# Fertiliser Subsidy: An Instrument to Improve Soil Health Through Balanced Fertilisation

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IFA/FAI National Seminar 16-17, March 2015, New Delhi, India

#### **Nutrients for Soil Health**

- Primary Nutrients
- Secondary Nutrients
- Micro Nutrients
- Organic Carbon



Major Policies				
Year				
1957	Fertiliser Control Order (FCO) enacted			
1976	Subsidy introduced on Phosphatic fertilisers @ Rs.1250 per tonne of P <sub>2</sub> O <sub>5</sub>			
1977	Retention Pricing Scheme (RPS ) for nitrogenous fertilisers implemented			
1992	Decontrol of P & K fertilisers based on the recommendations of JPC			
2003	New Pricing Scheme (NPS) on urea implemented replacing RPS			
2005	Task Force on Balanced Use of Fertilisers			
2008	(i) Guidelines for production and use of Customized Fertilizers (ii) Policy for encouraging fortified and coated fertilizers			
2010	Nutrient based subsidy policy on P & K fertilisers implemented.  Urea continued to remain under control			

# **Policy for Urea**

- · Urea is the major carrier of nitrogen for Indian agriculture
- Urea is highly regulated
- · Retail price of urea is controlled
- · Production, movement, distribution are regulated
- Subsidy is determined according to New Pricing scheme (NPS).
- · Subsidy varies from plant to plant
- Retail price of urea is low, far lower than neighbouring and other countries
- Dependence on subsidy is vey high (70-75 per cent of cost of production/ import).
- Imports canalised through 3 State Agencies

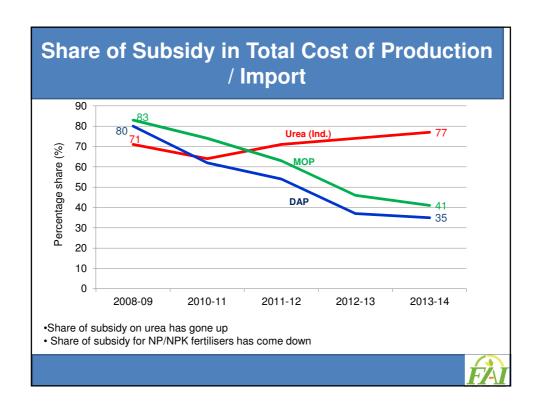


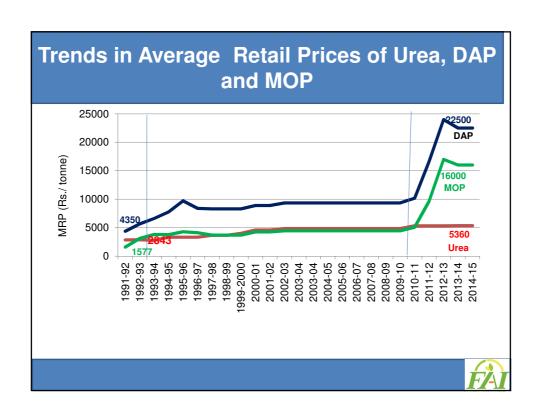


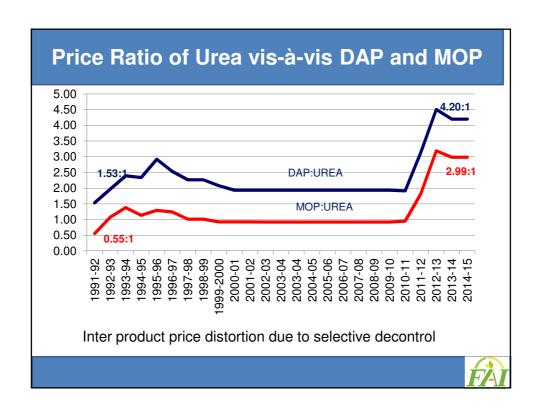
# Policy for P & K Fertilisers

- P & K fertilisers are covered under Nutrient based subsidy (NBS) policy w.e.f 1<sup>st</sup> April 2010
- · Fixed subsidy for N, P, K and S
- · Additional subsidy for fertilisers fortified with boron and zinc
- Currently, NBS is applicable on 22 fertiliser products
- Subsidy under NBS is same both for domestic and imported products
- Dependence on subsidy is about 35 to 41 per cent of the cost of production/ imports
- · Urea left out of the ambit of NBS policy









	Changes		
Year	N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O (All-India)	State	N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub>
Ideal ratio	4:2:1		(2013-14)
1991-92	5.9:2.4:1	Haryana	60.7:12.7:
1992-93	9.5:3.2:1	Punjab	56.8:13.5:
1993-94	9.7:2.9:1	Uttar	28.4:7.3:1
2009-10	4.3:2.0:1	Pradesh	
2010-11	4.7:2.3:1		
2011-12	6.7:3.1:1		
2012-13	8.2:3.2:1		
2013-14	8.0:2.7:1		

# Deficiency of Secondary and Micronutrients in Indian soils

Increasing deficiency of secondary and micronutrient have started limiting crop response to NPK application

Nutrient	% deficient samples
Sulphur	40
Zinc	48
Boron	33
Iron	12
Manganese	5



### **Policy for Micronutrients**

- ➤ MRP for fortified urea with zinc is regulated which is non- remunerative
- The additional subsidy for NP/NPK fertilisers fortified with zinc and boron is also inadequate
- There has been only negligible production of fortified fertilisers



# **Organic Manure / Fertilizers**

- Carbon content of soils is declining
- Organic content of soils is essential for improving physical and biological properties of soils
- Synergistic effect of organic manure & chemical fertilisers for higher use efficiency of plant nutrients is well known / established



# **Sources of Organic Matter**

- City Compost
- Farm yard Manure



# **City Compost**

- Potential for production of 4 million tonnes of city compost
- Production capacity: 1.5 million tonnes
- Cost for farmers : Rs. 6000 6500/MT
- ➤ Affordable price for farmers: Rs. 2500 3000/MT
- ➤ Actual production: 0.15 0.20 million tonnes



### **Farm Yard Manure**

- Decreasing population of farm animals due to mechanisation
- Large population of animals of dairy, piggery and poultry farms
- Increasing use of LPG as cooking fuel
- > Recycle of crop residue
- Composting of dung and crop residue has declined



### **Way Forward**

- Need for price correction of primary nutrients
- Remunerative price / subsidy for fortified fertilisers
- Subsidy support for production and marketing of city compost
- Promote farm yard manure
  - Collective composting by village entrepreneurs
  - Financial support to composting



### Message

- Fertiliser subsidy of more than USD 12 billion should be utilized to promote balanced fertilisation
- This will optimise use of natural resources, maximise return on investment and most important, will sustain soil health for sustainable agriculture



