidies to farmers are as follows

Seeds

The Department is implementing Sub-Mission on Seeds & Planting Materials (SMSP) from the year 2014-15 to promote production and multiplication of quality seeds of agricultural crops, so that the required quantities of seeds could be made available to farmers in the country. To upgrade the quality of farmers' saved seeds, financial assistance for distribution of foundation/certified seeds at 50% cost of the seeds for cereal crops and 60% for pulses, oilseeds, fodder and green manure crops for production of quality seeds is available/provided for one acre per farmer under the component Seed Village Programme of SMSP. The objective of this scheme is to make available improved /high yielding varieties of seeds to farmers in time and to achieve self-sufficiency in respect of seeds at village level itself. The above scheme/component is demand driven and implemented by the concerned State/implementing agencies for welfare of all the categories of farmers which help in enhancing productivity/production of various crops and also improving profitability of the agriculture sector (farmers' income) in the country.

Mechanization & Technology

(A) Sub Mission on Agricultural Mechanization (SMAM) is being implemented w.e.f. 2014-15. The SMAM provides a suitable platform for converging all activities for inclusive growth of agricultural mechanization by providing a 'single window' approach for implementation with a special focus on small & marginal farmers with the following objectives:

1) Increasing the reach of farm mechanization to small and marginal farmers and to regions where availability of farm power is low;

2) Promoting 'Custom Hiring Centres' to offset the adverse economies of scale arising due to small landholding and high cost of individual ownership;

3) Creating hubs for hi-tech & high value farm equipments;

4) Creating awareness among stakeholders through demonstration and capacity building activities;

(B) A special Scheme to support the efforts of the Governments of Haryana, Punjab, Uttar Pradesh and the NCT of Delhi to address air pollution due to stubble burning and to subsidize machinery for farmers for in-
situ management of crop residue, a new Central Sector Scheme on 'Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue' in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi for the period from 2018-19 to 2019-20 has been launched.

**Irrigation**

There are three components of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

i. PMKSY (Har Khet Ko Pani)
ii. PMKSY (Watershed) and
iii. PMKSY (Per Drop More Crop)

Subsidy component is only admissible for PMKSY (Per Drop More Crop). PMKSY (Per Drop More Crop): DAC&FW is implementing Per Drop More Crop component of PMKSY. The PMKSY- Per Drop More Crop mainly focuses on enhancing water use efficiency at farm level through precision/micro irrigation (Drip and Sprinkler Irrigation). Besides promoting precision irrigation and better on-farm water management practices to optimize the use of available water resources, this component also supports micro level water storage or water conservation/management activities to supplement Micro Irrigation.

**Godowns**

To promote creation of scientific storage capacity for storing farm produce, processed farm produce and agricultural inputs etc., to reduce post-harvest & handling losses, promote pledge financing and market access including marketing infrastructure (other than storage), the DAC&FW is implementing a capital subsidy sub-scheme “Agricultural Marketing Infrastructure (AMI)” of Integrated Scheme for Agricultural Marketing (ISAM) across the country.

AMI is a demand driven, credit linked, back ended subsidy scheme and no State/beneficiary-wise allocation has been made under the scheme. Beneficiaries viz, farmers, Agri-preneurs, FPOs, Individuals, Cooperatives, and state agencies etc. are eligible for assistance. Under the scheme, the subsidy @ 25% for plain areas and 33.33% for NER, hilly area, Women/SC/ST promoters & FPOs etc is available.

**Fertiliser**

Urea is being provided to farmers at a statutory notified Maximum Retail Price (MRP). The MRP of a 45 kg bag of Urea is Rs.242 per bag (exclusive of charges towards neem-coating and taxes as applicable) and the MRP of a 50 kg bag of Urea is Rs.268 per bag (exclusive of charges towards neem coating and taxes as applicable). The difference between the delivered cost of Fertilizers at farm gate and net market realization by the urea units is given as subsidy to the Urea manufacture/importer by the Govt. of India. Accordingly, all farmers are getting Urea at affordable subsidized price. With respect to Phosphatic and Potassic (P&K) Fertilizers, the D/o Fertilizers is providing subsidy on P&K Fertilizers. Further, as far as P&K is concerned, the Government has implemented Nutrient Based Subsidy Policy w.e.f. 1.4.2010 for Phosphatic and Potassic (P&K) Fertilizers. Under the policy, a fixed amount of subsidy, decided on an annual basis, is provided on subsidised P&K fertilizers depending on their nutrient content. Under this policy, MRP is fixed by fertilizer companies as per market dynamics at reasonable level which is monitored by the Government. Accordingly, any farmer including a poor and marginal farmer who is buying these fertilizers is getting benefits of subsidy.

Subsidies to the farmers are also given as part of various other schemes such as National Food Security Mission (NFSM), Mission for Integrated Development of Horticulture (MIDH), Rashtriya Krishi Vikas Yojana (RKVY) and Paramparagat Krishi Vikas Yojana (PKVY) etc for the benefits of the farmers. Most of the schemes are targeted to benefit the small and marginal farmers, the classification of which is based on the size of their land holding. Keeping in view of the objectives of various schemes, which offer subsidies to farmers, periodic review of the same is an ongoing activity and whenever any change/modification is required in the scheme(s) for the overall benefit of the farmers, the same is carried out.

**Conversion of Barren Land into Arable Land**

As per the Desertification and Land Degradation Atlas of India, prepared by the Space Applications Centre for the period 2011-2013, 96.4 million hectares i.e. 29.32% of the Total Geographical Area of the country is undergoing the process of desertification/land degradation. Approximately 6.35% of land in Uttar Pradesh is undergoing desertification/degradation.

As per the Special Report on Climate Change & Land of Intergovernmental Panel for Climate Change released in August, 2019, land use change, land-use intensification and climate change have contributed to desertification and land degradation. The report highlights that climate
change, including increases in frequency and intensity of extremes, has adversely impacted food security and terrestrial ecosystems as well as contributed to desertification and land degradation in many regions.

In order to reclaim and develop barren lands, Indian Council for Agricultural Research (ICAR) through Indian Institute of Soil and Water Conservation (IISWC) has developed several location specific bio-engineering measures to check soil erosion due to run-off of rain water. Central Arid Zone Research Institute (CAZRI), Jodhpur has developed sand dune stabilization and shelter belt technology to check wind erosion. The Council through Central Soil Salinity Research Institute, Karnal and All India Coordinated Research Project (AICRP) on Salt Affected Soils has developed reclamation technology, sub-surface drainage, bio-drainage, agro-forestry interventions and salt tolerant crop varieties to improve the productivity of saline, sodic and waterlogged soils in the country. ICAR through National Innovations on Climate Resilient Agriculture (NICRA) demonstrated Climate resilient technologies namely drought tolerant short duration varieties, crop diversification, integrated farming systems, soil and water conservation measures etc. in 151 most vulnerable districts in the country to minimize vulnerability against climate change. Agricultural Contingent Plans for 651 districts have also been prepared to cope up with any climate adversities.

National Afforestation & Eco Development Board (NAEB) Division of the Ministry of Environment, Forest and Climate Change is implementing the "National Afforestation Programme (NAP)" for ecological restoration of degraded forest areas under which an area of over 2 million ha has been approved for afforestation at a cost of Rs.3874 crore.

Various other schemes like Green India Mission, fund accumulated under Compensatory Afforestation Fund Management and Planning Authority (CAMPA), Nagar Van Yojana etc. also help in checking degradation and restoration of forest landscape. MoEF & CC also promote tree outside forests realizing that the country has a huge potential for increasing its Trees Outside Forest (TOF) area primarily through expansion of agroforestry, optimum use of wastelands and vacant lands.

Department of Land Resources has sanctioned 8214 watershed development projects in 28 States (except Goa)[during the period 2009-10 to 2014-15] (now 27 States and 2 Union Territories of Jammu & Kashmir and Ladakh) covering an area of about 39.07 million hectare under Integrated Watershed Management Programme (IWMP) principally for development of rainfed portions of net cultivated area and culturable wastelands. The IWMP was amalgamated in 2015-16 as the Watershed Development Component of the Pradhan Mantri Krishi Sinchayee Yojana (WDC-PMKSY).

India has also committed to achieve land degradation neutrality status by 2030. In addition, at the recently concluded 14th session of the Conference of Parties of United Nations Convention to Combat Desertification held in India in September, 2019, India has raised its ambition to restore degraded land from 21 mha to 26 mha by 2030.

Impact of Organic Foods on Fertilizer Industry

Government of India has been promoting balanced and judicious use of fertiliser in conjunction with organic fertiliser, bio fertiliser on soil test based recommendations. All India Consumption of major fertilizers namely Urea, DAP, MOP, Complexes and SSP, during the years 2016-17, 2017-18 and 2018-19 was 536.11 LMT, 543.83 LMT and 562.09 LMT respectively. The consumption of fertilizer depends on many factors namely, fertility of soil, availability of moisture in soil. Further, overall area under organic farming in the country in comparison to the gross cropped area is very less hence would not impact the chemical fertiliser industry though requirement of bio fertiliser would grow.

The demand of organic food is growing due to being chemical free and hence more safe. In order to encourage the use of organic/ bio fertilisers, Government of India has been promoting organic farming under two dedicated schemes namely Mission Organic Value Chain Development North Eastern Region (MOVCDNER) and Parampragat Krishi Vikas Yojana (PKVY) since 2015 through State Governments.

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