

## MEGHALAYA STATE ORGANIC AND NATURAL FARMING POLICY 2023

### 1. INTRODUCTION

Organic Farming is a process of agricultural production that relies on natural and eco-friendly methods of farming that are free from chemicals and pesticide residues. It is a system that relies on agronomic, biological, and mechanical methods for crop production as opposed to using chemicals and synthetic inputs to achieve the same. Natural Farming is a subset of organic farming. It is based on utilizing the natural process by which food grows in nature and adapting it to the farm. It is a system that requires minimal external intervention and does not require manufactured inputs or mechanization, but instead allows food plants to grow in a natural eco-system alongside other plants, animals and insects that are beneficial to the ecosystem as a whole.

Farming in Meghalaya is organic and natural by tradition and has been practiced by the local farmers and the farming communities for ages. Conventionally, shifting or slash-and-burn cultivation, which is commonly known as *Jhum cultivation* or *Rep Shyrtil* (in Khasi) and *A·ba o·a* (in Garo) is practiced by most farming communities in the state. This farming process, while organic, is often criticised for its negative side effects as it involves setting fire to forested lands to clear them for farming. When done continuously on a large scale, it can affect the local biodiversity and the natural process of recovery of the land. However, when done in a controlled manner and scale, this practice can be sustainable as the same land is never used beyond a few cycles, thereby allowing it to naturally recuperate before it is ready for use again. However, as the population grows and the demand for food increases, shifting cultivation may no longer be viable as a farming system. Today, organic, and natural farming has evolved significantly as a sector, and information about new methods of cultivation are available for adoption in the state. Farmers can take advantage of the latest insights on organic and natural farming and use these to maximize food production per unit of land, enable settled and sustainable farming, reduce input cost, meet the production needs of the state, and increase income.

Organic farming is important to preserve long-term productivity of the soil. Organic farming does not rely on the use of chemicals and synthetics to boost short-term productivity while compromising long-term health of the soil and the natural ecosystem. Organic farming can ensure sustainability through careful management of farming processes such as conservative use of water, methods that allow soil nutrients to be renewed, and elimination of use of chemical pesticides and chemical fertilizers which are otherwise common to conventional agriculture. Organic farming practices have a minimal footprint in terms of environmental pollution and impact on human health for both farmers and consumers and can ensure a balance between ecological and agricultural sustainability. Organic farming is ideal for mountain states that have large numbers of small and marginal farmers whose products are typically small-scale.

Meghalaya is currently one of the lowest users of chemicals in agriculture, using only about 17 to 20 kg of chemicals per hectare of land, and that is mostly limited to solanaceous crops. Despite this, the state began to take several steps to move towards sustainable organic farming. In 2015, the state discontinued subsidy on chemical fertilizers, plant protection chemicals and other chemicals used in agriculture. Several initiatives were undertaken by the State Government such as community seedbanks and mass awareness campaigns which created precedence for future actions. The advent of low-cost organic farming methods such as Zero-Budget Natural Farming (ZBNF) has brought organic farming within the reach of small and

marginal farmers. Since farming in Meghalaya is organic by tradition, it provides ample scope for scaling up to allow farmers to take advantage of the new and growing market opportunities.

Further, through the Mission Organic Value Chain Development for Northeastern Region (MOVCDNER), a scheme by the Government of India, the State aims at the development of certified organic production in a value chain mode to link growers with consumers and to support the development of entire value chain starting from inputs, seeds, certification, to the creation of facilities for collection, aggregation, processing marketing and brand building initiative.

## **2. POTENTIAL FOR ORGANIC FARMING**

Meghalaya has tremendous potential for the implementation of organic farming. The state enjoys a salubrious climate with three Argo climatic zones and a good amount of rainfall that is conducive to agriculture and horticulture. There are several high-value agriculture and horticulture crops viz., Strawberry, Ginger, Lakadong turmeric (with high curcumin content), Honey, Black Pepper, Orange, Lemon, Pineapple, Guava, Litchi, Banana, Jackfruit, and temperate fruits such as Plum, Pear and Peach, along with various exotic flowers (Anthurium, Carnation, different types of Orchids etc.), and also Potato, Jackfruit, Pineapple and Areca Nut, that are produced in large quantities. Bay leaf, Betelvine, Short-staple cotton, Jute, Mesta, Mustard, and Rapeseed are some of the important cash crops in the State. Apart from the above, the State has achieved success in the cultivation of non-traditional crops like Tea, Cashew, Tomato, Mushroom and Wheat. As of 2018-19, about 80% of the population is either directly or indirectly dependent on agriculture for livelihood. Moreover, given the limited volume of produce in the state of Meghalaya, the practice of organic farming will put the region at an enviable advantage.

### **CURRENT CHALLENGES AND PROPOSED STEPS**

There are currently several challenges that impede the growth of organic farming in the country that the State plans to overcome, which include -

- i. Limited knowledge of the potential and the benefits of organic and natural farming
- ii. Lack of knowledge amongst farmers on the process of transitioning from conventional to organic and natural farming
- iii. Limited access to quality organic input material such as organic seeds and fertilizers
- iv. High cost of certification and low number of certifying agencies make certification of organic produce challenging for small and marginal farmers

The proposed steps to address the challenges include -

- i. The Government will form dedicated Society for promoting the organic produces and products of the state, enhancing market linkages, value-chain creation, and so on.
- ii. Through the State Organic and Natural Farming Policy, the state aims to facilitate a transition from conventional to organic farming by creating a comprehensive support system for farmers to leverage this vast potential. Broadly, these would include the following:
  - Capacity building and handholding support for conversion from conventional to organic and natural farming
  - Promotion of research and development in organic inputs, technology, and processes

- Streamlining the organic certification process through Third Parties, PGS or any other acceptable certification processes
- Policy mechanism for the promotion of investments in supply chain development and market linkage
- Policy mechanism to enable farmers to tap existing and emerging organic markets

### **3. VISION**

The policy aims to "transform Meghalaya into a leader in the sustainable production, conservation and supply of organic produce by leveraging on the traditional organic and natural agricultural practices of the state, integrated with good organic and natural agricultural practices, which will enhance the incomes of farmers, the quality of life of the people and the economy of the state."

### **4. OBJECTIVES**

- Promoting organic farming as a viable and sustainable income-generating activity for the farmers of the state
- Development of a comprehensive support system for capacity building, development, and handholding of farmers for transitioning into organic and natural farming
- Facilitation of investment into sector development including conversion, institution building, human capital development, technology development, area expansion and supply chain development
- Promotion of organic farming in the State through certification of organic produce in order to equip and enable the farmers to meet the growing demand for organic food in national and international markets
- Increase farmers' income through training and capacity development for productivity enhancement, value addition, and market linkage
- Promotion of sustainable package of practices including crop and farm diversification for better protection from the impacts of adverse weather conditions and climate change
- Enhancing access to finance for farmers including small and marginal farmers
- Supporting research and development in sustainable, climate-resilient, and affordable organic farming technologies and practices

### **5. IMPLEMENTATION**

#### **5.1. Institutional Setup for implementation**

- 5.1.1. The Department of Agriculture & Farmers Welfare, Government of Meghalaya, would be responsible for policy planning and coordination of the activities of various departments, development agencies and civil society organizations involved in the farming and organic sector.
- 5.1.2. A proposed Society under the Societies Registration Act XXI of 1860 would be established under the chairmanship of the Senior most Secretary of the Department with representatives from line departments and other technical agencies and would be

responsible for the implementation of the policy including awareness generation, training and capacity development of various stakeholders, knowledge collation and dissemination, coordination of organic certification, convergence, and monitoring and evaluation of the implementation process and of key developments in the organic and natural farming sector of the state including branding, marketing and development of value chain.

## **5.2. Conversion from Inorganic to Organic Farming**

- 5.2.1. Efforts would be made through government departments and developmental agencies to increase awareness amongst farmers and consumers on organic farming, process, and the associated benefits. Appropriate outreach tools and mediums shall be deployed to speed up outreach and knowledge dissemination to all stakeholders to increase awareness and encourage adoption.
- 5.2.2. Priority would be accorded towards the production of high value niche crops indigenous to the state, conservation, and propagation of endangered indigenous varieties of crops and production of high demand, high value commercial crops. Within these, the focus will be on low resource intensity, high yielding crops.
- 5.2.3. Support would be delivered on a demand driven basis to enable a focused and efficient management of the state's resources while delivering services to stakeholders. Support for conversion, training, and capacity building of farmers to enable production of plant nutrient, Jiva Amrit, bio fertilizers and other basic organic inputs at the farm level would be provided on demand basis.
- 5.2.4. Specific interventions or projects pertaining to organic and natural farming conversion would be taken up under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). The Village Employment Councils (VECs) would identify work opportunities for organic farming in their respective villages and generate proposals in the MGNREGA work plans for funding under the scheme.
- 5.2.5. Standard Operating Procedures (SOPs) would be developed to standardize the conversion process, including assessment of technical feasibility, regulatory compliance, and economic viability.
- 5.2.6. Mechanisms would be framed to enable the convergence of the state's Mission Organic, MGNREGA, Mahila Kisan Sashaktikaran Pariyojana (MKSP), Mission Organic Value Chain Development for Northeastern Regions (MOVCDNER) and any other relevant schemes, to enable farmers to leverage on multiple resources simultaneously for conversion and operation.
- 5.2.7. Model organic farms would be identified from amongst the best performing organic farmers across the state to enable learning and exposure, and to facilitate replication by other farmers across the state.
- 5.2.8. The Government will promote collaboration and network building with other organic farming associations in the country to strengthen the organic sector in the state.
- 5.2.9. The Government will support entrepreneurship development in the organic sector by building entrepreneurial capacity and linking enterprises to high value markets.
- 5.2.10. The Government will promote organic farming in cities and towns in the form of kitchen/terrace gardens, vertical farming, and others.
- 5.2.11. The Government will form a dedicated Society for promoting the organic produces and products of the state, value-chain creation and so on.

### **5.3. Harmonizing usage of chemical fertilizers with organic farming**

- 5.3.1. While a large number of farmers in the State are following naturally organic practices, the Government recognizes that some sections of the farmers, especially the ones growing solanaceous crops like potatoes, tomatoes, capsicum, cabbage, and so on have been using chemical fertilizers extensively, over the last few years.
- 5.3.2. The Government recognizes the incongruence existing in the use of fertilizers in some pockets of the State and the imperative to transition to organic farming across the State.
- 5.3.3. The Government prioritizes the vision of transitioning to organic cultivation while recognizing the time and effort needed to change long standing agricultural practices which have involved use of chemical fertilizers in farming habits of farmers.
- 5.3.4. Therefore, to ensure that these farmers could be gradually transitioned into organic practices with necessary support without affecting their well-being, a framework that balances the imperative for environmental protection as well as for improved incomes for farmers has been recently developed by the Government.
- 5.3.5. The State Organic and Natural Farming Policy recognizes the framework which has been developed by the Government for this gradual transition of farmers from chemical fertilizer usage in farming to the undertaking of natural farming techniques through capacity augmentation, entrepreneurship development, awareness campaigns, and such other mechanisms to be developed by the Government.

### **5.4. Package of Practices**

- 5.4.1. Crop-wise Package of Organic Practices for organic and natural farming would be developed or adapted from the existing Package of Practices to standardize the organic farming process for Niche and high value crops. These Package of Organic Practices would be made easily accessible to all farmers and other interested stakeholders for ready reference. The Package of Practice would be updated from time to time to account for the latest knowledge available in the domain of organic and natural farming.

### **5.5. Facilitation of affordable and quality inputs**

- 5.5.1. Efforts would be made to strengthen bio labs and factories for producing adoptable and affordable organic fertilizers (Trichoderma, PSB etc.), plant protection products (biopesticides, insecticides, etc.), climate and disease-resilient organic seeds, and other inputs indigenously which would reduce dependence on high cost, proprietary inputs from outside the state.
- 5.5.2. Strengthening of the seed supply system will be a priority to ensure the availability of quality organic seeds across the state. Development of seed banks will be encouraged across all suitable seed-producing regions for the conservation, multiplication, and propagation of organic seeds. The seed bank would be operated on a social enterprise model which would support livelihood and ensure knowledge on improved seed production, multiplication, and propagation process percolates to the local communities for long-term sustainability.
- 5.5.3. Platforms will be created in collaboration with research institutions to enable scientific validation of Indigenous Traditional Knowledge and innovations made by farmers pertaining to Agri inputs, plant protection, disease and climate resilient organic seeds,

and organic seed production and propagation, including and standardization of the bio products, to facilitate wider adoption across the state and region.

- 5.5.4. Livestock rearing will be promoted in conjunction with the Government's vision for livestock development, to increase the availability of organic manure for farming. This will include enhancement of the production of silage to increase the availability of organic feed for the livestock. Downstream, the development of Organic Dairy for value addition would be facilitated in convergence with the Government's livestock development efforts to maximize income. Training and capacity building will be provided on a demand basis to ensure the byproducts of the livestock are organic.
- 5.5.5. Other land-based activities including poultry, piggery, goatery, fishery, sericulture, apiculture, dairy, and minor forestry would be integrated into organic farming systems to maximize farm production.

## **5.6. Local production of inputs**

- 5.6.1. Efforts would be made to build entrepreneurial capacities in farmers and enable them to gradually move towards self-dependence.
- 5.6.2. On-farm production of inputs such as Jiva Amrit, bio-fertilizers and so on would be promoted. Large farmers will be mandatorily required to install composting units at their farms for self-consumption and on enterprise mode. Small and marginal farmers will be encouraged to install basic composting units
- 5.6.3. Training would be imparted to farmers for on-farm preparation of organic inputs using locally available materials.

## **5.7. Site selection for organic farming**

- 5.7.1. Site selection will be based on a cluster-based mode. The government will prioritize promoting areas under cultivation in the state where the utilization of chemical fertilizers and pesticides is less, and the area has good accessibility for developing market linkages.
- 5.7.2. In the line of Paramparagat Krishi Vikas Yojna (PKVY), a cluster approach will be adopted in large patches of up to 500 ha area.
- 5.7.3. Cluster chosen shall be in the contiguous patch, as far as possible, and may be extending over a few adjacent villages (but not over large areas in sparsely distributed villages).
- 5.7.4. In areas where conventional farming is being practiced alongside potential organic farms, standard guidelines will be issued by the nodal department for protecting such sites from contamination.
- 5.7.5. Clusters located in the vicinity of intact natural habitats such as National Parks, Wildlife Sanctuaries, Reserved Forests, and other related areas will be selected for the promotion of organic and natural farming on priority.

## **5.8. Farmer organizations and institutional building**

- 5.8.1. The Government will encourage a participatory and collaborative approach to organic farming to strengthen awareness, collaboration, production, value, and benefits.
- 5.8.2. VECs would be strengthened to enable the assessment of opportunities and challenges in organic farming, and for the generation of village demand for intervention and support from the Government where required.

- 5.8.3. Farmers would be encouraged and supported to form SHGs, Village Organizations, Farmers Producer Groups (FPGs), cooperatives including Integrated Village Cooperative Societies (IVCS) and federations to leverage the collective strengths of the producers, mitigate risks to individual farmers and to empower small and marginal farmers.
- 5.8.4. Farmer Producer Organizations (FPOs) and Farmer Producer Companies (FPCs) would be promoted and sufficiently supported to facilitate professional management in organic production, marketing and supply while ensuring mutual and fair benefit to the farmers. In addition to MOVCNDR the Government will also promote organic FPC's and convert Integrated Village Cooperative Societies (IVCS) to organic collectives. Through farmer organizations and institutions, small and marginal farmers will be empowered to participate in the value chain to enhance their income.

#### **5.9. Certification and product testing**

- 5.9.1. There are three types of certification process that are invoked, the Participatory Guarantee system of India (PGS-India) is preferred for National market, National program for Organic Production (NPOP-Third Party Certification) is preferred for international market and Trust organic is preferred for local market. Different level of certification requires different amount of efforts and different level of cost implications are involved. Suitable methods will be adopted for the regions depending on the local realities and depending on the cost benefit implications as worked out by the Nodal agency.
- 5.9.2. The Government has currently notified the Bio Resource Development Centre (BRDC) under the Planning Department as the certifying agency, this agency and any other agencies as notified in the future, would function as the certifying agencies to enhance access to certification and reduce costs for farmers of the state.
- 5.9.3. The Large Area Certification Scheme can be implemented for traditionally organic areas where there is no evidence of chemical usage. The provision can certify large contiguous area as organic under PGS.

#### **5.10. Branding, Labelling, and Marketing**

- 5.10.1. The Government will examine the creation of an organic brand to enable the association of organic certified produce to the state.
- 5.10.2. The Government will make dedicated effort to brand and promote organic products so that the farmers will get best price in the market.

#### **5.11. Patenting and Geographic Indication**

- 5.11.1. Efforts will be made to Patent unique organic products of the state to ensure the protection of intellectual property.
- 5.11.2. Efforts will be made to obtain Geographic Indicator (GI) for indigenous produce that are fully organic to enable the state and the farmers to leverage on the potential value of the GI.

#### **5.12. Linking organic produce to Health & Nutrition Schemes**

- 5.12.1. Organic produce provides a range of health and nutritional benefits and are important to eradicate malnourishment and promote healthy living in the state. Efforts will be made to link various State Government schemes such as health and nutrition schemes and programmes including mid-day meal, healthcare facilities, anganwadi centers and so on to

sources organic produce to leverage on the health and nutritional benefits of organic produce.

### **5.13. Building Climate Resilience**

- 5.13.1. Farm diversification will be promoted to build resilience to the impact of climate change. Farmers would be encouraged to adopt climate smart farming systems such as multicropping, intercropping and crop rotation.
- 5.13.2. Organic farming will be promoted in conjunction with other land-based activities including poultry, piggery, goatery, fishery, sericulture, apiculture, dairy, and minor forestry to minimize risks due to unexpected adverse weather events.
- 5.13.3. Crop insurance will be promoted across all farmers and farming communities to mitigate adverse impacts of climate change. The Government will facilitate the development of affordable crop insurance services to enable access by all farmers including small and marginal farmers.
- 5.13.4. In line with the Meghalaya State Water Policy, water management will be promoted in collaboration with the farming communities to enhance availability and access to water. This will include rainwater harvesting, catchment area protection, groundwater recharge, and the development and use of efficient irrigation systems and water saving technologies among others.
- 5.13.5. Efforts will be made to improve weather forecasting to enable timely decision making and implementation of mitigative measures in response to adverse weather.
- 5.13.6. Adoption of Crop Contingency Plans will be promoted to enable farmers to cope with climate variability.
- 5.13.7. Efforts will be made to reduce Green House Gases (GHG) emissions as part of the Government's commitment towards sustainable development and towards reducing the extent of climate change which will in turn reduce the extent of adaptation and mitigation measures required thereby reducing the overall cost of production of organic produce.
- 5.13.8. The Government enhance access to technology and information through the development of a center of excellence for Organic and Natural Farming for the state, region, and country. Agriculture advisory services and information systems will be developed for dissemination of knowledge and information.

### **5.14. Research and Development**

- 5.14.1. Laboratories and research centers will be supported to undertake research and development of applied technologies and processes pertaining to seed production, multiplication and propagation, bio fertilizers and inputs, improved organic farming practices and climate resilient technologies.
- 5.14.2. Investment for strengthening of bio labs and research institutions will be facilitated to enhance the scale and quality of research and development of innovations that can be adopted by farmers.
- 5.14.3. Research on post-harvest management including low-cost storage for enhanced shelf life and reduced spoilage, would be prioritized.
- 5.14.4. The proposed Society will take over the operation of various laboratories in the state presently with the Directorate of Research Training & Technology Induction, collaboration with ICAR and so on



#### **5.15. Development of Organic Farming Tourism**

- 5.15.1. Organic Farm based tourism will be promoted in the state to create additional opportunities for livelihood and employment.
- 5.15.2. Organic farms would be linked to various other tourism locations within the state to enable the creation of tourism circuits that provide a diverse but unique set of experiences for tourists.
- 5.15.3. The Government would support the establishment of farm-based homestays. These would be linked to tourism networks to ensure economic viability and sustainability.
- 5.15.4. Priority would be accorded to women and youth for taking up organic farming-based tourism initiatives. Training and capacity building would be imparted to entrepreneurs and interested stakeholders, particularly women and youth, to enhance their knowledge and skills in hospitality, management, and business, for self-employment.
- 5.15.5. Efforts would be made to promote the state as an organic destination which would complement and further propel the state's image as a nature-based tourism destination. The Government will aim to establish fully organic villages, towns, and districts.
- 5.15.6. The proposed implementation Society could potentially take on the day-to-day operation and management of the existing infrastructure of farms and Horti-Hubs and will explore the possibility of development of Agri and Horti hubs as tourist sites.

#### **5.16. Access to finance**

- 5.16.1. While subsidies and government support would be available to address fundamental needs, the Government will promote and encourage cooperation amongst farmers to facilitate access to finance and risk sharing.
- 5.16.2. Integrated Village Cooperative Societies (IVCS) will be encouraged at village and cluster levels. For areas that are yet to be connected to the formal banking system, the IVCS will provide organic farmers and organic farm-based entrepreneurs with basic financial services including thrift and credit to enable the farms and enterprises to flourish. Since an IVCS may also function as a banking correspondent, it will enable farmers to gain access to bigger loans, crop insurance and other financial services.
- 5.16.3. The Society will take over the day today operation of all the Horti hubs and Agri firms across the State to content them into the best practices in natural and organic farming and so on.
- 5.16.4. Linkage with LIFCOM (Livelihood Investment and Finance Company) which provides interest free loans to farmers and cooperatives and focuses on livelihood enhancement and development, banks, and similar organizations for development of market linkage, value chains and enterprise development.

## 5.17. Conclusion

- 5.17.1. This policy has been framed considering the emerging economic opportunity available in organic farming for the people of the state while also enabling the state to address the broader global issue of sustainable development through the promotion of sustainable farming.
- 5.17.2. The Government fully understands that the objectives of this policy can be achieved with the concerned Departments playing their role as per their mandate along with support from all other stakeholders who would also be required to carry out their respective roles and work in a collaborative manner to meet the objectives of this policy.
- 5.17.3. This policy will be supported by legal instruments and supplemented with implementation strategies and action plans with specific targets, measurable indicators, timelines, and progress against these will be continuously monitored.
- 5.17.4. The State Organic and Natural Farming Policy may be reviewed/revised periodically as and when the need arises.