

Organic Farmers and Farms in North East India

NORTH EAST INDIA AND ORGANIC FARMING: AN OVERVIEW

The North East Indian states of Assam, Arunachal Pradesh, Manipur, Meghalaya, Nagaland, Mizoram, Sikkim and Tripura are organic by tradition.

The North Eastern Region, NER as it is generally known, is spread over 2.6 lakh sq km which approximates to 8% of India's geographical area and is home to 4% of India's total population. Being bestowed with favorable endowments of soil, agro-climate, agro and forest biodiversity, wetlands, good rainfall, flora and fauna, the people of this region have evolved as traditional tribal communities or clans with unique socio cultural moorings deeply embedded in the forests, hills, rivers and local biodiversity.

Because of its distance from the mainland, most policy and outreach programmes that were introduced into the country and spread quickly, have generally been delayed in reaching these distant lands. And so, it came to be that, the penetration and influence of chemical farm practices during the Green Revolution years remained to a minimum and the little that did reach was confined to the plains. Also being traditional communities a change would naturally infer an adaptation or switch in cultural rituals, and probably the reluctance to give that up may have acted in favour of retaining traditional agricultural practices in the NER. In the hills even today, agriculture remains predominately in the form of shifting cultivation locally known as 'Jhum.' Jhuming, of late, is viewed as environmentally unsustainable by policy makers and major attempts to wean people away from this traditional practice are underway.

As in the rest of the country, land here is state and privately owned, albeit with a difference. Private ownership falls under various systems of community ownership, for example, land owned collectively by the villagers or communities, land owned by the clans, land owned by the chiefs and land owned by individual families. The unique agricultural practices here are largely because of this peculiar land tenure system. And, though, 80% of the population depends on agriculture, the region reports 7.5% net sown area and only 1.5% of national grain production.

In the lower altitudes and mid-hill ranges of the region various horticulture and cash crops such as ginger, turmeric, areca nut, pineapple, large cardamom, passion fruit, oranges, etc. are being grown.

Rice is still the most important cereal crop in the valleys, plains and in the hill areas covering about 70% of total cultivated area. Besides maize, millets, potato, oilseeds (mostly mustard, rapeseed and sesame), cotton, jute, pulses, chilies, sugarcane, sweet potato etc. wheat cultivation is also gradually increasing. Fruits and vegetables make up about 5-6% of the produce.

Sikkim perhaps is the only region that has no intensive jhuming practice. 90% of the cultivated area in the plain areas of Tripura, Manipur and Assam are under irrigation. The rest are rain fed. Ginger, turmeric, arecanut, pineapple, orange, litchis, large cardamom, passion fruit, etc are grown in the mid hills. In the high hills and mountain areas the maximum cultivars are fruits like plums, pears, peaches, apricots, apples, potato, cabbage, cauliflower, radish, carrots, beans, broccoli, maize, millet and large cardamom. Wild Cardamom occurs naturally in the region. Passion fruit grows in the hills of Mizoram, Nagaland and Manipur as home garden fruit; however Nagaland and Sikkim in recent times have explored its commercial local and export potential.

NERCORMP, The North Eastern Region Community Resource Management Project for Upland Areas, a joint body of the GoI and United Nations is the chief official outfit working with agriculture activities in the region. It is in operation since 1999 in two districts each of Assam, Manipur and Meghalaya. The Ministry of Development of North Eastern Region (DoNER) represents the Government of India. The North Eastern Council (NEC) under the DoNER, looks into operational matters. The Government's attempts through NEPED (Nagaland Empowerment of People through Economic Development) and NERCORMP to promote alternate agri-methods in the past few decades is based on the premise of jhum being unsustainable from an ecological stand point.

On the other hand, there are strong arguments and independent studies indicating the appropriateness of jhum as a good agricultural practice for the NER. However, the external interventions promoted by official bodies as an alternative to jhum have brought in the cultivation of arecanut, ginger, pineapple, large cardamom and passion fruit in recent times.

A few representative stories are extracted below:

Organic Arecanut Cultivation

Stone Rynnaiw, aged about 40, from Upper Nongkyndang village in West Khasi district of Meghalaya, is an arecanut cultivator. He started arecanut cultivation in 1995-96, up scaling his plantation only about seven years ago. Today he has about 5,000 palms.

His arecanut garden is located on a gentle slope with black loamy soil, rich in nutrients. Originally the land was cleared by slash and burn method, and he intercropped arecanut with banana, papaya and lemon. He obtained the seedlings (about 2-3 years old) from a local arecanut grower. The variety planted here is known as Garo Kwai, as the original seedlings came from the adjoining Garo hill districts. He planted the saplings in the month of May-June, by digging 1 cft.pits and followed a random planting system to enable him to intercrop with banana, etc. At the initial stage he applied rice husk and wood ash around the arecanut saplings. He has no irrigation system but is entirely

dependent on rainfall. Weeding is carried out twice a year in the months of May-June and September-October. All the accumulated grass is used for mulching. He has applied no other manure and has not encountered any serious pests and diseases so far. Occasionally high speed wind during flowering and fruiting cause some damage. Areaca is harvested twice a year (February-March for green nuts and May-June when the nut covers turn yellow. Harvesting is done by traditional method (sickle tied on the tip of a long bamboo pole). Each arecanut tree gives a maximum of about 400-500 nuts and a minimum of 250-300. All produce is sold to local traders from the plains of Assam.

Organic Ginger Cultivation

Robin Naiding (37 years old) from Bagadima village, belonging to the Dimasa tribe, hails from a very poor family and has seven children.

In 2003, he got a loan of Rs. 2,000 from Biata Cultural Organisation under Natural Resource Management Group (NaRMG) activities. He invested the entire amount for purchasing ginger. He purchased 285 kg @ 7.00 per kg and planted it on one acre of land.

The site, selected during January, was a sloping jhum land with loamy soil. The shrubs and weeds were cleared and left for three weeks to dry. The dried weeds were burned during the same month. In February, the burned debris was mixed with the soil by hoeing. Mulching was adopted for soil and water conservation. At the onset of the monsoon (March–April), he sowed the rhizomes (Nadia variety) along with arhar. At the border of the field, sajana was planted which acted as fencing plus provided vegetables. (Traditionally farmers grow ginger as a mixed crop along with cowpea, bean, maize, chilies, brinjal, cucumber, solanum sp, pumpkin, and papaya. The farmers believe that mixed cropping results in healthy growth of crops, better yields and also helps in controlling and reducing the pest population).

During the month of January-February, 2800 kg ginger were harvested. Once ginger was harvested, 300 kg good healthy rhizomes were sunned for a week and put aside in a thatched house for seed purpose. Robin Naiding sold 2500 kg @ Rs. 12 per kg and earned a profit of Rs. 30,000. In 2004, he planted 300 kg of ginger and harvested 3000 kg and sold it for Rs. 13 per kg and earned a profit of Rs. 36,400. He also purchased 50 ducks for rearing and sold their eggs.

With every harvest he started sending two of his children to school. Today he continues to cultivate ginger along with other farming activities and his dream is to farm on a larger commercial scale.

Organic Passion Fruit Cultivation

Lamak Kajung of Lairowching village of Senapati district of Manipur is from the Maram tribe and lives adjacent to the neighbouring Kohima district of Nagaland. Initially he learnt the art of passion fruit cultivation from the neighbouring farmers of Nagaland. He even brought the seedlings from Nagaland. He started passion fruit cultivation in 2001 and presently has about 12 acres of land under passion fruit cultivation and seedling nurseries.

Kajung chose a gentle sloping land with good soil for his cultivation and slashed and burned the area for field preparation. He weeds the farm twice a year and uses weed as mulch. Wire trellises support the spreading vines. Frequent inspections are carried out personally for signs of pest, so far, he claims, there have been no major infestations.

In 2004, with a total investment of Rs. 2.5 lakhs, he earned a total of Rs. 8.5 lakhs (Rs. 2.5 lakhs by selling fresh fruits @ Rs. 8 per kg and Rs. 6 lakhs by selling saplings).

Kajung received the 'Award of Excellence as Best Horticulturist' from SBI, Manipur during 2004-05 for his success in passion fruit cultivation.

Organic Pineapple Cultivation

Khoya Teron from the village of Kekangadong in the Deithor area of Bokajan sub-division in Karbi Anglong district of Assam has been successfully growing pineapple organically for several years. His total cultivated area is a little over 1.00 ha. Originally this was jhum area which he converted into a pineapple garden. His annual income from selling the fruit and suckers is more than Rs. 45,000.

Initially during the first three years of cultivation, Teron spent considerable time in weeding operations – at least thrice a year. His garden is now mature and the spacing of the plants is such that weeds are almost naturally suppressed. He now clears weeds only once a year. However, he spends considerable time in collecting suckers and clearing them periodically for proper maintenance of the garden. 'Overcrowding of the plants is not good for pineapple', he says.

Fruiting season, June through August to early September are particularly busy months as he must collect the mature pineapple on alternate days to minimize damage. He also gets a winter crop of pineapples, which he says, does not have much demand but is able to sell, due to his proximity to the Bokajan market.

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