

# AGRICULTURAL POLICIES IN INDIA: ADAPTABLE TO SUSTAINABILITY CHALLENGES



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# BASIC FACTS ABOUT INDIAN AGRICULTURE



## INDIAN AGRICULTURE - BASIC FACTS

Total Geographical Area	329 million hectares
• Net Area sown	141 million hectares
• Gross cropped area	195 million hectares
• Cropping Intensity	138 %
• Percentage area under Irrigation	45 %
• Rainfall	
- Average	1100 mm
- Range	300 – 3000 mm
• Operational holdings	129 million
- Small & marginal (< 2 hectares)	83%



## INDIAN AGRICULTURE - BASIC FACTS

- 2nd largest producer of rice, wheat, groundnut, sugarcane, tea, fruits & vegetables and seed cotton
- Largest producer of pulses, jute & fibre, mango, banana, spices, cashew, arecanut, papaya, sapota, milk, etc.

### **Agriculture contributes:**

- 19% to GDP (At current prices)
- 11% of total exports
- More than half of India's workforce is employed in its agriculture sector
- Growth of other sectors and overall economy depends on performance of agriculture to a considerable extent.



## STRENGTHS

- Rich Bio-diversity
- Large arable land
- Variety climate
- Strong research infrastructure
- Vast knowledge pool



## WEAKNESSES

- Fragmented land
- Low productivity
- Low capital formation
- Low technology inputs
- Inefficient water management
- Inadequate infrastructure
- Inadequate credit from formal sources
- Inadequate risk management



## OPPORTUNITIES / GROWTH DRIVERS

- Bridgeable yield gaps in food crops
- Vast potential for :
  - Cash crops
  - Horticultural crops
  - Allied agriculture (fisheries, livestock, poultry, piggery, etc.)
- Huge potential for value addition and agro- processing
- Building infrastructure for marketing
- Export opportunities
- Organic farming for domestic and exports
- Risk mitigation



## DEVELOPMENTS IN AGRICULTURAL POLICIES



## AGRICULTURAL POLICIES

- **Pre-Green Revolution period** (1950/51 to mid 1960s) - institutional changes and development of major irrigation projects
- The intermediary landlordism was abolished, tenant operations were given security of farming and ownership of land.
- Expansion of area was the main source of growth
- **New Agricultural strategy (Green revolution technology)** (from 1965-66) Spread of HYV of wheat and rice which involved use of fertilizers and irrigation.
- The biggest achievement - attainment of self sufficiency in food grains.



## CHALLENGES IN POST REFORM PERIOD

- Green revolution has been widely diffused in irrigated areas, throughout the country, the dry land areas have not seen the benefit of technology
- Government initiated process of economic reforms in 1991, which involved deregulation, reduced government participation in economic activities, and liberalization new international trade accord, requiring opening up of domestic market
- To provide new direction to agriculture, GOI announced **National Agricultural Policy in July 2000.**



## NATIONAL AGRICULTURAL POLICY

- The National Agriculture Policy was announced on 28th July, 2000.
- Seeks to:
  - (i) tap the vast untapped growth potential of Indian agriculture,
  - (ii) strengthen rural infrastructure,
  - (iii) promote value addition
  - (iv) accelerate the growth of agro business,
  - (v) create employment in rural areas,
  - (vi) secure a fair standard of living for the farmers and agricultural workers and their families,
  - (vii) discourage migration to urban areas and face the challenges arising out of economic liberalization and globalization.



## AIMS OF NATIONAL AGRICULTURAL POLICY (NAP)

Over the next two decades, NAP aims to attain:

- A growth rate in excess of 4 per cent per annum in the agriculture sector;
- efficient use of resources and conserve our soil, water and bio-diversity;
- Widespread growth across regions and farmers;
- Growth that is demand driven and caters to domestic markets and maximizes benefits from exports of agricultural products
- Growth that is sustainable technologically, environmentally and economically



# SUSTAINABILITY CHALLENGES AND ACTION PLAN



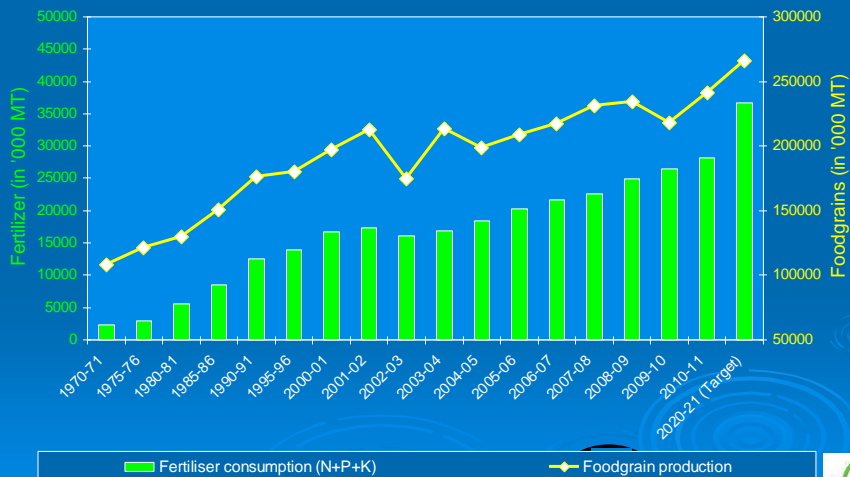
## FUTURE CHALLENGES

- **Limited land area**
- **Shrinkage in water resources**
- **Growing population**
  - Projected population (2020) – 1.4 billion
- **Ensuring food security**
  - Estimated food-grain requirement - 266 million tonnes in 2020
- **Ensuring adequate nutrient availability**
  - Estimated fertilizer nutrient requirement – 37 million tonnes (N+P+K)
- **Climate change**



## FERTILISER CONSUMPTION & FOOD GRAIN PRODUCTION

*India has accorded high priority to use of fertilisers for achieving self-sufficiency in foodgrains production and stipulated growth in other crops.*



## TASKS AHEAD

- To achieve higher agricultural productivity
- To ensure food security
- Efficient use of water resources
- Balanced and efficient use of nutrients
- Measures to mitigate impact of climate change





## RECENT INITIATIVES BY G.O.I - AGRICULTURE

- National Food Security Mission launched with an outlay of over one billion dollar for XI Plan to increase the production of rice by 10 million te, wheat by 8 million te and pulses by 2 million te by 2011-12
- National Agriculture Development Programme with an outlay over 5 billion dollar for holistic development of agriculture sector
- National Horticulture Mission, Cotton Mission, Oilseeds and Pulses Mission
- Increase in agricultural credit through formal sources
- Steep increase in the minimum support prices
- Additional area of 10 million hectares under assured irrigation
- Infrastructure for soil and fertilizer testing
- Infrastructure for marketing and agro-processing.



## RECENT INITIATIVES BY G.O.I - FERTILIZER

- Policy for encouraging production and availability of fortified and coated fertilizers
- Guidelines for production of Customized fertilizers
- Implementation of Nutrient Based Subsidy (NBS) on P & K fertilizers w. e .f. 1<sup>st</sup> April, 2010
- Policy for uniform freight subsidy on all fertilizers
- Extension of NBS for urea and New Investment Policy are under active consideration of the G.O.I.



## NATIONAL MISSION FOR SUSTAINABLE AGRICULTURE (NMSA)

- NMSA is envisaged as one of the eight Missions *under the National Action Plan on Climate Change* with the Objective of promoting *Sustainable Agriculture*.
- **Thrust areas:**
  - Dry land Agriculture
  - Access to Information
  - Bio-Technology
  - Risk Management
- **The Vision of NMSA:**
  - Transform Agriculture into Climate Resilient Production system
  - Grow and Ecologically Sustain agricultural production to its Fullest Potential
  - Ensure Food Security and Equitable Access to Food Resources,
  - Enhance Livelihood Opportunities,
  - Contribute to Economic Stability at the National Level



## NMSA – KEY FOCUS AREA

- Strategic Planning at Agro Climatic Zone Level
- Customized interventions to enhance productivity
- Easy access to Information and institutional Support
- Linking Laboratory to Land
- Dry land Farming

