Organic Farming in India

1) What is organic farming?
   - Organic farming is a system which avoids the use of synthetic inputs (such as fertilizers, pesticides, hormones, feed additives etc)
   - Rely upon crop rotations, crop residues, animal manures, off-farm organic waste, and biological system of nutrient mobilization and plant protection
   - FAO suggested that Organic agriculture enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity
   - With merely 0.4 per cent of total agricultural land under organic cultivation, the industry has a long journey ahead.

2) Need of organic farming
   - With the increase in population there is a need to stabilize agricultural production and increase it further in sustainable manner
   - ‘Green Revolution’ with high input use has reached a plateau and is now sustained with diminishing return of falling dividends
   - A natural balance needs to be maintained at all cost for existence of life and property
   - agrochemicals which are produced from fossil fuel and are not renewable and are diminishing in availability which may also cost heavily on our foreign exchange in future.
   - With the cost of chemical fertilisers and pesticides, going up without any corresponding increase in productivity, farmers either quit the profession or are forced to end their lives unable to cope with mounting debts.
   - Organic farming can significantly cut down the cost of production
   - Organic agriculture in India will continue to grow and play a larger part in safely feeding 1.5 billion Indian mouths in 2030
   - New studies indicate that using the best management practices in organic systems over a long period of time can produce equal yields, or even outdo those of conventional systems.

3) The key characteristics of organic farming
   - Relies primarily on local, renewable resources
   - Makes efficient use of solar energy and the production potential of biological systems
• Maintains the fertility of the soil
• Maximises recycling of plant nutrients and organic matter
• Does not use organisms or substances foreign to nature (e.g. GMOs, chemical fertilisers or pesticides)
• Maintains diversity in the production system as well as the agricultural landscape
• Weed, disease and pest control relying primarily on crop rotations, natural predators, diversity, organic manuring, resistant varieties
• Nitrogen self-sufficiency through the use of legumes and biological nitrogen fixation

4) Advantages of Organic Farming
• Sustainable and environmentally friendly production method, which has particular advantages for small-scale farmers
• Organic agriculture contributes to poverty alleviation and food security
• Increasing yields in low-input areas
• Conserving bio-diversity and nature resources on the farm and in the surrounding area
• Increasing income and/or reducing costs
• Producing safe and varied food
• Provide several ecosystem services and being sustainable in the long term
• Farmers in India’s poorest region are recording record rice yields by growing organically

5) Government Initiatives
• Government is promoting organic farming through various schemes under National Mission for Sustainable Agriculture (NMSA)/ Paramapragat Krishi Vikas Yojana (PKVY)
• Central Regional Scheme – Organic Value Added Mode Development Mission for North-Eastern regions keeping in view the potentiality of farming in North-Eastern region
• The Centre’s announcement for allocation of ₹1 billion for organic market development and ₹3 billion for the participatory guarantee scheme is commendable.
• Sikkim is an organic state with 75,000 ha of land under organic cultivation based on an initiative that started in 2003.
• Meghalaya aims to convert 200,000 ha under organic farming by 2020
• Government has come up with stringent punishment for selling counterfeit organic produce.
National Project on Organic Farming (NPOF) is a continuing central sector scheme since 10th Five Year Plan. The scheme is continuing in the 12th Plan.

National Horticulture Mission (NHM) and Horticulture Mission for North East & Himalayan States (HMNEH), financial assistance is provided for adoption of organic farming.

Assistance for promotion of organic farming under Rashtriya Krishi Vikas Yojana (RKVY)

Indian Council of Agricultural Research (ICAR) has developed technologies to prepare various types of organic manures

Challenges and Concerns

Due to relatively small volumes, the costs of organic food products are relatively high.

The cost of cultivation increases as it takes more time and energy to produce than its chemical-intensive counterpart.

High demand and low supply has further created an inflationary pressure on organic food products.

Specialised farmer training costs, higher processing and inventory holding costs, and increased packaging, logistics and distribution costs add to the price of end products.

The absence of organic food products across all segments in the market is a concern.

There is low awareness at the producer level on the difference between conventional farming and organic farming.

At the consumer level there is confusion between natural and organic products and limited understanding of the health benefits of organic food products.

Consumers are faced with a plethora of decisions around brands — imported or domestic, product quality, authenticity of claims and certifications.

What needs to be done?

Supply-demand mismatch can be eased fundamentally by making organic production mainstream with location-specific hybrid production strategies.

Investments in achieving operations excellence by companies will facilitate lowering the cost of organic food products.

In order to sustain consumer trust, maintaining an accurate audit stream, and preventing cross-contamination with conventional goods would be crucial.

Consumers should consume responsibly and stakeholders should prevent wastage along the supply chain.
The Government must rope in agricultural scientists and international research institutions to develop organic herbicides.

It is critical for companies involved in the organic food business to increase awareness among consumers in non-metro cities.

People across all income groups should have access to organic food.

Establishing community-supported agricultural farms or with “grow your own food” programmes.

8) Conclusion

Organic agriculture is the best insurance policy that India can have with better performance on productivity, environmental impact, economic viability and social well-being.

Focusing only on higher yields at the expense of other sustainability pillars (economics, environment and society) is not the food production system that India needs.

What India needs is an integrated system that gives equal importance to all sustainability dimensions across the value chain and thus helps establish a healthy and well-fed society.