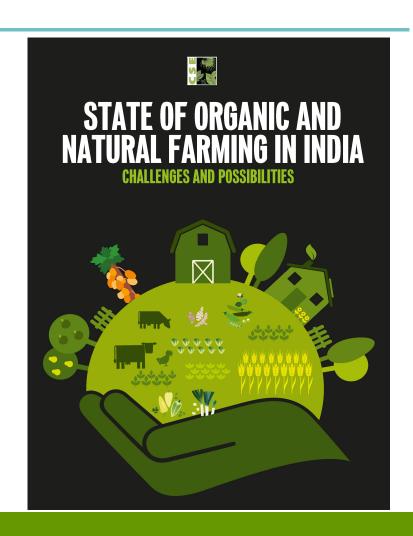


### State of Organic and Natural Farming in India Challenges and Possibilities

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### **SECTION I**

### ORGANIC AND NATURAL FARMING IN INDIA





### **Upscaling organic and natural farming: The imperative**

- Sustainability: The Green Revolution model—an input- and chemical-intensive model is linked with decline in soil health, loss of productivity, soil infertility, desertification, reduced agro-diversity, pesticide pollution and emerging pestresistance.
- Income for farmers: Low-input but high value crops will increase wellbeing of farmers
- Climate emergency has further aggravated the situation -need to increase resilience in food systems; multi-cropping and local investments
- Health and nutrition needs food is the best medicine and we need agriculture to meet nutrition needs (not just calories) and ensure that it does not add to health burden because of toxins



Organic
Farming
Policies and
Programmes
in India

#### Organic farming policies and programmes in India

Ministry of Commerce and Industry

**National** 

Programme for

**Processed Food** 

**Products Export** 

Development

since 2001

Third party

in 2018-19

Certification:

**Organic Production** 

(NPOP) certification

by Agricultural and

**Authority (APEDA)** 

70% of India's organic

area as on March 2020

registered on TraceNet

portal as of March 2020

2.59 million MT food

production in 2018-19

Wild harvest collection

area of 1.49 million ha

1.15 million farmers

Ministry of Agriculture and Farmers' Welfare

National Mission for Sustainable Agriculture (NMSA) since 2014–15

Paramparagat Krishi Vikas Yojana (PKVY) since 2015 Participatory

Guarantee System of certification for India (PGS-India)

21.5% of India's organic area as of March 2020

**1.49 million** farmers enrolled as of February 2020

Rs 1,632 crore allocated till November 2019 Mission Organic Value Chain Development for North East Region (MOVCDNER) since 2015

Certification: Third party

2.6% of India's organic area as on March 2020

In eight Northeast states

**Rs 645** crore allocated till November 2019

Related schemes and institutions: National Centre of Organic Farming (NCOF) and National Project on Organic Farming (NPOF)

States/Union Territories

**6.1% of India's organic** area under state schemes or non-schemes as of March 2020

**Organic Farming Policy 2005** 

#### Other supporting schemes

Rashtriya Krishi Vikas Yojana (RKVY) and Mission for Integrated Development of Horticulture (MIDH)

Participatory Guarantee System of certification for India (PGS-India)

**Adopted by** government in 2015–16 **0.75 million** farmers as of March 2020

**0.21 million** MT food production in 2018–19

For domestic market, not eligible for export



# Organic reinvented: whole farming systems

- Transition to sustainable food systems—is a win-win for people, the planet and livelihoods
- But, despite recognizing benefits for many years, the organic and natural farming movement in India is still niche rather than a mass movement.
- Our analysis shows:
  - Only 2 per cent of net sown area in India is "organically" farmed (2.78 million ha out of 140.1 million ha) and about 1.3 per cent of farmers in India are registered for organic farming (1.9 million out of 146 million agriculture households)



# Organic area is a small fraction of net sown area in most states, reflecting limited on-the-ground efforts despite state-level policies

- Area under organic cultivation is concentrated in few states only
  - Madhya Pradesh (27%), top three MP, Rajasthan, Maharashtra (50%), top 10 (80%)
- Only a small fraction of net sown area in states is organic
  - In the top three MP (4.9%), Rajasthan (2.0%), Maharashtra (1.6%)
  - Meghalaya, Mizoram, Uttarakhand, Goa, Sikkim have 10% or more but except Goa most are hilly states; Union Territories with more than 10% have a small agriculture area
- NPOP area far exceeds that of PKVY in most states
  - MP (90% of area under NPOP), top 3 states (80% area under NPOP)
  - Andhra Pradesh, Uttarakhand, Telangana and Bihar have higher PKVY area
- NPOP food production far exceeds that of PKVY
  - Quantity of organic food during 2015-16 to 2018-19: NPOP (96%) and PGS(4%)
- Slow progress of states in increasing organic coverage
  - At least 20 states have organic Policy, Mission or Act
  - Having policy early has not led to greater organic coverage. Karnataka policy 2004 (1.1% coverage), Kerala policy 2010 (2.7% coverage)
  - Target set by some states but could not be achieved; few have set for 100% coverage
  - Many states have their own organic brands and certification agencies for years



## **Encouraging news**: States want to do more. Are innovating

#### Karnataka:

- Rs 10,000 per ha cash incentive for all millet growers under Raitha Siri Scheme, 2019-20
- Will include millets (most grown organically) under PDS and procurement of organic ragi and jowar at 20-25% above MSP

#### Uttarakhand:

 Organic Agriculture Act of 2019; Ten blocks spread across districts declared fully organic and sale of chemical fertilizers and pesticides banned in them

#### Chhattisgarh:

- Godhan Nyay Yojna, 2020 to help in organic farming, reviving rural livelihoods
- Cattle dung to be purchased at Rs 2/Kg and vermicompost prepared by SHGs to be sold to farmers at Rs 8/kg through cooperatives

#### Odisha:

- Millet promotion in tribal areas (farmers encouraged to be grown organically); procurement linked with PDS and aim to be linked with ICDS, Mid-Day Meal and Integrated Tribal Development Welfare Hostels
- Malkangiri, is a district with its own 'committee on agroecology and agrobiodiversity'.
- Andhra Pradesh is promoting natural farming through leveraging on SHGs, and is focusing on farmer training and regular hand-holding
- Himachal Pradesh announced 100% coverage of natural farming through state-funded 'Prakritik Kheti Khushal Kisan Yojana' in May 2018; few others have started pilot and training programmes



### **SECTION II**

### DRIVING CHANGE—BARRIERS AND INTERVENTIONS





Gaps: to 'work' at scale

### Gaps in implementation (in particular the flagship PKVY)

- **1. Not enough expertise and knowledge**: Officials responsible for ground-level implementation lack expertise in organic/natural farming
- 2. Inadequate farmer training and handholding
- **3. Cumbersome certification:** PGS-India is not farmer-friendly and third-party certification expensive for small farmer
- **4. Poor marketing linkages:** concerns of remunerative prices and value addition; no buy-back/procurement provisions such as in PKVY

In short, we have a programme but lack the intent and capacity to make it work at scale and with impact



### **Gaps: and need for ambition**

### Just consider the difference in scale

- Minuscule budgetary allocations to promote organic compared to subsidies to chemical fertilizers (a few hundred crore rupees compared to Rs 70,000-80,000 crore per annum)
- Large part of scientific community oriented towards chemicalbased agriculture; Absence of holistic perspective, inadequate understanding of multiple benefits of organic/natural farming, leading to a weak 'case for change', limited investments

### Need to consider how to up-scale this

 Move organic/natural/whole agriculture, which is good to environment, good to farmers and good for consumers to the center of our economic world



### **BARRIERS**

### Why governments at the Centre and states not adequately pushing for organic or natural farming practices

Why the majority of consumers are not buying organic or natural foods

- Mindset of chemical farming;
- Scientific community not oriented towards organic or natural farming;
- Issues of low yield and food security;
- Influence of agro-chemical industry;
- Organic and/or natural produce not considered a holistic solution beyond pesticide-free food;
- Lack of documentation on holistic linkages;
- Limited attention to disadvantages of current chemical-based model;
- Lack of conviction about benefits:
- Extension machinery lacks expertise; not trained, not practised;
- State-level 'political will' not adequately displayed other than in a few states such as Sikkim and Andhra Pradesh.

- Prevailing mindset for chemical farming;
- Lack of knowledge of organic and/or natural approaches;
- Lack of confidence in organic and/or natural practices and fear of low yield;
- Lack of risk-taking capacity to bear yield losses;
- Absence of handholding support during transition to organic and/or natural farming;
- Lack of support and risk coverage during transition to organic cultivation;
- Lack of assured market offering remunerative prices;
- Inadequate availability of quality organic inputs like seeds, bio-inputs and technology;
- Concerns about pest management;
- Certification involves extensive paper work, which is cumbersome and expensive for small farmers;
- Dependence on livestock;
- Natural and organic farming are labourintensive and require time;
- Rural youth's declining interest in agriculture; reducing joint family support system.

- Organic produce often priced higher than conventional most consumers not ready or cannot afford to pay higher prices:
- Organic produce not easily available and accessible everywhere;
- Concerns about credibility of organic food in market, i.e. whether produce is fake organic;
- Lack of awareness or convinction about health linkages (e.g. cancer and pesticides have a more complex link than sugar and diabetes—this link is less direct, less seen and less believed);
- Limited awareness on linkages of organic and/or natural farming with sustainability, environment etc.:
- Consumers may lack awareness of chemicaldependent food systems and food producers.



### Intervention for change

(1/3)

- A targeted, ambitious and well-funded nation-wide programme to drive the transformation towards organic and natural farming:
  - Includes bringing together different ministries and programmes
  - Outlines Centre-state relationship (funds, accountability, coordination)
  - Establish strong drivers such as a vibrant market that benefits farmers while addressing existing barriers.
- Massive Promotion of organic and biofertilizers instead of chemical fertilizers:
  - Measures to adequately produce and make available quality organic fertilizers and biofertilizers at low cost should be the priority
  - Includes coordinated action to promote and make available city compost as an organic fertilizer as well as locally produced bio-inputs
  - Farmers should be enabled to choose between chemical and organic fertilizers
    through transfer of the huge ongoing subsidies allocated for chemical fertilizers to
    chemical-free farming.



### Intervention for driving change

(2/3)

- Agriculture extension system to be enabled to lead and support the transition on the ground:
  - Systematic approach is required to build capacity among extension officials and enable them to be change-makers
  - Leveraging technology to bridge gaps in information exchange and last-mile connectivity as well as integrating practitioners in the community should be fundamental to the extension process
  - Organic and natural farming should be mainstreamed in agriculture education and research systems.
- Build rigorous scientific data on the benefits of organic and natural farming:
  - A comprehensive research agenda should be developed and implemented with multiple sectors and stakeholders to understand the complete set of benefits including those related to biodiversity, water conservation, climate resilience, soil health and preventing desertification in addition to increasing yield, incomes and health.
  - Best practices of practitioners should also be collated and documented.



### Intervention for driving change

(3/3)

- Organic certification process should be improved to make it farmer-friendly and low cost:
  - Address concerns about the PGS-India certification system to make it more farmerfriendly
  - Implementing measures to increase the credibility and popularity of PGS certification among consumers is the need of the hour
  - If required, an alternative certification that is simpler for farmers and trustworthy for consumers could be explored for well-connected local markets
- Actively work on marketing strategies for organic/natural farming food
  - Link PGS to procurement for mid-day meals; link PGS to food procurement programmes (Karnataka; Odisha model)
  - Do more to ensure that farmers get value for this high-value crop (high on nutrition and health)



## Sustainable agriculture is resilient agriculture It is self-reliant agriculture

### For India to become truly self-reliant, the Indian agriculture needs to change:

 Move towards an approach that helps farmers earn more money, use less chemicals and pesticides and produce healthy food, while conserving natural resources

### Need to transform agriculture for the coming decade

 This is our opportunity; our chance to work on multiple objectives and fix multiple crises – economic growth and sustainability in an increasingly climate-risked world