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Impact of organic tea cultivation among the small tea growers and their success in the sustainable income generation in Assam in India

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Abstract

The growing awareness on health and environmental issues in agriculture has led to the demand for production of organic food which is emerging as an attractive source of income generation. The 'organic' label is not a health claim, it is a process claim. There are also claims that food produced by organic methods tastes better and contains a better balance of vitamins and minerals than conventionally grown food. Tea is considered as one of the main agricultural produce in India. Presently, the small tea growers started producing organic tea in their tea gardens. The investigation was carried out in Dibrugarh district of Assam since the district has highest area under Tea cultivation. A sample of ninety farmers was selected from six villages. The impact of organic tea cultivation on the Small Tea Growers indicated that 96.66 percent of the respondents agreed that due to future prospects of organic tea, increased income and demand for organic products in the World market and rise in prices makes the farmers to get more income (93.33 percent) and 50.00 percent of the consumers are willing to buy organic products and they felt healthy and nutritious in consuming tea (96.66%). The case analysis of successful organic farmer expressed that he sold his tea in the brand name called Bloom at the rate of 2500 per kg which has excessive demand by the domestic as well as at international customers and earned ten lakhs per year. Hence, the organic tea cultivation may be sustained to get sustainable income by the small tea growers.

Keywords: organic tea cultivation, small tea growers, income generation

Introduction

Tea is the ancient beverage and the most popular drink in the world. Tea is cultivated in around 35 countries of the world and the major exporters are China, Sri Lanka, India, Kenya, Vietnam and Indonesia. India has sixteen tea growing states, of which Assam, West Bengal, Tamil Nadu and Kerala account for about 95 percent of the country's total tea production. The concept of small tea cultivation in home stead gardens and unutilized land along with other crops to sell the green leaf to the existing big factories for enhancing farm income is comparatively a recent development. Small tea cultivation came into existence when Kenya decided to produce tea for export in 1950s. It is a revenue generator as well as employment provider. Tea is a big agricultural enterprise which involves both agricultural and industrial operations. Presently the small grower segment is very important to the tea industry as this sector produces over 44.06% of India's tea as per the statistics of the Tea board of India. Assam tea is manufacturing specifically from the plant *Camellia sinensis* var. *assamica* known for its body, briskness, flavour and strong, bright colour.

The growing awareness on health and environmental issues in agriculture has led to the demand for production of organic food which is emerging as an attractive source of income generation. (Sukla *et al.* 2013) [5]. The 'organic' label is not a health claim, it is a process claim. It has been demonstrated that organically produced foods have lower levels of pesticides and veterinary drug residues and in many cases lower nitrate contents.

There are also claims that food produced by organic methods tastes better and contains a better balance of vitamins and minerals than conventionally grown food. The aim of organic Small tea growers is to grow a crop of high nutritional quality in sufficient quantity, encourage and enhance biological cycles within the farming system, involving micro-organisms, soil flora and fauna, plant and animals, maintain and increase the long term fertility of soils; use of on-farm resources in locally organised agricultural systems; avoid of all forms of pollution that may results from agricultural techniques allow producers an adequate return, safe environment and the long term wellbeing of the planet. The demand for organic tea has been increasing in the international market. The rising demand for organic tea in countries like United States, Japan and Europe and other countries is due to growing consciousness of the people against harmful effect of conventionally produced tea (Pramod Kumar *et al.* 2008.)^[3]. Hence, this study will assess the real benefits of Organic Tea Cultivation among the Small Tea Growers and their success in the sustainable income generation.

Methodology

Three major attributes of impact was chosen and the perceived

impact was assessed through Participatory method of simple scoring. It involves the adaptation of participatory tools combined with more conventional statistical approaches specifically to measure the impact of activities. Simple scoring method was adopted by Andrew *et al.* (2010)^[1]. Respondents were asked to place the stones based on the weightage of the statement. Later the stones in each item were counted and weightage will be given and ranked according to the highest score and analyzed. This is usually done by using counters such as seeds or stones, nuts or beans to attribute a specific score to each item or indicator. The sample size of 30 respondents was selected. Respondents were asked to give score to each item from their perspective by using stones. Then according to the responses total number of responses for each item was added and percentage analysis was done. Based on the higher percent of the item selected rank was given.

Findings and Discussion

The findings of the impact assessment were given under three heads namely Personal Impact, Social Impact and Economic Impact.

Table 1: Distribution of respondents according to their Perceived impact on Organic Farming. N=30

SI No	Categories	Scoring	Frequency	Percentage	Rank
I					
Personal Impact					
1.	Enhanced the confidence level	*****	24	80.00	VI
2.	Organic farming increased the contact with scientist and other officials	*****	26	86.66	IV
3.	Enhance decision making ability	*****	25	83.33	V
4.	Expanded the prospects of organic farming and opportunities in other crops in agriculture	*****	29	96.66	I
II					
Social Impact					
5.	Increased level of social participation	*****	21	70.00	VII
6.	Emerged as an opinion leader in village	*****	15	50.00	IX
7.	Gained more recognition in village	*****	25	83.33	V
8.	Many farmers approach me for guidance	*****	20	66.66	VIII
III					
Economic Impact					
9.	New income generation enterprise started	*****	20	66.66	VIII
10.	Increase in level of income due to demand and price rise for organic products	*****	28	93.33	II
11.	Increased investment on enterprise	*****	12	40.00	X
12.	Improvement in livelihood status	*****	27	90.00	III
13.	Increased savings	*****	26	86.66	IV

According to the responses of the Organic Tea Growers rank was assigned from I to X from highest to lowest respectively. Table 1 reveals that 96.66 percent of the respondents agree that their future prospects of organic tea influences to do other agricultural crops in organic way. Hence, it was ranked first. Followed by increased level of income. Due to the demand for organic products in the world market and rise in prices makes the farmers to get more income. Hence it was ranked second (93.33 percent). This study is in line with the findings of Ripunjoy (2005)^[4]

Third rank was given to the statement improvement in livelihood status followed by increasing contact with scientist and other officials and increased savings (86.66 percent). This might be due to medium to high information seeking behaviour and high income leads to increase in savings. As such 6th rank was given to enhanced level of confidence which might be due to educational status and experience in organic tea cultivation.

Seventh rank was given to increased level of social participation as most of them are members of Organic Small Tea Growers Association. 8th rank was given to the statement “many farmers approach to me for guidance” and New income generation enterprise started. Ninth rank was given to the statement emerged as opinion leader (50%) and 10th rank (40%) was given to the increased investment in enterprise. Overall it was concluded that, the impact was positive towards organic tea cultivation and sustainable income generation.

Consumer preference on organic tea

Tea has a very large universe of consumers. Consumer behaviour is influenced by many factors like, marketing factors, health factor, processing factor, sensory factors and value factors. In this study the consumer preference was assessed through their attitude towards organic tea and their consumption behaviour. The results were presented in the following table 2 and 3.

Table 2: Distribution of respondents according to their attitude towards Organic tea cultivation

Sl. No	Attitude towards Organic tea	Frequency	Percent
1.	Organic tea is natural, healthy and nutritious	29	96.66
2.	Organic tea produces without chemical	28	93.33
3.	Organic tea grown only by using vermicomposting and animal residue	25	83.33
4.	There is an organic certification body	27	90.00
5.	Organic products should be identified by a logo	28	93.33

(** Multiple responses)

Table 2 reveals that majority of the consumers (96.66%) felt that organic tea is natural, healthy and nutritious followed by 93.33 percent of respondents felt that organic tea was produced without chemical which they can be identified by a logo and 90 percent knows that there is an organic certification body. Whereas 83.33 percent knows that farmers used vermicomposting and animal residue for cultivating

organic tea. This finding is in line with the findings of Chris Timmins *et al.*, (2010) ^[2].

Consumers attitude are changing today as they are utilizing mass media and also their educational level make them aware of the harmful effects of conventionally produced tea might be the reason for changing attitude towards organic products.

Table 3: Distribution of respondents according to their consumption behaviour of Organic Tea (n=30)

SI No	Reason for consumption of organic tea	Frequency	Percent
1.	They are healthy and nutritious	29	96.66
2.	They are safe to consume not contaminated	27	90.00
3.	They are tasty	23	76.66
4.	They are readily available	17	56.66
5.	Good for management of illness	26	86.66
6.	Affordable	8	26.66
7.	Makes me feel in touch with my indigenous roots	28	93.33

(** Multiple responses)

Table 3 reveals that majority of the respondents (96.66%) consumes organic tea because they are well known of the fact that organic tea is healthy and which make them feel them in touch with their indigenous (93.33%) and 90.00 percent feel safe to consume organic tea. Most of the respondents (86.66%) consider organic tea for good management of illness, followed by 76.66 percent find organic tea to be tasty as they can feel a special aroma and flavour. 56.66 percent consume organic tea as they can easily get in their neighbourhood. While more than one-fourth of the respondents (26.66%) find organic tea is affordable.

Consumers are aware of the reason that organic tea is healthy and nutritious despite of the fact that they are expensive than conventionally produced tea. Apparently organic tea would make them feel in touch of their indigenous root and they find it has more taste, good flavour and colour which motivated them to buy organic tea even they are slightly or significantly more expensive than conventional tea. According to the perspective of the consumers, they find organic tea is good for management of illness as it is produced without chemical and has carcinogenic effect.

Consumers are sensible about their health hence they prefer to consume nutritious foods regardless of the price but while buying they get motivated towards the quality of the tea, its taste, colour as well as flavour. Fancy consumers also check packaging quality, proper labelling, licencing and brand name while some customers trust their manufacturer as they are well known of their making tea.

Sustainable Income Generation

A successful organic and small tea Grower Mr. Birinci Bora, belongs to Tairai Soibam Village of Assam with DIC Registration No- 521604 and Biometric No. - ASDIDIPU619 is a progressive farmer of age 49. He is possessing 1.40 hectares of land that has been inherited from his father. His passion is to do farming instead of going for Government job.

He has completed 25 years of farming experience. His attitude and hardworking nature made him to succeed and became a key person as well as opinion leader in the village. While his father handover the tea cultivated land in his hand he uses chemical fertilizers in his land to increase productivity. But one day he realised that chemical fertilizers are affecting his land and the neighbourhood habitant hence he stop farming for few years. Again after the recovering of his land he started cultivating tea organically. He has good rapport with scientist, extension officers and Tea Board officials and getting valuable guidance leads to Organic tea cultivation with good returns.

He started a Self- Help Group with 50 members and at present he has 200 members in the group. The members of the group joined together to market their organic tea with the help of online market promotion. As being an innovative grower he was trying new techniques to improve his organic Tea gardens. He was successfully able to blend many medicinal plants with tea. He sold his tea at 2500 per kg which has excessive demand by the domestic as well as at international customers. Instead of Organic Tea he also produces organic vegetables when leaf season is over. Presently, the small tea growers started producing organic tea in their tea gardens.

Conclusion

In Assam tea cultivation on small holding is still in nascent stage. There are some hindrances for the growth and development of this sector which include – ownership of land, lack of finance, low price realisation of green leaf, unorganised nature of cultivation, etc. Apart from this majority of the respondents consume organic tea because of the fact that organic tea is healthy and which make them feel in touch with their indigenous and feel safe to consume organic tea. The amount of organic tea producers and the volume of organic tea traded on the world market has increased substantially over the last few years. Hence there is a wide scope to increase the organic tea production and export

of products to other international markets which fetches profit and sustainable in come in near future.

References

1. Andrew Catley, John Burns, Dawit Abebe, Omeno Suji. Participatory Impact Assessment- A Guide for Practitioners. Feinstein International centre, Friedman School of Nutrition Science and Policy, 2007.
2. Chris Timmins. 'Consumer attitude towards Organic Food', Beaufort Research, Aberystwyth University, Aberystwyth, 2010, 5-158.
3. Pramod Kumar, Badal PS, Singh NP, Singh RP. Tea industry in India: Problems and Prospects. Indian Journal of Agricultural economics, 2008, 63(1).
4. Ripunjoy. A Socio- Economic study on the Small Tea Growers of upper Brahmaputra Valley Zone of Assam. Unpub. M.Sc. (Ag.) Thesis, TNAU, Coimbatore, 2005.
5. Shukla UN, Mishra ML, Bairwa. Organic Farming: Current Status in India. Review article. Journal of Plant Biology Research. 2013; 2(2):38-48.