

Government of Assam initiatives towards Organic Agriculture

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Abstract:

Organic agriculture is an ecological production management system that largely avoids the use of chemical fertilizers, pesticides, growth regulators etc. and thereby promote and enhance biodiversity and soil fertility. In recent times the concept of organic farming has been significantly gaining popularity due to its eco-friendly nature and several health benefits. Traditionally Assam is an agriculture-based state. Around 70% of the population of Assam are dependent on agriculture to earn their livelihood. Assam is naturally blessed with fertile land and agriculture favourable climatic conditions which pave the way for the farmers of the land to explore the potentiality of organic farming considering the huge global organic market. Though challenges are huge instead Government of Assam in cooperation with the government of India have taken many initiatives to promote organic farming in the state. Paramparagat Krishi Vikas Yojana (PKVY), Mission Organic Value Chain Development (MOVCD) etc. are some of the schemes in the direction towards making Assam an organic hub.

Keywords: Organic agriculture, Making Assam an organic hub, Government schemes etc.

Introduction:

Agriculture forms the backbone of the socio-economy of Assam. Near about 70% of the population of Assam are directly or indirectly dependent on agriculture to earn their livelihood. Fortunately, Assam along with the other parts of the North Eastern Region (NER) is naturally blessed with fertile soil and agriculture-based climatic conditions. The majority of the farmers living in the rural and hilly pockets of the region are yet to introduce chemical fertilizers and pesticides in the farming practises and still continuing with the ingenious farming methods. Therefore, traditionally Assam is by default organic. The harmful effects of the green revolution have made human civilization realize the importance of organic agriculture. In recent times statistics has claimed that organic products have been capturing the world food market at an increasing rate. Assam the land of monsoon has enough potential to meet the growing demands of organic products in the national and global markets. Governments at the centre and the state of Assam have taken many initiatives to promote organic agriculture in the state.

Methodology:

This paper has been developed based on secondary methods of data collection and largely relied on internet websites, journals, newspapers, magazines, official government websites etc as a source of data.

Objectives:

The objective of the study is to inform the readers about the government initiatives towards promoting organic agriculture in the state of Assam.

Meaning of Organic Agriculture:

Organic agriculture can be defined as “a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasises the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using, where possible, agronomic, biological, and mechanical methods, as opposed to using synthetic materials, to fulfil any specific function within the system” (Food and Agriculture Organization of the United Nations, n.d.). organic farming uses indigenous practices in the production process which is ecology friendly and of natural origin such as cow dung, organic waste etc. in other words, organic farming largely avoids uses of synthetically compound fertilizers, pesticides, growth regulators, genetically modified organisms and livestock, food additives (Singh & Dabas, n.d.). Organic production emphasises the maintenance of the nutrition value of agricultural output as well as the preservation of soil fertility. To achieve this goal organic production management employs a variety of techniques such as crop rotation, use of organic waste, green manure, rocks bearing minerals, ecology-based pest control methods etc. International Federation of Organic Agriculture Movements (IFOAM)- Organics

International established in the year 1972 described organic farming as “Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved” (IFOAM General Assembly, 2008).

Principles of organic farming:

IFOAM-Organics International has put forward four principles of organic farming which includes health, ecology, fairness and care. These principles provide organic farming a boost to grow and develop worldwide. They are described below:

- **Principle of health:** The culture of organic cultivation among the producers will be benefitted for preserving the health of the whole ecosystem. Healthy soil will provide healthy crops which in turn will foster the health of the living beings.
- **Principle of ecology:** Organic agriculture should be based on the principle of reuse and recycling and should focus its goal to attain ecological balance. Organic farming should be designed in such a way to ecological ambience through the maintenance of genetic agricultural diversity and without disturbing the natural habitats.
- **Principle of fairness:** Organic farming should ensure fairness at all levels which include, farmers, workers, processors, distributors, traders and consumers.
- **Principle of care:** In organic agriculture care should be taken to avoid unethical practices in agriculture and at the same time, it should ensure the health and wellbeing of current and future generations and the environment.

National scenario of organic farming:

Experienced with the harmful effects of genetic engineering and uses of chemicals in agricultural production has pushed the consumers towards organic agriculture. The demands for organic products have been increasing globally at a faster rate. The concept of organic farming is not new to India. Traditionally India has been growing its food using indigenous farming practices. For a long time, India has remained away from modern-day farming techniques such as genetic engineering, use of fertilizers and pesticides etc. The advent of the green revolution has drastically increased the use of chemical fertilizer and pesticides which has adversely affected the soil fertility and the nutrition value of the food. Therefore, in search of an alternative focus has been concentrated on organic agriculture. India has huge potential to become the global hub of organic farming. According to the report of FIBL and IFOAM yearbook 2020 India ranks 8th in terms of world organic agricultural land and 1st in terms of the total number of producers (Agricultural & Processed Food Products Export Development Authority, 2021). India accounts for 1.5 million hectares of organic agricultural land in 2016, which increased to 1.8 million hectares in the same year (Buragohain, 2020). As per the statistics of the World of Organic Agriculture Report 2018, India produces 30% of total organic production but accounts for only 2.59% of the total cultivation area (Buragohain, 2020). According to APEDA, till 31st March 2021 India's total area under organic cultivation process registered under National Programme for Organic Production (NPOP) is 4339184.93 hectares which include 2657889.33 cultivable areas and another 1681295.61 for wild harvest collection (APEDA). In terms of production, India produced around 3496800.34 MT during the year 2020-2021 of certified organic products which includes oilseeds, fibre, sugarcane, cereals and millets, aromatic and medicinal plants, tea, spices, dry fruits and vegetables etc.

Organic farming in Assam:

Along with other North-Eastern states, Assam is blessed with diverse and favourable argo-climatic conditions and with rich fertile land. Near about 70 percent of the population of the state are directly dependent on agriculture for their livelihood. The agricultural sector holds a major stake in the state's economy. Assam is mostly organic and is away from the ill effects of modernity. The farmers of the hills and village areas of the land are still dependent on ancient farming methods in the production process. according to government statistics, of the net cultivated area of 4.3 million hectares, around 30.92 lakh hectares have never seen the use of chemical or inorganic fertilizers (Das, 2020). Assam grows almost all its foods except a few such as wheat, onion, potato etc. using indigenous farming techniques. The principal food crops which include cereals, vegetables, and spices produced in the state are rice (paddy), maize (corn), pulses, potato, cauliflower, cabbage, carrot, tomato, spinach, coriander, ginger, turmeric, chilly, bhoot jalakia, banana, pineapple, kazi lemu etc. All these suggests that there is huge potential of organic agriculture in Assam. As of now many agricultural products from Assam have been listed under the Geographical Indication tag which are, ginger, litchi, joha rice, boka chaul, kaji nemu, chokuwa rice etc. (Sharma, 2021).

Role of government to promote organic agriculture in Assam:

The government of Assam under the ‘Chief Minister’s Organic Farming Scheme’ a total of 300 hectares of land have been brought under organic cultivation and 8100 hectares of land of the state have converted to organic production under the scheme of Paramparagat Krishi Vikash Yojana (PKYV) and Mission Organic Value Chain Development in North East Region (MOVCD-NER) involving 11923 in different districts of Assam. Besides, the government of Assam in cooperation with the central government of India have taken many initiatives towards promoting organic agriculture in Assam. A few of them are listed below:

• National Mission for Sustainable Agriculture (NMSA):

National Mission for Sustainable agriculture outlined under National Action Plan on Climate Change has been launched with the objective to promote sustainable agriculture and enhance agricultural productivity, especially in rainfed areas focusing on integrated farming, water use efficiency, soil health management and synergizing resource conservation. NMSA seeks to address issues regarding ‘Sustainable Agriculture’ in the context of risks associated with climate change by devising appropriate adaptation and mitigation strategies for ensuring food security, equitable access to food resources, enhancing livelihood opportunities and

contributing to economic stability at the national level (Department of Agriculture and Cooperation, Ministry of Agriculture, New Delhi, 2010).

- **Paramparagat Krishi Vikas Yojana (PKVY):**

PKVY is an organic farming scheme launched in the state of Assam during 2015-16. The main objective of the scheme is to promote the culture of organic farming and thereby to increase the fertility of the soil as well as the nutrition value of the food produced by farmers. The department of agriculture has been given the responsibility to prepare the blueprint of the scheme. Under the Guidelines, farmers will be organized in a cluster for encouraging them to adopt organic farming. 50 acres will form a cluster and engage in conversion and adoption of organic farming. The Participatory Guarantee Scheme (PGS) of certification empowers the farmers in the clusters to certify the process of production and have access to the organic market. A separate web portal is also developed for the purpose of PGS certification.

Initially, the scheme is implemented in 10 nos of District. A total no of 220 clusters have been formed in the selected districts. The total no of farmers is 6913 with a total area of 10935 acres (4428.675 ha).

District wise Cluster formation process is completed and the Numbers of clusters in each district are as follows:

Sl. No	Name of the District	No of Clusters
1	Karbi Anglong	26
2	Nagaon	27
3	Kamrup	30
4	Goalpara	30
5	Barpeta	17
6	Bongaigaon	20
7	Darrang	27
8	Sonitpur	8
9	Udalguri	30
10	Morigaon	5
Total		220

Source: <https://diragri.assam.gov.in/schemes/detail/paramparagat-krishi-vikasyojanapkvy-0>

- **Mission Organic Value Chain Development in Assam (MOVCD):**

Considering the fertile soil and favourable climatic conditions of the North Eastern Region (NER), the Ministry of Agriculture and Farmers Welfare, Government of India during 12th five years plan has launched a central government scheme called Mission Organic Value Chain Development in the region aiming at to make the region an organic hub. Traditionally, farmers of the land of the NER have been practising nature-based age-old methods of cultivation which is largely organic. Therefore, the NER has enough potential to meet the growing demand for the organic products in national and international markets. The scheme MOCVD has been framed with the prime motive to produce safe and healthy food in an organic way through the minimum use of chemical fertilizers, pesticides in agricultural production. Under the scheme, MOVCD emphasised has been laid on the brand building of the NER organic products and also to identify the areas, products and markets to develop.

The government of Assam has been working on a mission mode to achieve the goals of the central government-initiated scheme. The Assam government has already formed 10 clusters in the 9 districts of the state with a target of 500 ha area in each cluster. The table given below bears the details of cluster wise implementation of the scheme.

SL No	Districts	Locations	Area in Hectares	Agricultural produce
1	Dhemaji	Butipur	500	Red rice
2	Majuli	Pokajhora	500	Red rice
3	Sonitpur	Bihagiri	500	Okra, Ridge gourd & ginger
4	Golaghat	Padumpathar	500	Ginger & turmeric
5	Golaghat	Bokakhat	500	Turmeric & Red rice
6	Kamrup	Sonapur	500	Ginger & turmeric
7	Nalbari	Baliteria	500	Vegetables spl. Pumpkin
8	Chirang	Panbari	500	Ginger & turmeric
9	Kokrajhar	Titaguri	500	Ginger & turmeric
10	Cachar	Lakhimpur	500	Pineapple

Source: <https://dirhorti.assam.gov.in/schemes/mission-organic-value-chain-development-in-assam-movcda>

- **Rashtriya Krishi Vikas Yojana (RKVY):**

Rashtriya Krishi Vikas Yojana (RKVY) is a central government scheme implemented for the holistic development of agriculture and allied sectors. During the period 2016-17 organic farming schemes under RKVY in Assam has covered 60 (sixty)nos of Assembly constituencies covering 3920 ha. The crops are non-basmati rice like joha , fine HYV rice, black rice , spices and vegetables (Directorate of Agriculture, Govt. of Assam, 2021). With the objective to promote organic agriculture in Assam the then Chief Minister Tarun Gogoi in May 2012 inaugurated the organic agriculture produces market complex at Guwahati was constructed by Assam Agricultural Marketing Board at an estimated cost of Rs. 7.65 crore covering the land area of 1.17 acres under the scheme RKVY (Market complex for Assam's organic produce, 2012). Besides government of Assam has been planning to set up 100 organic markets for selling organic products at different corners of the state with the goal to make Assam an organic hub (NE Now News, 2019).

Challenges:

Assam is blessed with fertile land has enough potential in the field of agriculture to become an organic hub. However, the major constraints in the way of organic agriculture in Assam are as follows:

- Lack of market facility.
- Lack of exposure of the high-quality organic products of Assam in the mainland national and international markets.
- Lack of financial, technological and infrastructural support.
- Lack of advertisement and brand building.
- High costs of organic inputs.
- Non-availability of high-quality organic seeds.
- Lack of experience and expertise of the farmers about organic farming.
- Lack of storage facility in the rural and remote areas.
- Indifferent outlook of the industrialists towards agriculture of Assam

Conclusion:

The growing demands for organic products in the international markets have opened up new space and scope for Assam to fulfil the demands of the consumers. Assam is naturally blessed with fertile land. The hilly pockets of the region are still away from the touch of modern genetic engineering as well as harmful chemical fertilizers and pesticides. The farmers of the land are still dependent on age-old practices to grow their food which is largely organic. In regards to the growing global organic food markets, the government of Assam in cooperation with the government of India has been taking many initiatives to increase the production of organic products setting the goal to capture the global organic market. Many schemes such as PKVY, RKVY, MOCVD etc. have already been implemented to achieve the goal. However, the ground reality shows a different picture. There are many hurdles in the way of organic farming in Assam. Unless the problems are not addressed with a positive attitude by the governments at both state and centre the Assam's dream to become an organic hub can not convert into reality.

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