

Organic farming in Assam: Prospects and Challenges

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Abstract

Assam is the land of monsoons and evergreen forests is rediscovering its ancient farming practices which are committed to socially responsible, ecologically friendly and economically self sustainable development. Assam's potential for organic farming is enormous that is, 'naturally organic by default' and can be gauged from the extremely low consumption of the fertilizer in the region. Farmers in this region often use organic manure as a source of nutrients. Those farmers which are living in hillside, untrained by pollutants and away from hazards of modernity are now tapping into ancient secrets of sustainable farming – they are rediscovering the benefits of traditional and holistic farming that maintain soil health and biodiversity. According to government figures, 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, conscious organic farming has suddenly picked up across Assam, especially among those cultivating ginger, turmeric, oranges, black pepper, pineapples and tea since the demand for organic food is increasing worldwide. Despite of huge potentiality in the progress of the organic farming in Assam the inability of the government policy making level to take a firm decision to promote organic agriculture arise as the main obstacle. Lack of financial supports to promote organic farming, subsidy on chemical fertilizers, cheap imported fertilizers from Bangladesh puts some problems to growing organic farming in Assam. The purpose of present study is to gain insight into the prospects of growing organic farming in Assam. In addition, it will focus on highlighting various challenges of organic farming in Assam as well.

Keywords: Assam, organic farming, sustainable development, potentials and challenges of organic farming, naturally organic, organic manure.

0.0 Introduction

From ancient time economy of Assam is based on agriculture. Agriculture forming the back bone of Assam economy and is the dominant land use category comprising 54.11% of the total geographical area of the state. More than 80% of the total population of Assam is dependent on agriculture and more than 50% of total population is involved in agriculture sector. Though a huge portion of population absorb by the agriculture but adoption of modern agricultural technique is still negligible and mostly using traditional or old agricultural practices which enhancing organic farming intensity in Assam. Assam is blessed with rich natural resources comprising rivers, forests, highly fertile land, hills, organic nutrients which promote organic farming practices in Assam. The International Federation of Organic

Movement (IFOM) defines 'organic agriculture' as a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, bio-diversity 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 share environment and promote fair relationships and a good quality of life for all involved. At present organic products gaining popularity worldwide day by day in the wake of humanity's devastating experiences with chemical farming. Since Assam is the land of monsoons and evergreen forests which is redirected its farming technique to ancient farming practices along with many nations which are committed to socially responsible, ecologically friendly and economically self-sustainable development.

0.1 Objective

- I. To analyze how organic farming maintains sustainable agriculture practices in Assam.
- II. To analyze the current status and prospects of organic farming in Assam.
- III. To identify the challenges of organic farming in Assam.

0.2 Methodology

The present analysis is based on the secondary sources of data. For making this analysis necessary data are collected from journal articles, websites, publications of government and non-government organizations etc.

1.0 Discussion

1.1 Organic Farming: a milestone for sustainable agriculture

A sustainable agriculture must be able to meet the needs of the present without diminishing opportunities for the future. It must be capable of maintaining its productivity and value to society indefinitely forever. Practitioners of sustainable agriculture seek to integrate three main objectives into their work namely; a healthy environment, economic profitability and social and economic equality. Organic agriculture can contribute to meaningful socio-economic and ecologically sustainable development especially in poorer countries. Though Assam and North-East region of the country are mostly organic by default, according to government figures of the net cultivated areas of 4.3 million hectares, around 30.92 lakh hectares have never seen the use of chemical fertilizers.

The farmers of Assam have immense capacity to endure hardships natural and manmade. Their farming wisdom remains unchallenged despite technological advancements. Those farmers in Assam living in hillside, untainted by pollutants and away from hazards of modernity are now tapping into ancient secrets of sustainable farming—they are rediscovering the benefits of traditional and holistic farming that maintain soil health and bio-diversity. Farmers of Assam often use organic manure as a source of nutrients that are readily available either in their own farm or in their locality. Since Assam is naturally organic by default can be gauged from the

extremely low consumption of fertilizer in the region. Assam using only 56 kg of chemical fertilizers on per hectare of land while it is 106 kg on all India average. Like Assam's average pesticide use per hectare of land is 40.46 grams while all India average is 0.446 kg. According to data, state wise farm area (excluding forest area) under organic certification during 2013-14, the total land area under organic farming in Assam is 2828.26 hectare next to the Sikkim and Nagaland (source modified from APEDA 2012-13). Over 1600 registered are there in Organic Farmers Association Of Assam who using organic manure, vermicompost, animal waste etc. for growing of their crops and maintains the soil quality, bio-diversity and health of the people.

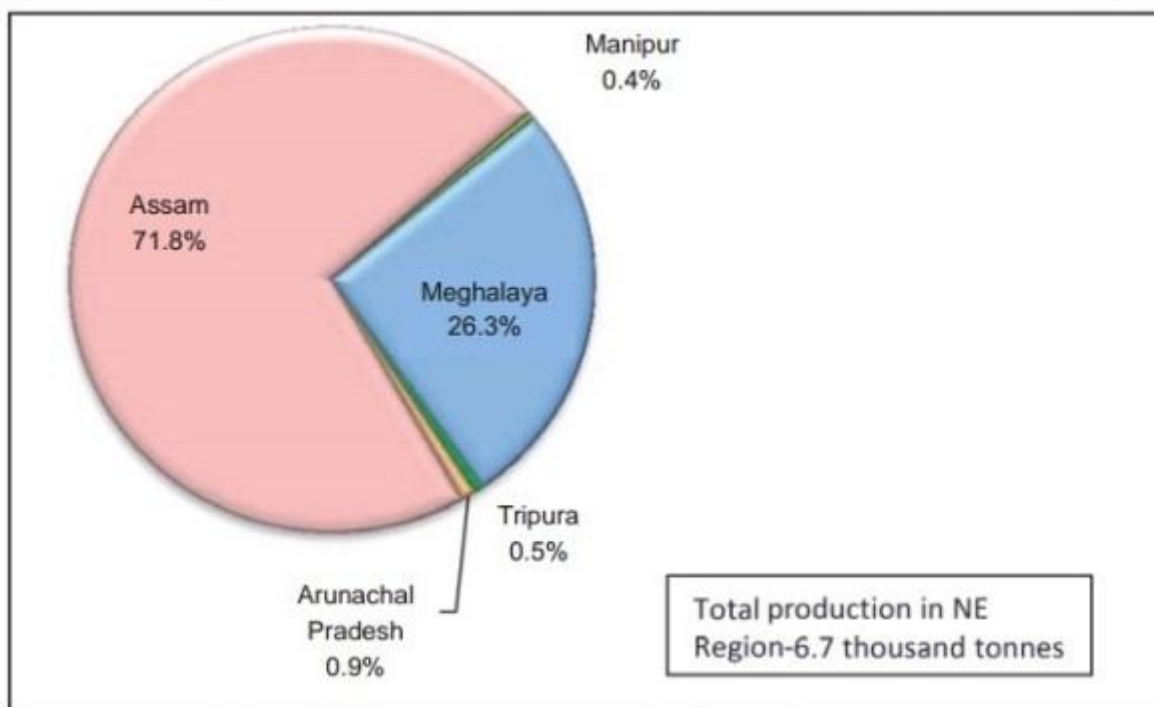
1.2 Current status and prospects of organic farming in Assam

The process of organic agriculture has come out to be viable alternative to address the issues thrown up as the after effects of chemical rich agriculture practiced since 1960. As the consumers becoming more conscious of food quality, health and environment, the demand for organic food is increasing in Assam. Conscious organic farming has suddenly picked up across Assam, especially among those cultivating ginger, turmeric, oranges, black pepper and pineapples. Besides, the growing demand for organic tree due to its medicinal value forced marginal and small tree farmers of Assam to produced organic tree. 'Kanoka Tea Estate' is one of the example of an organic tea estate in Assam, which covers 8.8 hectares organic tea cultivation located in Panchnoi Prajapathar, Sonitpur district. Hatikhuli Tea Estate is another example of organically growing tea estate of Assam. The total of 45 organically growing tea estate are found in Assam, which accounts highest number of organic tea Estates among the nation (source: Press Information Bureau Government Of India, Ministry Of Commerce and Industry, organic tea farming 10 July 2019).

Assam adopted organic culture of farming with the help of central government too. In Karbi Anglong district of Assam, two companies took steps to promote organic cultivation. Emphasis is given to help tribal people belonging to Karbi tribe realize better returns from their land. This initiative is designed to promote organically grown of turmeric, ginger and chili on a large scale so that it could processed and export. The state agriculture department initiated a pilot scheme jointly with the government of India in 2004 for organic farming in the districts of Udalguri, Sonitpur and North Lakhimpur covering an area of 91 hectares and involving 154 farmers. This scheme led to the production of 133 MT of Joha rice in the year 2007, and in 2006 it produced 60 MT of this aromatic variety of rice.

Here a pie chart is added to show the state wise organic production of NER in 2012-13:

Exhibit 1.0: state wise organic production in the North-Eastern Region of India (2012-13)



Source: Lok Sabha Unstarred Question No.3130 dated 11-02-2014

The diagram shows that Assam produced highest organic products among the North-Eastern region of the country accounting for nearly 72% followed by Meghalaya in 2012-13. It is worth mentioning that in the same year, of the total geographical area of Assam using 2299.21 hectare of its land for organic farming which rose to 2828.26 hectare in the year subsequent year 2013-14 (source : Lok sabha Unstarred Question No.3130 dated 11-02-2014). This shows that trend of organic farming in Assam increased year after year.

When the organic movement was started the North-Eastern states were identified as one of the promoting zone for organic farming. Since the land of North-Eastern states including Assam almost virgin and in Assam the crops was grown virtually organic, so Assam was identified as the one of the main zone of enhancing organic farming in the country. Assam has tremendous potential to grow crops organically because of the use of inorganic fertilizers and chemicals is almost least in the region. Assam receives plentiful rainfall 1524 MM per year which contributes to production of biomass and may be utilized as a valuable organic nutrient sources for sustainable crop production. Besides, the fruit of green revolution could not benefit the farmers of Assam to adopt modern inputs of farming due to which farmers have to rely on animal waste and other organic manure, hence crops are grown naturally. Most of the farmers of Assam maintaining livestock like pig, cattle, goats etc. and producing sufficient quantity of on-farm manure, which could be used for organic agriculture. Some medicinal rice and passion fruits like Lemon, Joha rice, Ukhura rice which are organically grown in Assam has high markets demand like organically grown green tea of Assam which forced farmers to adopt organic farming technique as well.

Assam has great potential to produce organic crop like Ginger which is an important cash crop in India. Assam is one of the emerging India's organic ginger hub, it is cultivated traditionally ginger growing villages of Assam. Assam is the major producer of turmeric in NER and contributes approximately 56% of total turmeric production area of the region. Litchi is another organically growing crop in Assam which is cultivated organic conditions of the state. Moreover Assam has great potential to produce pineapple by using its organic conditions at large scale. Besides, time tested indigenous farming systems and use of indigenous technical knowledge in agriculture may key to success of organic farming in Assam.

1.3 Challenges of organic farming in Assam

The main obstacles arise in the development of organic farming in Assam and NER of the country is to inability of the government policy making level to take a firm decisions. The organic farmers of Assam received a negligible amount of financial and technical assistance from the government while intensive agriculture receives a massive subsidy which discouraged the organic farmers. It is important for government to make a study about to how efficiently transit the farmers from today's farming practices to the organic agriculture practices without any gap in farming activities, but no such type of initiative has seen yet. It is also makes challenge to organic farmers to determine which particular crops would be the most suitable for which region of the state. It is one of hurdle in front of the organic farmers of Assam, especially for marginal and small farmers to find reliable channels to sell their products with no government supports. The following are the major challenges of organic farming in Assam:

Lack of awareness

The many organic farmers of the state possess a vague idea about the organic farming. Use of bio-fertilizers and pesticides, organic manure requires awareness on the part of farming community, but most farmers have a little knowledge about this.

Availability of cheap chemical fertilizers

With government subsidy the farmers of Assam can access cheap fertilizers, due to which they used it unscientifically which can deteriorate soil quality and bio-diversity as well. Moreover some farmers of the state using cheap imported fertilizers from Bangladesh, which may also hazards human health.

Output marketing problems

Since the organic products are produced at a high cost and so their market price is comparatively higher than the conventional produce and inability to obtain a premium price, at least during the period required to achieve the productivity levels suffers the producers.

High input cost

In Assam most of the farmers are small and marginal, most of the times they are not able to purchase the costly organic inputs.

Conclusion:

No agriculture can continue to feed a growing population if it depletes or fouls up its resource base. The path undertaken by conventional agriculture is ultimately a dead end in this regard, though there is an almost mystical faith that genetic engineering and other complex technologies will always triumph. Agriculture needs to be sustainable. Unless, Assam makes a rapid shift towards organic farming, the cost in terms of environmental degradation and health costs arising from agriculture could rise sharply. Organic farming is therefore, a welcome alternative from three angles, i.e., saving in finance draining by small farmers, eco-friendly and helps in improvement of soil fertility and will facilitate the government on trimming gradually the subsidy on fertilizers. The environmental sustainable advances in the productivity and profitability of organic production system will help to generate both livelihood and income. Whatever be the reasons, it appears as a welcome step that would help benefit farmers by increasing their earnings from the same land holdings while cutting down on the cost of pesticides and chemicals. However there are a few hurdles that have to be surmounted. It is important for the government to first carry out a study to ensure how best farmers can make a transition from today's farming practice to the organic mode because the shift would have to be carried out without any gap in farming activities. There is also a need for the government to identify which particular crops would be most suitable for which region of the state. Keeping in view the information needs of the farming community, the government must also train its personnel, without which the right knowledge would not be available to the needy. No less importantly, the government has to set up a mechanism to market the organic produce. It would be a dangerous proposition if the farmers, and especially the marginal farmers, find themselves without reliable channels to sell their produce with no government support by their side. Further the government could do well if certification and branding of produce could be done to identify them as genuine organic produce from Assam.

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