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The Outlook for fertilizer demand in India – What scenarios

Satish Chander
The Fertiliser Association of India, India

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Outline of presentation

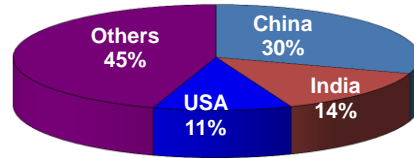
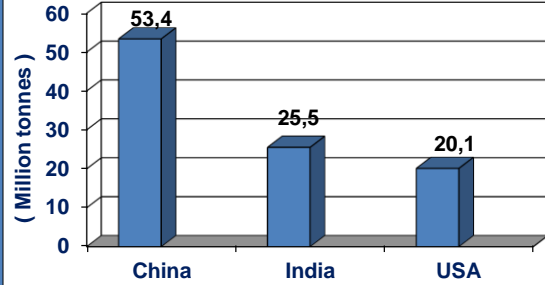
1. Recent trends in fertiliser consumption
2. Pricing and subsidy policy
3. Factors influencing fertiliser demand
4. Outlook for fertiliser demand
 - Assumptions
 - Projected demand for fertiliser nutrients – Alternative scenarios
5. Conclusion

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Dominant position of India in world fertiliser Consumption

- India ranks second in world fertiliser nutrient consumption next only to China
- 14 per cent share in world fertiliser consumption
- Fertiliser consumption in India has increased manifold over the past four decades
- Per hectare consumption still low compared to neighbouring countries (China 439 kg; Bangladesh 231 kg; Pakistan 164 kg; India 151 kg)

Rank of India in world consumption of fertiliser nutrient (Million tonnes) - 2012



Total Fertiliser consumption (Production + Import)

52 Million tonnes



Total Districts (640)



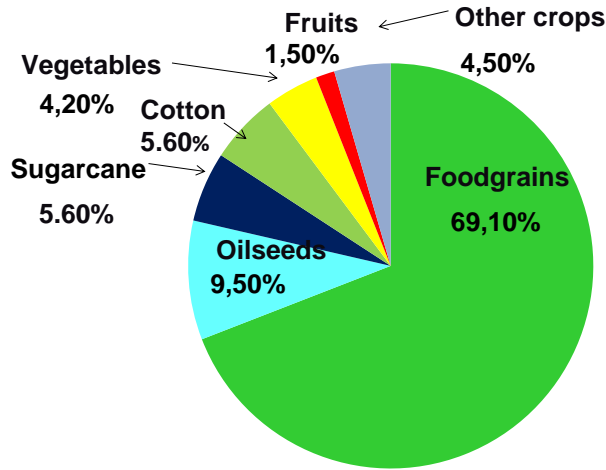
Total Villages (640,867)



Farmers (138 million farm holdings)

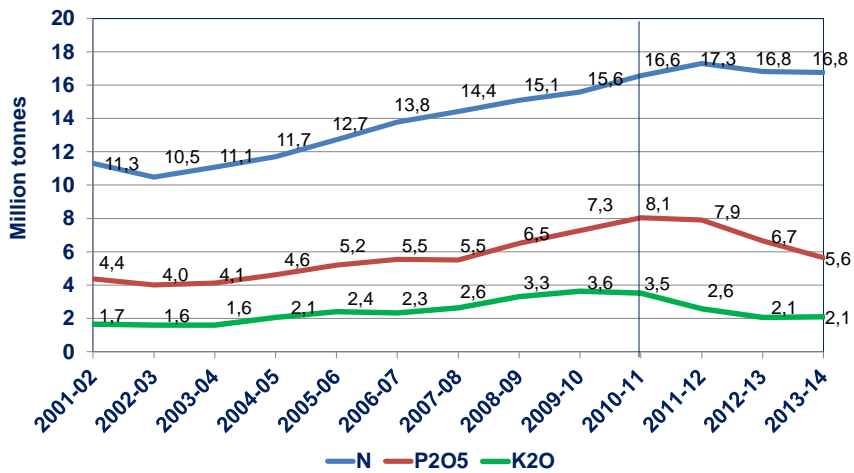


Fertiliser use by crops in india



Source: Based on data presented in All-India Report on Input Survey, 2006-07, DAC, Agricultural Census Division.

Trends in consumption of fertiliser nutrients



Recent trends in consumption of major fertilisers (Million tonnes)

Fertiliser	2009-10	2010-11	2011-12	2012-13	2013-14
Urea	26.67	28.11	29.57	30.00	30.60
DAP	10.49	10.87	10.19	9.15	7.36
NP/ NPKs	8.02	9.76	10.39	7.53	7.26
SSP	2.65	3.83	4.75	4.03	3.88
MOP**	4.63	3.93	3.03	2.21	2.28
Total Material*	53.34	57.49	59.04	53.78	51.97

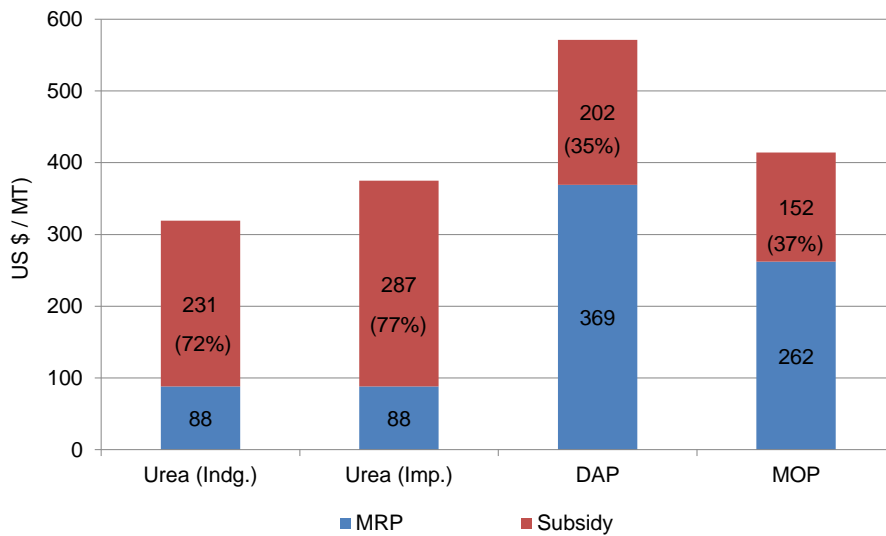
• = Includes other fertilisers. ** = For direct application.

Current farmer's price (Maximum Retail price)

Fertiliser	US \$/ MT
Urea	88
DAP	369
NP/NPKs	227-344
SSP	109
MOP	262

Exchange rate assumed = Rs. 61 / US\$

Farmer's price, subsidy and subsidy as % of total cost



Pricing/ Subsidy policy

Urea

- High variable subsidy
- Low controlled retail price

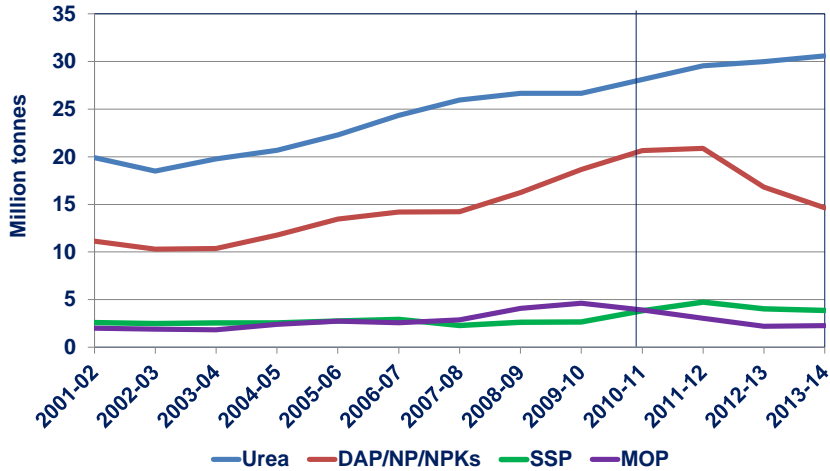
DAP/ NP/NPKs, SSP and MOP

- Low fixed subsidy per tonne
- High retail prices

Result

- Sustained increase in urea demand
- Subdued demand for phosphatic and potassic fertilisers
- Growing imbalance in NPK use ratio

Trends in consumption of Urea, DAP/NP/NPKs, SSP and MOP



Fertiliser demand – factors

- ✓ Weather
- ✓ Water storage in reservoirs
- ✓ Crop area
- ✓ Fertiliser price
- ✓ Rates of subsidy
- ✓ Minimum support price
- ✓ Government policy

Factors influencing fertiliser demand				
	2011-12	2012-13	2013-14	2014-15 (Forecast)
Fertiliser consumption (N+P+K) (Million tonnes)	27.79	25.54	24.48	25.21
Rainfall as % of Long period average (LPA)	1% above	8% below	6% above	11% below
% Water storage in reservoirs as on 30th Sept	86.4%	74.6%	86.2%	79.5%
Subsidy rates (Rs/tonne)				
DAP	19763	14350	12350	12350
MOP	16054	14400	11300	9300
Average exchange rate Rs/ USD	47.92	54.42	60.51	60.18
NPK use ratio	6.7:3.1:1	8.2:3.2:1	8.0:2.7:1	8.0:2.7:1

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Outlook for fertiliser demand Scenario I	
Assumptions	
<ol style="list-style-type: none"> 1. Existing fertiliser policy continues <ul style="list-style-type: none"> - Urea remains under control - Retail price of urea remains unchanged 2. Normal weather 3. Cost of production / import stable 4. Subsidy levels stable 5. Exchange rate stable 6. Increase in Minimum Support prices of crops (MSP). 	

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Projected demand for fertiliser nutrients (Million tonnes) Scenario I

Year	N	P2O5	K2O	Total	NPK use ratio
2014-15 (Est.)	17.19	5.88	2.14	25.21	8.0:2.7:1
Forecast					
2015-16	17.65 (2.7%)	6.11 (3.9%)	2.26 (5.6%)	26.02 (3.2%)	7.8: 2.7:1
2016-17	18.16 (2.9%)	6.36 (4.1%)	2.39 (5.8%)	26.91 (3.4%)	7.6: 2.7:1
2017-18	18.73 (3.1%)	6.64 (4.4%)	2.53 (5.9%)	27.90 (3.7%)	7.4: 2.6:1
2018-19	19.34 (3.3%)	6.96 (4.8%)	2.69 (6.3%)	28.99 (3.9%)	7.2:2.6:1
2019-20	20.01 (3.5%)	7.29 (4.7%)	2.85 (5.9%)	30.15 (4%)	7.0: 2.6:1

() = % change over the previous year.

Outlook for fertiliser demand Scenario II

Assumptions

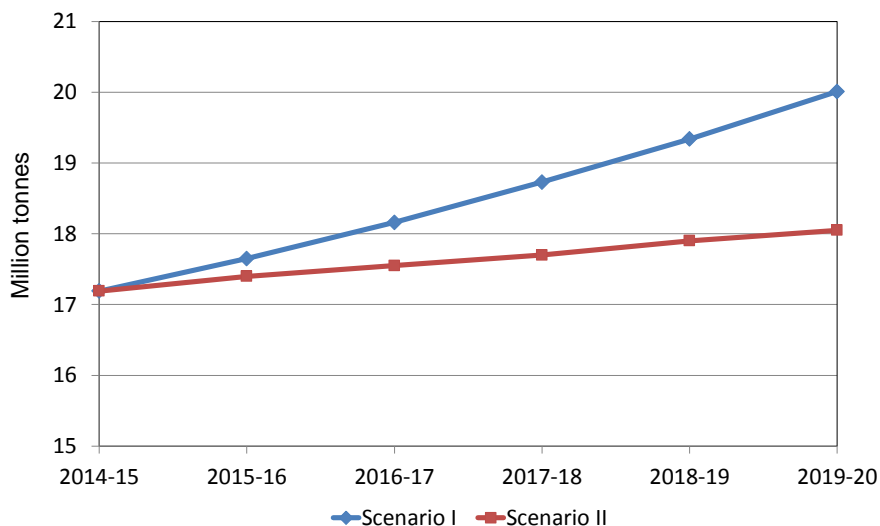
1. Reform in fertiliser sector
 - Increase in urea price
 - Ultimate deregulation of urea
 - De-canalisation of urea
2. Stable policy for P & K fertilisers
3. Encouragement of new products
4. Balanced use of fertilisers
5. Normal weather
6. Cost of production / import stable
7. Subsidy levels stable
8. Exchange rate stable
9. Normal Increase in MSP.

Projected demand for fertiliser nutrients (Million tonnes) Scenario II

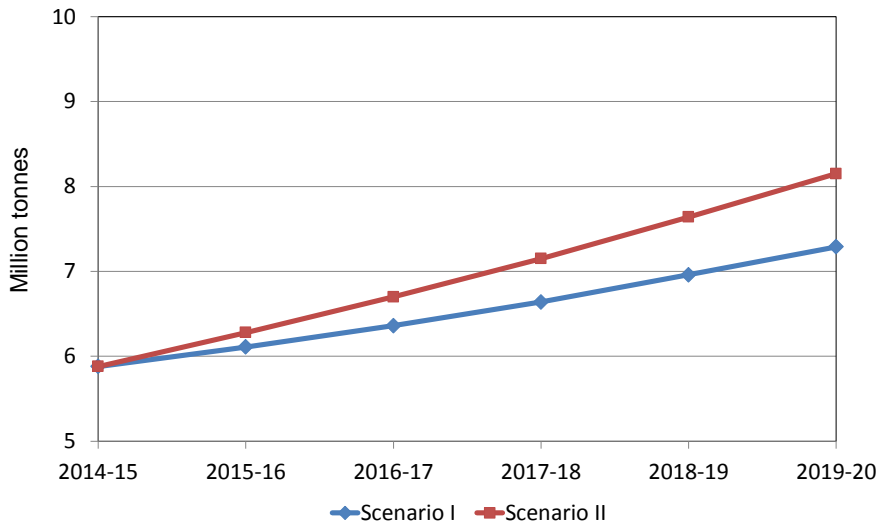
Year	N	P2O5	K2O	Total	NPK use ratio
2014-15 (Est.)	17.19	5.88	2.14	25.21	8.0:2.7:1
Forecast					
2015-16	17.40 (1.2%)	6.28 (6.8%)	2.42 (13.1%)	26.10 (3.5%)	7.2: 2.6: 1
2016-17	17.55 (0.9%)	6.70 (6.7%)	2.75 (13.6%)	27.00 (3.4%)	6.4: 2.4:1
2017-18	17.70 (0.9%)	7.15 (6.7%)	3.11 (13.1%)	27.96 (3.6%)	5.7:2.3:1
2018-19	17.90 (1.1%)	7.64 (6.9%)	3.52 (13.2%)	29.06 (3.9%)	5.1:2.2:1
2019-20	18.05 (0.8%)	8.15 (6.7%)	4.00 (13.6%)	30.20 (3.9%)	4.5: 2.0:1

() = % change over the previous year.

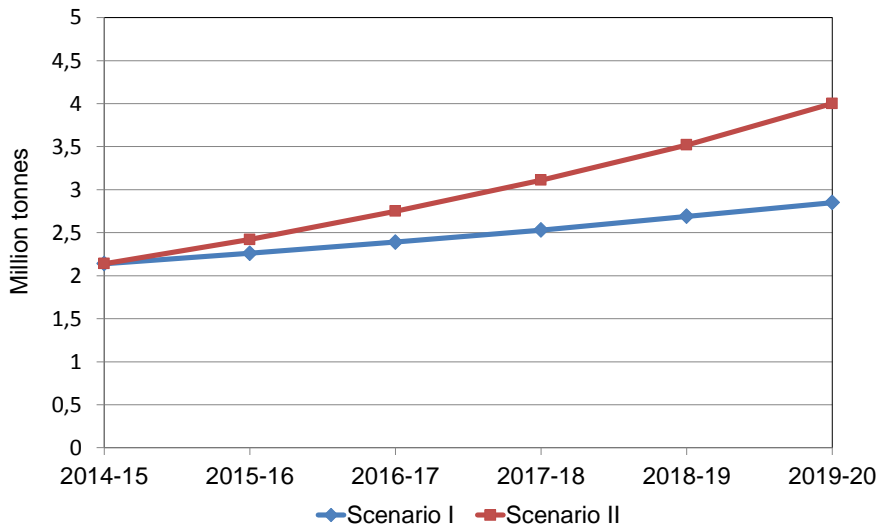
Alternative scenarios of projected demand for nitrogen



Alternative scenarios of projected demand for phosphate



Alternative scenarios of projected demand for potash



Projected demand for fertiliser nutrients (Million tonnes) 2019-20

Year	N	P2O5	K2O	Total	NPK use ratio
Scenario I	20.01	7.29	2.85	30.15	7.0: 2.6:1
Scenario II	18.05	8.15	4.00	30.20	4.5: 2.0:1

Conclusion

- **Present policy needs revision**
- **Revision in urea policy**
 - phased increase in retail price of urea
 - urea sector is needed to be brought under NBS
 - De-canalization of urea
- **Full reform in fertiliser sector will lead to:**
 - Efficient and balanced use of fertilisers
 - Encourage new/ innovative products
 - Sustain high agricultural productivity and promote food security
 - Direct subsidy to farmers
 - Improvement in health of the Industry
 - More service by the Industry to the farmers.

Thank you