

Status & Prospects of Specialty fertilizers in India

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

Specialty Fertilizers- Definition

- Fertilizers applied in Special condition of Soil & plant
- Fertilizers applied for Specialized action in plant

Specialty Fertilizers- Understanding

- All Water soluble Fertilizers
- All Secondary & Micronutrients
- Slow & Controlled release fertilizers – NCU, SCU, UDP etc
- Area & Crop Specific Fertilizers- Customized fertilizers, Fortified fertilizers

TATA CHEMICALS LIMITED

Water Soluble fertilizers (WSF)

100% Water soluble fertilizers, with low salt , chloride content and high fertilizer use efficiency.

Fertilizer Use efficiencies of conventional fertilizers

N- 30- 45%

P- 10-30%

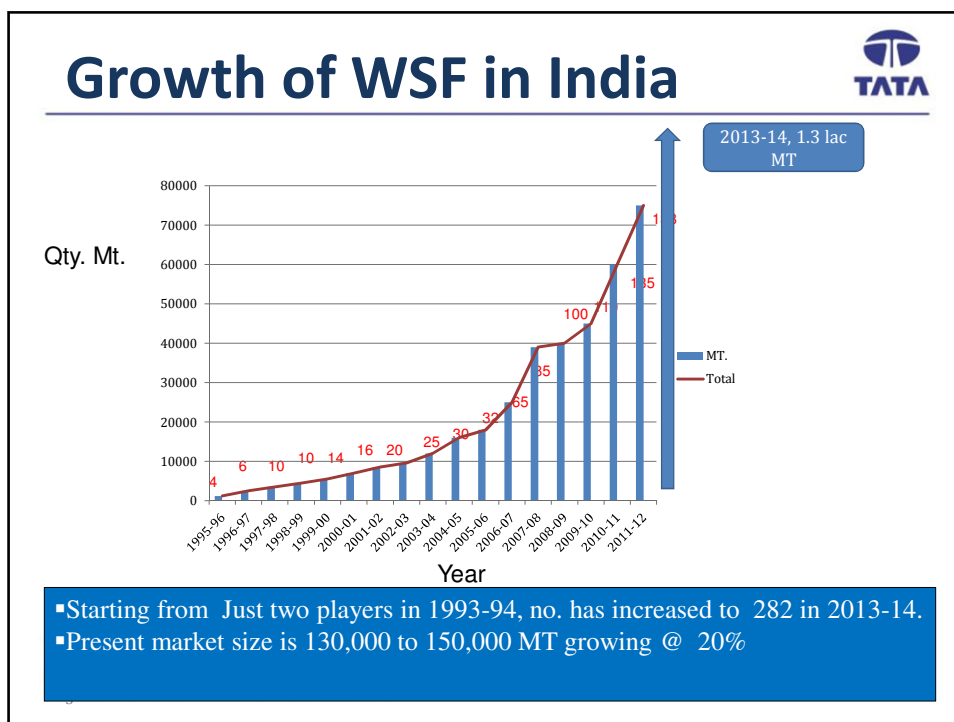
K-50%

This leads to lower return on money spent on per unit of fertilizer, along with increased soil salinity.

Source:- IFA, World Fertilizer Use Manual

FUE of WSF @ 80-85% ?

TATA CHEMICALS LIMITED



WSF compounds

Name	N	P	K
MAP	12	61	0
MKP	0	52	34
Pot. Nitrate	13	0	45
SOP	0	0	50
Urea Phos.	17	44	0

- All other grades are prepared by Blending of these compounds

TATA CHEMICALS LIMITED

Policy Reform for WSF



- General Specifications for WSF mixtures
- Freedom to introduce new WSF grades
- Limit for NPK kept at minimum 40 units & 30 units for any 2 nutrients

Further improvement in policy : allow fortification of secondary & micronutrients

TATA CHEMICALS LIMITED

Growth prospect- Indicators



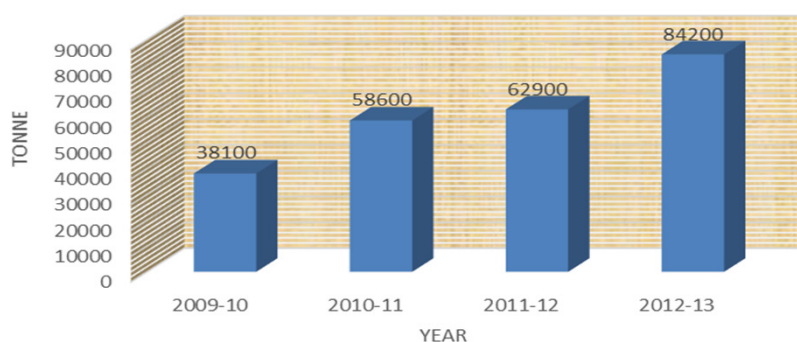
- Progressive Policy Reforms
- Rationalisation of subsidy on Bulk Fertilizers
- Significant increase in subsidy support for Micro Irrigation in budget for 2015-16 - 854 mill \$
- Area under Drip irrigation is highest in World (2.82 mill ha)
- Shift towards high Value crops

TATA CHEMICALS LIMITED

Impact of NBS



Consumption of WSF



TATA CHEMICALS LIMITED

Impact of Fiscal Policy on WSF



- Leverage to farmers for his financial resource allocation
- 54% increase in consumption of WSF in 2010-11 post NBS on Bulk Fertilizers

TATA CHEMICALS LIMITED

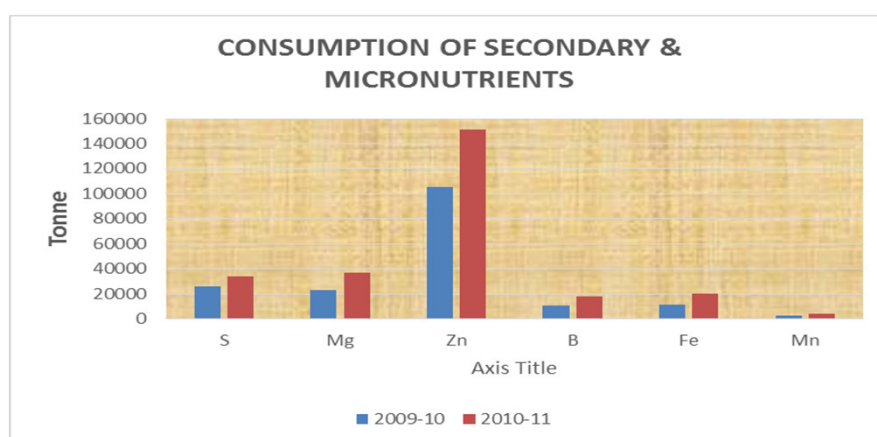
Secondary & Micronutrients



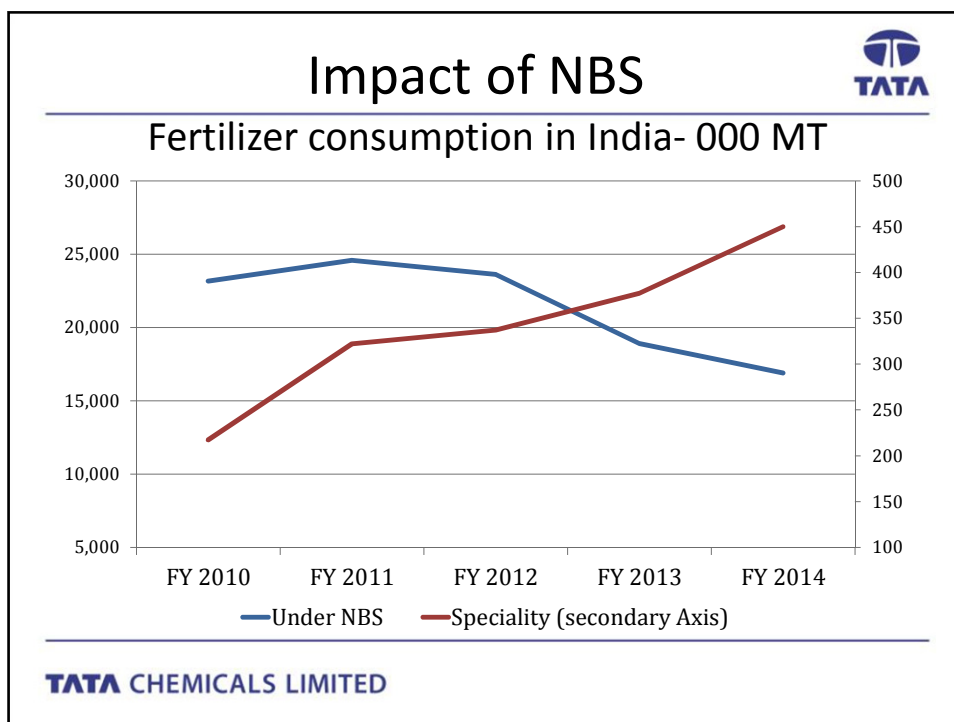
- 35% growth in consumption of S & Mg products in 2010-11 post NBS
- 45% growth in consumption of Zn , B, Fe & Mn products in 2010-11 post NBS

TATA CHEMICALS LIMITED

Impact of NBS



TATA CHEMICALS LIMITED



Slow & Controlled release fertilizers

- Neem Coated Urea
- Sulphur Coated Urea
- Urea Deep Placement (UDP)

TATA CHEMICALS LIMITED

Neem Coated Urea



- Current production > 5 mill MT per annum likely to double in view of removal of production cap
- 4 -7 % increase in crop yield reported by Industry based on large scale demonstrations
- Increase in demand by farmers predominantly in rice growing areas

TATA CHEMICALS LIMITED

Urea Deep Placement (UDP)



- IFDC promoted Technology
- Successfully implemented in Bangladesh
- R & D efforts by Tata chemicals
- Registered in FCO

TATA CHEMICALS LIMITED

Advantages of UDP



- Urea dose reduction by 20%
- Rice yield increase by 25%
- Nitrogen Use Efficiency > 45%

TATA CHEMICALS LIMITED

UDP- Application Technology



- Labour intensive Technology
- Applicator development in process by IIT graduates

TATA CHEMICALS LIMITED

Area & Crop Specific Fertilizers

- 44 grades of Customized Fertilizers approved
- Production & sale by Nagarjuna, Indo Gulf Fertilizers & Tata Chemicals
- Current sales more than 50,000 MT
- Demand generation - Challenging

TATA CHEMICALS LIMITED

TATA CHEMICALS LIMITED



Thank You
