



भारतीय कृषि एवं खाद्य परिषद्  
**INDIAN COUNCIL OF FOOD AND AGRICULTURE**

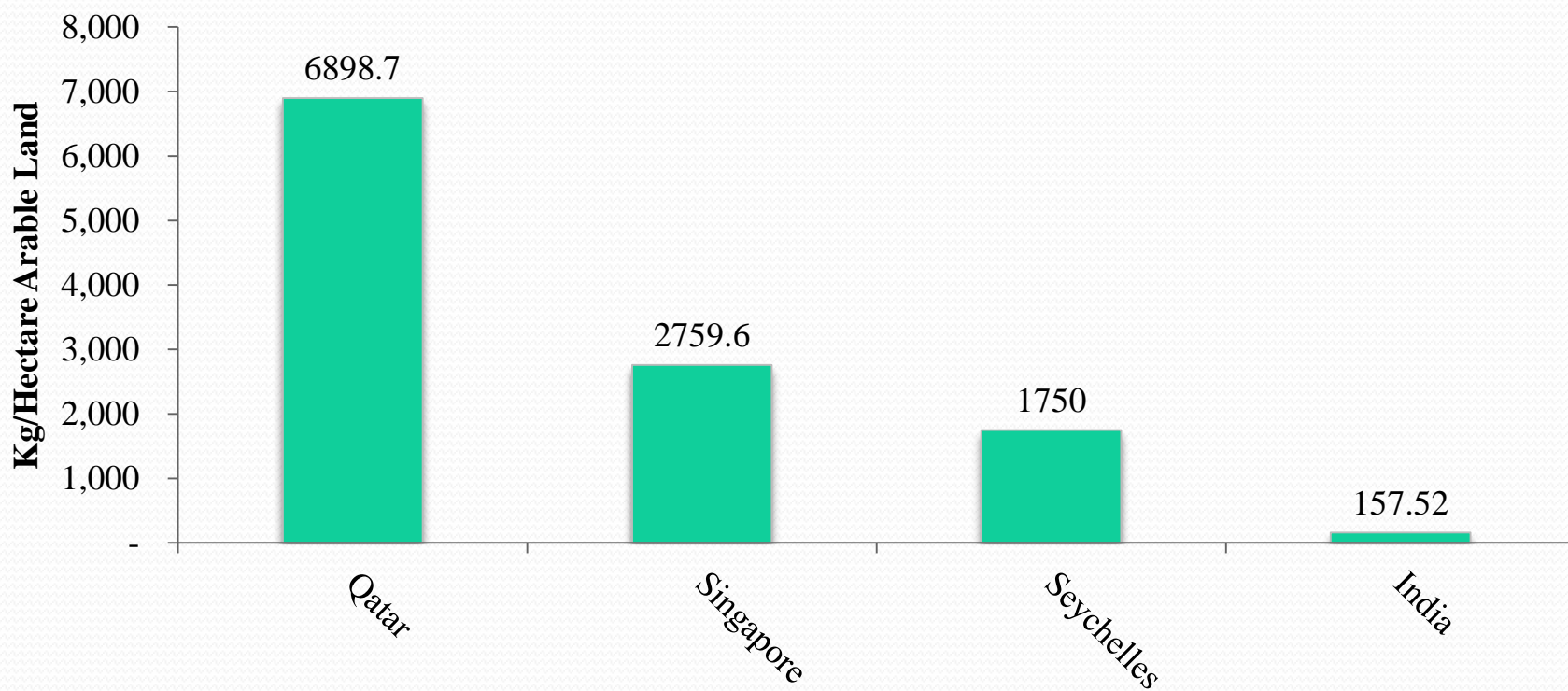
# FARM SUBSIDY AND SOIL HEALTH



**MARKET UPDATE**

# India's Positioning in the Global Fertilizer Industry

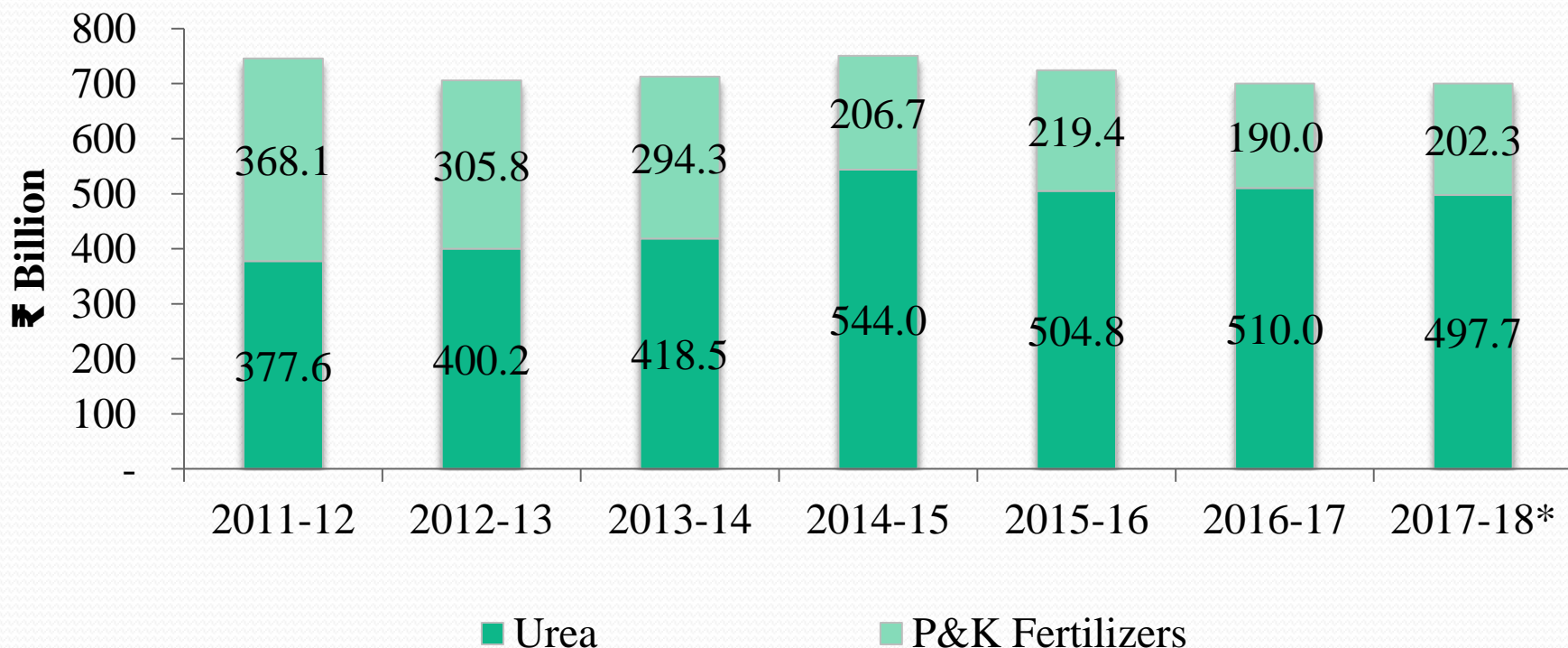
## Country-Wise Consumption of Fertilizers



Source: FAO

# Indian Fertilizer Industry

## All India Fertilizer Subsidy Released; 2011-17

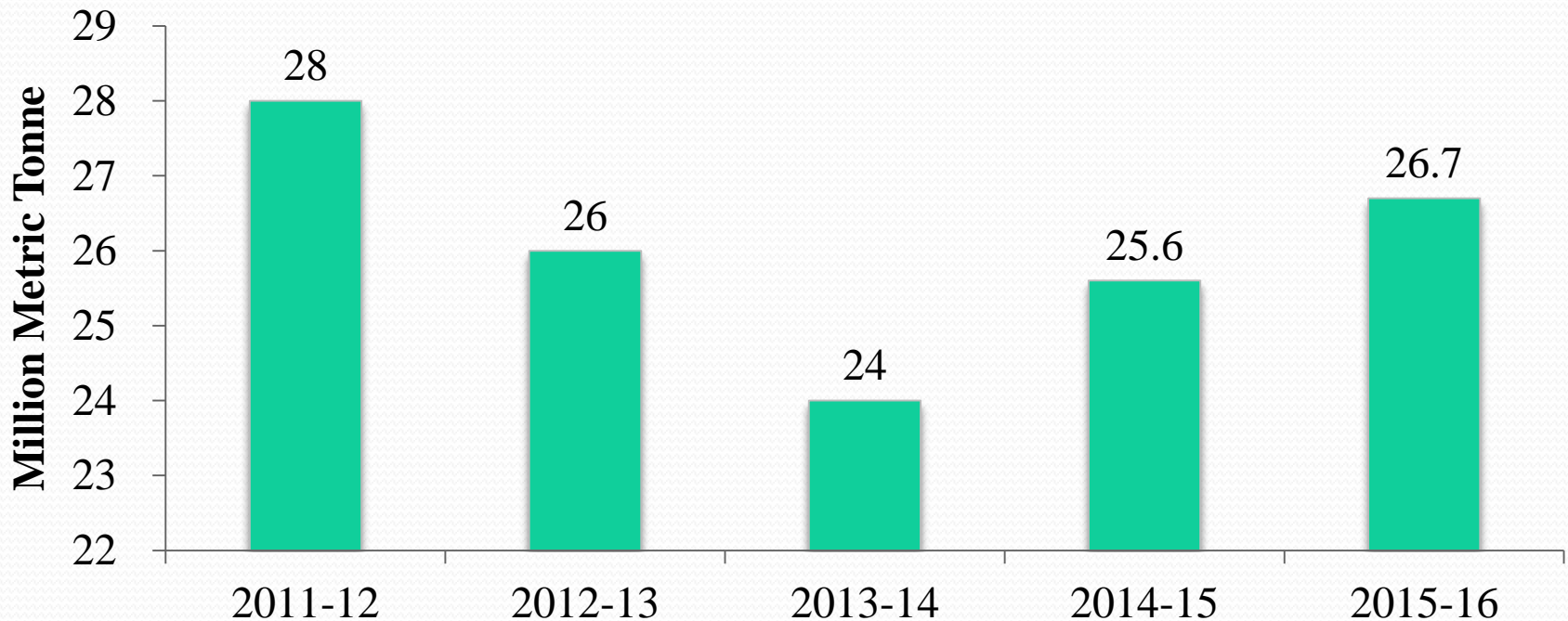


Source: Department of Fertilizers

Note: \* represents the Budget for fertilizers subsidy

# Indian Fertilizer Industry

## All India Fertilizer Nutrient Consumption; 2011-16



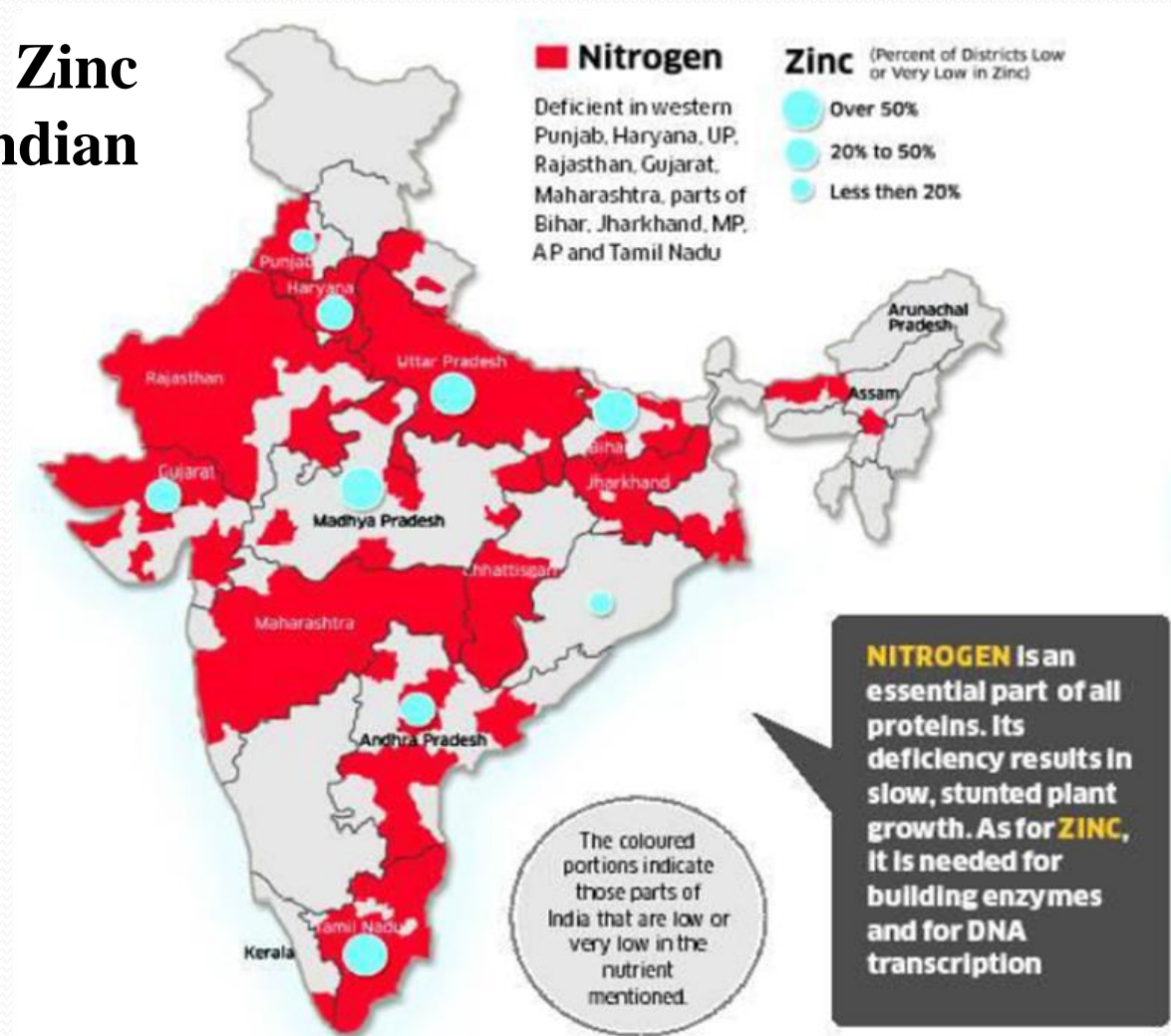
Source: Gulf Petroleum and Chemicals Association

Note: 2015-16 is estimated.

\* The Consumption for the fertilizer in terms of nutrient means that the data for single items received in products through the country yearly FAO questionnaire on fertilizers are converted into nutrients using the appropriate conversion factors and then summed up in order to obtain the N, P, K totals in terms of nutrients

# Indian Soil Quality Status

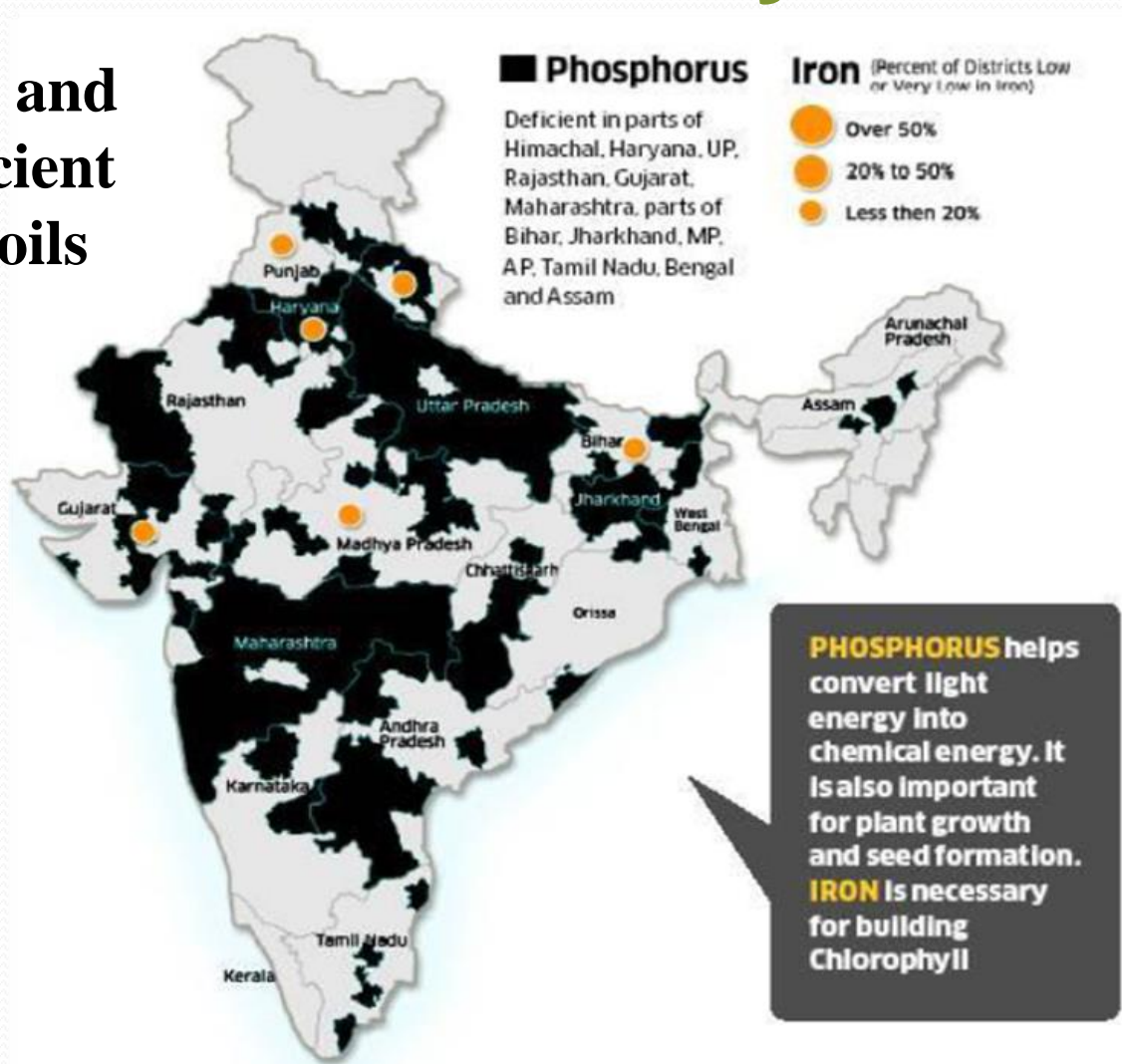
## Nitrogen and Zinc Deficient Indian Soils



Source: Company Presentation

# Indian Soil Quality Status

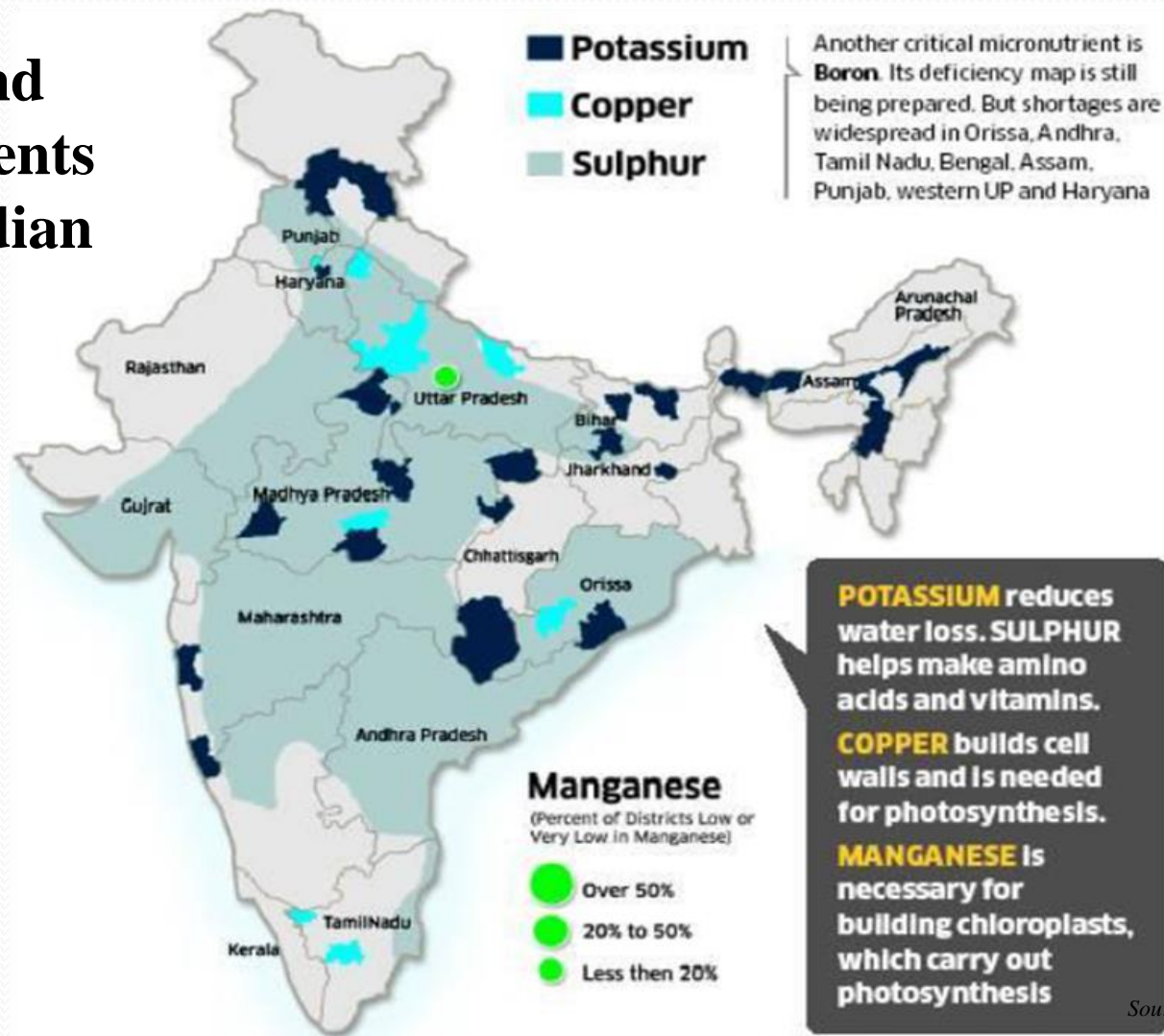
## Phosphorus and Iron Deficient Indian Soils



Source: Company Presentation

# Indian Soil Quality Status

## Potassium and Micro-Nutrients Deficient Indian Soils



Source: Company Presentation

# Soil Health Initiatives

- Soil Health Management Scheme
- Soil Health Card Scheme



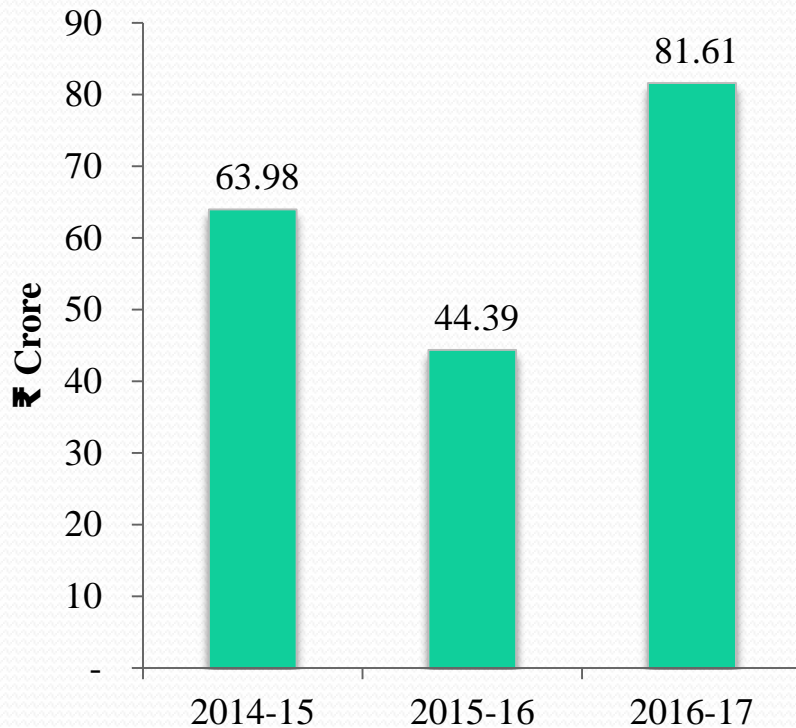
# Soil Health Management Scheme

Soil Health Management (SHM) is one of the most important interventions under NMSA. This scheme is implemented by State Government., National Centre of Organic Farming (NCOF), Central Fertilizer Quality Control & Training Institute (CFQC&TI) and is sanctioned by INM division. SHM aims at promoting Integrated Nutrient Management (INM) through:

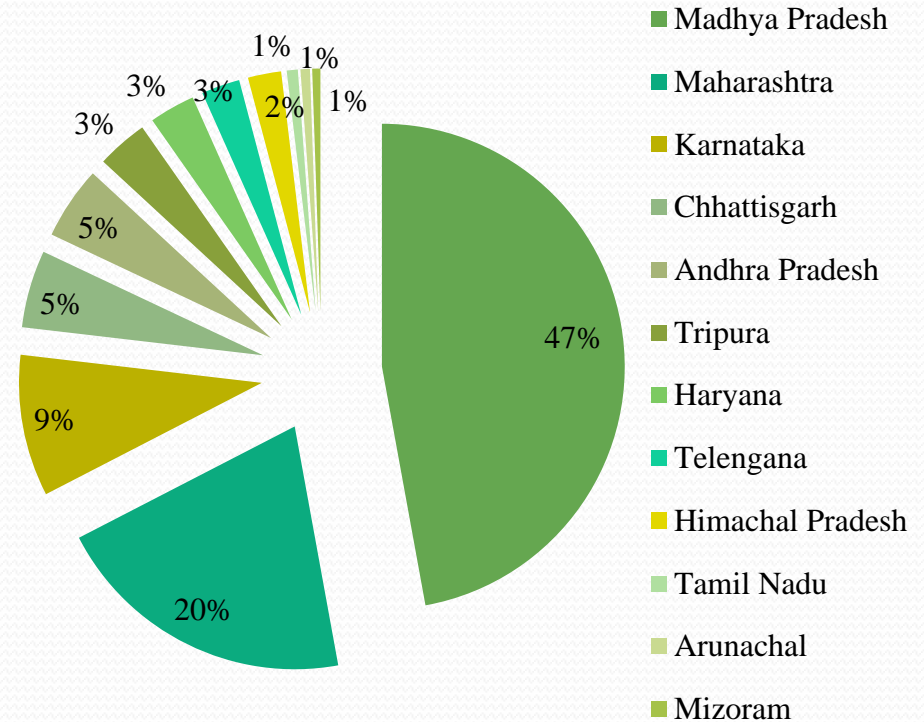
- Judicious use of chemical fertilizers including secondary and micro nutrients in conjunction with organic manures and bio-fertilizers for improving soil health and its productivity;
- Strengthening of soil and fertilizer testing facilities to provide soil test based recommendations to farmers for improving soil fertility;
- Ensuring quality control requirements of fertilizers, bio-fertilizers and organic fertilizers under fertilizer control order, 1985;
- Up gradation of skill and knowledge of soil testing laboratory staff, extension staff and farmers through training and demonstrations; promoting organic farming practices etc.

# Soil Health Management Scheme

**Funds Released Under Soil Health Management Scheme; 2014-17**



**State-Wise Funds Released Under Soil Health Management Scheme; 2016-17**



Source: Ministry of Agriculture and Farmer's Welfare  
 Note: 2016-17 till 30th Jan 2017

Source: Ministry of Agriculture and Farmer's Welfare

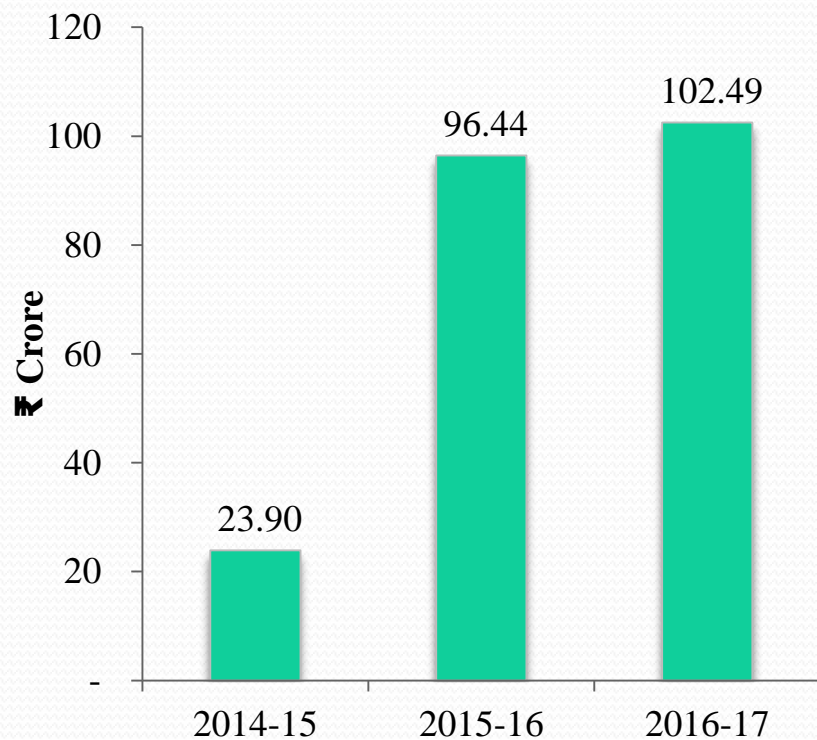
# Soil Health Card Scheme

In February 2015, the central government had launched the Soil Health Card Scheme. The major objectives are:

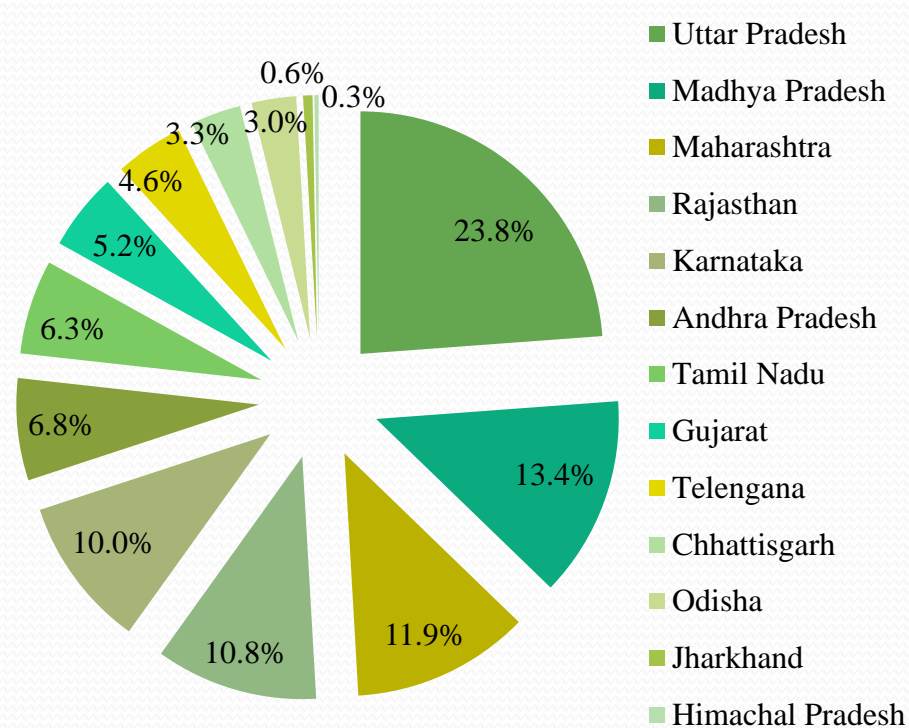
- To issue soil health cards every 3 years, to all farmers of the country, so as to provide a basis to address nutrient deficiencies in fertilization practices.
- To strengthen functioning of Soil Testing Laboratories (STLs) through capacity building, involvement of agriculture students and effective linkage with Indian Council of Agricultural Research (ICAR) / State Agricultural Universities (SAUs).
- To diagnose soil fertility related constraints with standardized procedures for sampling uniformly across states and analysis and design taluqa / block level fertilizer recommendations in targeted districts.
- To develop and promote soil test based nutrient management in the districts for enhancing nutrient use efficiency.
- To build capacities of district and state level staff and of progressive farmers for promotion of nutrient management practices.

# Soil Health Card Scheme

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Source: Ministry of Agriculture and Farmer's Welfare  
Note: 2016-17 till 30th Jan 2017

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# Soil Health Card Scheme

## Performance of Soil Health Card Scheme

State-Wise Soil Health Cards Issued Till 11.05.2017					
S. No.	State Name	Number in Lakh			
		No. of Samples Entered	No. of Farmers Covered	Samples Tested	SHC Printed
1	Karnataka	15.09	83.87	11.33	61.45
2	Tamil Nadu	13.64	52.32	11.81	41.64
3	Chhattisgarh	7.47	46.74	6.72	40.99
4	Uttar Pradesh	15.93	45.11	9.87	29.15
5	Maharashtra	12.60	37.56	10.63	25.53
6	Telangana	10.10	28.62	9.56	21.31
7	Andhra Pradesh	14.26	41.07	12.69	16.25
8	Haryana	5.94	15.52	4.75	12.17
9	Odisha	3.68	13.38	2.38	8.20
10	Jammu & Kashmir	1.60	6.80	1.19	4.81
<b>Total</b>		<b>143.34</b>	<b>450.74</b>	<b>111.59</b>	<b>284.68</b>

Source: Soil Health Card Website

# Challenges

- There is policy asymmetry between N, P and K. Policy is in favor of N i.e. Urea. Urea is under direct control and P and K are under Nutrient Based Subsidy (NBS). This is leading to adverse NPK ratio which in turn leads to fall in agricultural productivity.
- There is too much of micro management in fertilizer sector. Entire Extension machinery of States is engaged in certification/verification/inspection works.
- In the view of building the soil health, chemical fertilizers alone are degrading the soil health of the country.

# Recommendations

- Customized fertilizers have to be encouraged containing all nutrients in right proportion specific to an area and specific to crops.
- There is a need to bring Urea also under NBS.
- Subsidy benefit should go directly to the farmers and use of IT must be leveraged to do that.
- Government should take initiatives to promote compost such as subsidy or market development assistance on compost should be enhanced from ₹1,500 PMT to at least ₹5,000 PMT.
- Provision of quality extension services using available technologies like ICT through public private partnerships need to be encouraged to benefit the farmers in the areas of soil health analysis etc.
- Customized farm equipment rentals should be promoted by the government and cooperatives should be encouraged for the same.

# Recommendations

- It is advised that the data must be analyzed and proper recommendations should be provided by the scientists regarding the proportion of fertilizers and type of fertilizers to be used for a particular land.
- It is suggested that for soil health card generation scheme, government should involve private firms which have the capability and competency in testing and generating the soil health cards of designated area.
- There is an urgent need to ensure quality standards for soil analysis to be maintained by the laboratories which are undertaking this analysis and they should be accredited.
- There is a need to devise a mechanism to integrate soil health card scheme and subsidy for fertilizers, to enable farmers to procure required nutrient with financial assistance from government, resulting in better soil health.





*Thank you*