



ROUNDTABLE ON
Organic Fertilisers / Biofertilisers
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Important Policies

Besides Central Government, State Governments have also been providing policy support for decades. Some of the policy initiatives include-

Name of the Scheme	Incentives
National Biogas and Manure Management Programme (NBMMP)	A Central Sector Scheme, which provides for setting up of Family Type Biogas Plants mainly for rural and semi-urban/households where a family type biogas plant generates biogas from organic substances such as cattle –dung, and other bio-degradable materials such as biomass from farms, gardens, kitchens and night soil wastes etc.
Biofertilizers-Biopesticides unit	25% of total financial outlay subject to the maximum of Rs.40 lakh per unit, whichever is less.
Fruit & Vegetable Market Waste Compost Unit	33% of total financial outlay subject to the maximum of Rs.60 lakh per unit, whichever is less.
Setting up Soil testing lab	33% of total financial outlay subject to the maximum of Rs.60 lakh per unit, whichever is less.
Setting up Vermicompost	Financial assistance for production units @ 50% of the cost subject to a maximum of Rs.30000/- per beneficiary.
Paramparagat Krishi Vikas Yojana	Groups of farmers would be motivated to take up organic farming under the scheme and every farmer will be provided Rs.20000 per acre in three years for seed to harvesting of crops and to transport produce to the market.
NMSA	100% assistance by the state government for setting up mechanization of fruit/ vegetable waste and for setting up of biofertilizer and biopesticide manufacturing units. Also, Rs.85 lakh assistance for setting up a biofertilizer testing quality control laboratory
National Horticulture Mission (NHM) and Horticulture Mission for North East and Himalayan State	50% subsidy for a vermicomposting unit <ul style="list-style-type: none"> • INR30,000 per beneficiary for adopting organic farming • INR5 lakh for farmer group covering an area of 50 ha
City Compost	Providing assistance to the City Compost Manufacturers / Marketers of Rs.1500/- Per MT as Marketing Development Assistance (MDA)
Nutrient Based Subsidy	Government of India is implementing the Nutrient Based Subsidy (NBS) policy w.e.f. 1st April 2010. The NBS deals with 22 grades of decontrolled fertilizers namely DAP, MAP, TSP, DAP Lite, MOP, SSP, Ammonium Sulphate and 15 grades of complex fertilizers. These fertilizers are provided to the farmers at the subsidized rates based on the nutrients (N, P, K & S) contained in these fertilizers. Additional subsidy is also provided on the fertilizers fortified with secondary and micronutrients as per the Fertilizer Control Order such as Boron and Zinc.

Name of the Scheme	Incentives
	The subsidy given to the companies is fixed annually on the basis of its nutrients content (i.e. Nitrogen, Phosphate, Potash and Sulphur) on per kg basis which is converted into subsidy per ton depending upon the nutrient content in each grade of the fertilizers. Under this scheme, Maximum Retail Price (MRP) of fertilizers has been left open and manufacturers/marketers are allowed to fix the MRP at reasonable level. These rates are determined taking into account the international and domestic prices of P&K fertilizers, exchange rate, inventory level in the country.
Mission Organic Value Chain Development	Promotion of Organic Inputs under Organic & INM Components of Soil Health Management, assistance is provided for vermicompost, Bio-fertilizers (Liquid / solid), Waste compost, Herbal extracts etc. including PROM @ 50 % of cost subject to a limit of Rs.5000/- per ha and maximum Rs.10000 per beneficiary.
GOBARdhan	The objective of the scheme is to increase rural income, rural jobs and to keep villages clean through solid waste management by managing and converting cattle dung and solid waste in farms to compost, bio-slurry, bio-gas and bio-CNG, at the same time supporting biodegradable waste recovery and conversion of waste into resources.

Policy Overview

- Organic fertilizers considered vital for sustainable agriculture from the very first plan of the Government of India.
- Organic fertilizers promoted under different nomenclature and terminology like farmyard compost, city compost, manure, bioslurry, biofertilizer etc.
- Some of the variants and categories of organic fertilizers included in Fertilizer Control order (FCO) of Government in India with needful specifications to be followed.
- Lack of coordination and coherence in efforts of different ministries and departments, very limited acceptance and propagation of organic fertilizers so far.
- Despite several problems with chemical fertilizer, production and sale rising steadily and now at 55 million tons. Organic fertilizer production and sale data not available but very small in comparison.
- Standardization, testing, quality control etc. with organic fertilizers still not in place. Resultantly, market development in nascent stage even now.
- City compost considered very valuable for organic farming decades back, not yet accepted by policy makers and users on a large scale.
- Biofertilizers with enormous benefits to all stakeholders also still evolving and far short of potential it has.
- Evolution of Sikkim as an organic state is a role model for other smaller states in the North East.

- Work of National Centre of Organic farming (NCOF) still not impactful.
- Policies not backed by effective implementation leading to misuse/abuse of subsidies and funds of the Governments.

In short, several steps from supply side but insufficient actions on demand side leading to organic fertilizers/ biofertilizers failing to become viable alternative or adjunct to chemical fertilizers.

Challenges

- Excessive thrust on fertilizers to boost up production for food security has conditioned an average farmer to go for chemical fertilizers.
- Subsidy regime, standardization, massive manufacture, imports and distribution of chemical fertilizers biggest challenge to go for alternatives despite several medium and long term advantages.
- Intrinsically, chemical fertilizer companies not favorably disposed to manufacture or marketing of organic and biofertilizers.
- Absence of sizeable private players in organic and biofertilizers a deterrent for market creation for them.
- Due to lack of harmonization, proper standards, specifications, tests and quality control, organized markets yet to evolve for organic fertilizers.
- Failure of extension, back up and follow up support responsible for lack or loss of confidence among farmers.
- Plenty of hype in urban centres for benefits of organic fertilizers not matched by farmers as yet, since marketing or demand side interventions still not in place.
- Liquid biofertilizers found to be great for reducing chemical fertilizer consumption by 15-20% in several states not being expanded as yet owing to varieties of technical and extraneous factors.
- Very limited facilities of soil testing, fertilizer testing/analysis obstructing the spread.
- Lack of research based studies on use of bioslurry by MNRE or its affiliates to boost confidence of users.
- Attempts made for promotion of Phosphate reinforced Organic Manure (PROM) not successful due to poor marketing and extension.
- Similar fate affecting bioslurry, sludge compost and farmyard compost propagation.
- City compost not included as an organic fertilizer due to several extraneous reasons. No effort made to scientifically and objectively involve producers and users to optimally use this abundantly available resource.
- Formulation of schemes not found holistic. Like GOBARdhan for converting organic, Bio-Agro resources not having desired focus on value from organic fertilizers, which is a direct output.
- Absence of harmonious actions even in the space of research, product/ applications/ market development.

- Lack of concerted action to reduce import bill of Rs.80000-90000 crore through use of organic and biofertilizers at all levels.
- In a nutshell, policies and implementation suffering from vision and tangible actions under the umbrella of serious structural issues faced by agricultural sector. For example, failure to see the reduction in chemical fertilizer need through use of Liquid biofertilizers (LBF) not given high priority, though it can save import bills substantially.

Opportunities

- Swachh Bharat Abhiyan (SBA) a lot more than toilets. All types of wastes to be converted into resources. And hence big opportunity through GOBARdhan, NBMMP, SATAT etc. at Centre and treated waste water (TWW) at State level.
- According to study of GERMI and GIZ, huge biomass (350 Million tons of press mud, 150 Million tons wheat straws, 150 Million tons of paddy husk etc.) available annually. Huge amount of animal waste (30 crores of cattle for example) also available for conversion into biogas and/or fertilizer.
- With thrust on treating sewage and waste water large quantities of sewage sludge to become available. By adopting suitable technologies like that of BARC, safe and cost effective organic fertilizers to become available in near future.
- Effective implementation of MSW rules, a big opportunity for compost stroke bioslurry.
- Favorable climate for organic food and produce all over the world. Big investments by companies like Amazon in organic food chain attracting huge attention.
- Nutrient value of organic fertilizers very high due to presence of micro nutrients or NPK when produced properly.
- Enhanced awareness in urban areas of India about negative impact of chemicals on health and hence shift to organic millets, grains, vegetables, fruits etc. even at higher prices.
- Awareness among farmers about reduction in quantity of chemical fertilizers through LBF and hence attraction to them from reliable sources like IFFCO, GSFC, AAU etc.
- Evolution of variety of products with relevant characteristics as demanded by the users. Value addition possibilities by appropriate methods.
- Creation of application development, extension, testing, analytical and quality control ecosystem on the lines of other domains like dairying, clinical laboratories etc.

In a way, huge untapped entrepreneurial opportunities owing to health/ nutrition/ safety factors associated with organic foods.

Way forward- Suggestions and Recommendations

- Fertilizer companies to use their market connect and reach to offer integrated solutions without restricting themselves to only chemical fertilizers, for example companies like IFFCO, GSFC, GNFC etc. to expand their vision to offer bouquet of chemical, organic and biofertilizers and to use their marketing strength to study the societal and farmer's needs for developing and offering optimal solutions.

- All stakeholders to think of national imperative of holistic agriculture and foreign exchange saving possible through organic/ biofertilizers.
- Focus on standardization, testing and quality control extensively to ensure delivery of promised/ agreed products and to expand market possible through positive results.
- Investment by Governments, fertilizer companies and departments in effective communication through multimedia and by extensive demonstration.
- Linking organic/ biofertilizers to “Circular economy”, climate change and global warming to showcase environmental benefits to all.
- Motivation to people to go for small kitchen gardens for organic vegetables/ fruits and to experience improved nutrition and health.
- Spreading the benefit of millets, pulses and organic vegetables in mid-day meal and similar schemes.
- Aggressive action on low hanging fruits like
 - Cattle, Buffalo or Poultry for biogas and fertilizer and “Gomutra” for increasing income of farmers.
 - Vegetable/ Food/ kitchen waste in APMC/ Hotels/ Canteens/ Clubs/ Hostels that can be converted into Biogas for use in cooking and organic fertilizer.
 - Allowing mixing of urea dust with compost.
- Modification of NPOP to reduce minimum requirement of production and inclusion of dairy waste and others including city compost and Mandi waste. This can incentivize decentralized and small production centres.
- Creation of ecosystem to bring research labs, entrepreneurs, financing bodies, policy makers etc. to boost up the market for organic/ biofertilizers.
- Assess various combination and integration possibilities like
 - Mixing chemical fertilizers with Liquid biofertilizers.
 - Combining chemical with organic to maintain C-N ratio.
 - Doubling price of Urea and giving three bags of compost, one bottle of Rhizobium and one bottle of PSB free of cost to offset increase in price of urea.
 - Linking chemical fertilizer companies to Municipal corporations to set up composting facilities. Such compost and biofertilizers can be marketed with chemical fertilizers.
 - Learn from successful places like Madurai, Coimbatore who enrich compost with microbes and successfully promote it as a soil conditioner.
- Phasing out subsidies in a calibrated manner.
- Out of box and innovative approach all through the value chain creating win-win situation for all stakeholders.