

Inclusive Growth through Organic Farming**S Vijay Kumar, Associate Professor****Dept. of Business Management****Stanley College of Engineering & Technology for Women****Hyderabad, Telangana - 500001****Abstract**

Real India lies in villages. Entire village is an economic system. And villages are backbone for Indian economy. As agriculture is our important sector and contributor to the economy. Group farming will give economies of scale and overcome traditional lacunae in individual farming. India is well poised for agricultural growth. It has variety of flora and fauna and natural resources. There is a possibility of more local tribal brands becoming global brands. As the village and tribal brands are very near to the nature, they command unique preference of the consumers globally. Organic brands like Araku Emerald, though in nascent stage, have become the way of the life and have immense international potential. This paper suggests group farming with organic inputs as a tool in inclusive growth in rural India. Organic produce will fetch more revenues in international market in long run. The paper also, suggests producing and marketing slow food in rural India in the light of expected change in food consumption pattern.

Keywords: Agriculture, Rural Organic Farming, Inclusive Growth

Introduction

Young adult segment of consumers, prefer to spend more on healthy food, fitness and less on medications and surgeries. In the light of urbanization and high levels of pollution and toxic presence in most of the food, the urban consumer is shifting to organic food.

Organic Farming

Organic farming is basically a holistic management system, which promotes and improves the health of the agro-ecosystem related to biodiversity, nutrient bio-cycles, soil microbial and biochemical activities. An alternative system is called 'Eco-technological farming' has often been equated to organic or bio-dynamic farming in the Indian context. Organic farming emphasizes management practices involving substantial use of organic manures, green manuring, organic pest management practices and so on. It has also come to mean that it is a system of farming that prohibits the use of artificial fertilizers and synthetic pesticides. Bio-dynamic farming is an alternative variant where the chemical fertilizers are totally replaced by microbial (biological) nutrient givers such as bacteria, algae, fungi. Biological Pest management of crops is undertaken by employing predators, parasites and other natural enemies of pests, in addition to all the rest of options that help to avoid resorting to chemical pesticides.

Organic farming could then signify all such farming practices. Organic farming is thus a philosophy for sustainable rural development and lead to inclusive growth at village level. The philosophy of organic farming is very important because it cannot be viewed in isolation as for a market, but also could be a way of life in the Indian rural context. Therefore, organic farming can be defined as socially just, environment friendly and economically viable alternative to chemical-oriented farming. This system is an effective bend to traditional practices of wisdom with appropriate modern advances of science. In fact, organic and bio-dynamic farming signify the production of a kind of chemical residue-free slow food products to sensitive consumers. In other words, Organic is a 'process claim' rather than a 'product claim'. This is because the agricultural products such as cereals, pulses, grams, fruits, spices or cotton cannot be distinguished into organic type or inorganic type. Several countries and multitude of private certification organizations have defined in similar ways organic farming as agriculture is defined. The brand power in the contemporary fast food format is being eroded. A seminal work by Miele and Morgan (2003) has identified a new trend in the market: The Slow Food Movement. It created a scope for a niche market in the form of brand organic.

Benefits of Slow Food Farming

- Slow food farming is capable of producing as much food as industrial agriculture.
- It outperforms modern agriculture even in drought.
- It protects biodiversity and food culture, whereas overuse of aquifers in India resulted in its damage.
- Modern methods damage the soil structure and composition, opting for organic farming will help revive the damage and preserve the indigenous gastronomic traditions.
- It encourages local production and consumption, as means of self reliance which leads to self sufficiency.
- Agricultural waste of around 700 metric tons is produced in India per annum and the same can be used to cut the cost on fertilizers and lead to overall growth.
- There are many alternatives for supply of soil nutrients from organic sources like vermi-compost and bio-fertilizers. Technologies have been developed to produce large quantities of nutrient rich manure or compost. There are specific bio-fertilizers for cereals, millets, pulses and oil seeds that offer a great scope to further reduce the gap between nutrient demand and supply. Organic agriculture is in many ways a preferable pattern for developing agriculture, especially in countries like India.

Efforts of promotion of organic farming have been made in many states. Efforts have been made by the NGOs to study organic farming in Gujarat, Madhya Pradesh, Kerala, Karnataka, Tamil Nadu. Agricultural Universities organized workshops, Group meetings. Seminars and Conferences on this topic drew attention of scientists to the need

of research in this area. The use of bio-fertilizers, bio-pesticides, vermin-compost, farmyard manure, green manure, crop residues have been based on long experimentation. In fact, a number of farmers, NGOs and even some Universities/Institutions are practicing organic farming, using traditional sources and methods of nutrient supplies to the crops and non-chemical forms of plant protection measures with varying degree of success.

However, the technology adopted and methods followed are not well-documented. It is essential that the philosophy of organic farming is percolated to farmers properly. Government alone cannot bring the complete inclusion. Private partnership can act as a catalyst in inclusive growth. Naandi Foundation (Dr Reddy Labs) is helping farmers in Araku in the production of organic coffee.

The following crops are currently cultivated under organic farming methods in our country.

Commodities: Cotton, Sugarcane, particularly for Sugarcandy (gur)

Cereals: Wheat, Paddy, Jowar, Bajra, Maize

Pulses: Pigeonpea, Chickpea, Greengram, Blackgram, Chana,

Oilseeds: Groundnut, Castor, mustard, sesame

Spices: Ginger, Turmeric, Chillies, Cumin

Plantation Crops: Tea, Coffee, Cardamom

Fruits : Banana, Sapota, Custard Apple and Papaya

Vegetables: Tomato, Brinjal, Cucurbits, Cole crops and leafy vegetables

India is well poised to promote organic farming. Establishing biotechnology parks, promotion of crop research is essential either through public and private partnership/sponsorship to promote the rural inclusive growth.

AC Nielsen's (Nielsen, 2006) study indicates that Indians are amongst the top 10 buyers of foods with "health supplements" globally but lack access to slow food products. The study indicates Indians are keen to purchase slow food for their children but it suffers from poor availability and premium price perception. Nearly 30% of the farm produce (depending on the crop the percentage will change) is retained by farmers themselves for self-consumption. So they need to be encouraged to produce slow food. Then they will consume themselves and know the advantages of slow food and further motivated to produce slow food. Slow food production is friendly for developed and developing countries as well. About 60% of the rural consumers are involved either directly or indirectly in production of food. Hence, a targeted marketing approach on the part of the policy makers is required to promote consumption of organic food among this segment of the consumers. This perhaps would bring about a radical shift in the consumption and production of organic food. Further, one of the important constraints in consumption of organic food appears to be its availability rather inclination towards consumption. It can be seen from

the Table 1 that the farmers in fact, are enhancing the consumption of fertilizers. The focus of the farmer still seems to be on volume rather than value. This approach requires a change.

Table 1: Consumption of Fertilizers in India

	Consumption in 1996-97		Consumption in 1999-2000	
	Per Hectare (Kgs) N+P+K	Fertilizers (^{'000'} Tonnes) N+P+K	Per Hectare (Kgs) N+P+K	Fertilizers (^{'000'} Tonnes) N+P+K
	North Zone	116.60	4839.84	136.30
East Zone	60.60	2048.30	83.70	2764.98
West Zone	49.10	3823.95	62.30	4923.23
South Zone	102.80	3596.04	133.00	4698.13
All India	76.00	14308.13	95.60	18128.93

Note: There is a need of detailed survey to determine the actual usage. Consumption of fertilizers per hectare for 1996-97 and 1999-2000 has been worked out on the basis of gross cropped area available for the year 1994-95 and, 1996-97 respectively.

Araku Emerald

Araku, a scenic landscape of Araku Valley, Visakhapatnam district, Andhra Pradesh, India is the country's only coffee grown by a Tribal Cooperative to have got an International Certification, a Fair Trade Certification and FLO Certification for export markets. The produce is processed under strict International processing standards; a central coffee processing unit has been built and 4,000 tonnes of coffee is produced annually in Araku Valley and Paderu regions, which is about 15 per cent of India's coffee production. Organic coffee fetches better prices to growers in international market and of course

better health to consumers. Araku coffee has been judged as the world's best coffee due to the use of organic fertilisers.

The production of Araku Emerald as a premium organic coffee is part of a unique tribal livelihood program leading to inclusive growth at Araku in partnership with a host of regional, national and international partners – the ITDA, Paderu, Naandi Foundation, The Coffee Board of India, and International coffee quality control, biodynamic and Organic experts. Araku Emerald – which is presently for export – is processed under the best international quality standards; a centralized coffee processing plant, India's first such plant set up by the tribal coffee cooperative members too has been set up at the village. The unit will process 200 MT of coffee in the year 2008 and nearly 600 MT during the 2009 coffee harvest.

Success of this brand is so impressive that Government of India recommended that all the 11 coffee-producing mandals (part of a village) in the Visakhapatnam District should be converted into an 'organic' zone and it is a remarkable achievement of Araku Emerald.

Spurred by the economic, environmental and social sustainability achieved thus far in Araku Valley as part of the organic coffee cultivation program, to boost coffee production, Government of India announced that Coffee Board of India and the ITDA together will spend Rs. 76 crore for coffee cultivation in Araku Valley over the next five years is an accomplishment.

It is an inclusion which made eight thousand small and marginal farmers, growing organic coffee as the primary source of income, into profit making entrepreneurs.

Statistics

- Araku Emerald is the country's only coffee grown by a Tribal Cooperative
- Have got both an international and a Fair Trade certification
- produce is processed under strict international processing standards
- Processing plants to be owned, managed and run by tribal women
- Other product: They also grow pepper as intercrop
- About 4,000 tonnes of coffee is produced annually
- Coffee Board would be responsible for all technical assistance
- ITDA would help in extension services and

- Naandi Foundation would provide testing, certification and marketing of the organic coffee
- Spread in presently for 8000 farmers across 8000 acres
- One plant will process 200 metric tonnes of coffee in one quarter
- presently, 60,000 tribals are working in coffee cultivation
- The coffee output was 4,000 tonnes during 2006-07
- In another five years, this would be stepped up to 8,000 tonnes
- In five years, the number of growers would also be doubled to 1.20 lakh.
- would export 300 tonnes of coffee
- The Coffee Board broadly classifies coffee varieties, such as Monsooned Malabar, Robusta Kaapi Royale and Mysore Nuggets Extra Bold as speciality coffees.
- Monsooned Malabar derives its name from a process through which the beans are exposed to the south-west monsoon winds that give it a unique flavour.
- Mysore Nuggets are large beans and Kaapi Royale is a parched Robusta.
- In 2006-07, India exported 9476.3 tonnes of these three varieties—about 4% of total coffee exports of 243,059 tonnes. Unlike normal coffee, which sells in tonnes, speciality coffee volumes are restricted to bags of 60kg each.

Opportunities

- Large scope for area expansion
- Opportunity to increase the productivity

Challenges

The following problems have been identified:

- Lack of information on technical and market requirements; and trading opportunities are also less for developing countries like India. Producers lack easy interstate or international market access
- Lack of knowledge of the commercial and environmental benefits of organic farming;
- Lack of qualified personnel in the production and commercialization of organic products.

Obstacles to Global Marketing

- There are difficulties in supplying required nutrients to crops only through organic sources and ensuring sufficient availability of organic matter to farmers.

- Several obstacles inhibit expansion of the organic produce markets. The most significant obstacles concern supply, price and distribution.
- Lack of market information and global marketing strategies is a major constraint to market development. For example, export channels for organic coffee from India are not fully established. Marketing policies to promote the use of brand names and other mechanisms, including electronic commerce, to move organic products out of commodities markets and auctions, are needed to increase premiums.
- The organic market is still not accessible to small and marginal farmers.
- Farmers have inadequate access to finance due to lack of financial information and non-formal business practices.
- Farmers access to private equity and venture capital and have a very limited access to secondary market instruments.
- Absence of proper cold chain facilities, proper post harvest technology marketing network and facilities.
- Limited availability of quality seeds and planting materials and slow pace in adoption of new technologies.

Other Emerging Local Brand-Manipur Passion Fruit

India as the second largest producer of fresh fruit and vegetable and now is accelerating pace into production of organic produce especially after launch of Government of India's National Horticulture Mission and several other schemes.

North-East has been identified as the mega bio-diversity spot in terms of its rich reserve of flora and fauna. The Manipur state decided to encourage organic farming in the development area as organic products fetch a premium in the international market. Since 2001-2002, Manipur has been carrying out a horticulture technology mission.

As per this mission it is setting up agri exports zones for organic products and passion fruit in collaboration with Agriculture Processed Food Exports Development Authority. Agro-climatic conditions of the State are very much suitable for cultivation of Passion Fruit in large scale and processing technology is available.

Passion fruit plant is native of tropical America. Organically produced passion fruit commands high international demand.

In Manipur purple variety is under cultivation. The pulp of this fruit can be used as a flavoring in baking or for mixing cocktails. Canned passion fruit nectar is a delicacy and is found in specialty markets.

Market Potential

- North Eastern Region, the main growing region for passion fruit is receiving high priority for development of horticulture.
- All parts of Manipur can grow passion fruit in large scale.
- Passion fruit juice enjoys very high level of acceptability due to its unique taste and flavour.
- The global demand of Passion fruit is estimated to be much higher than supply. Hence, there is ample scope for new entrants in the world trade.
- APEDA is supporting export of the product.

With changes taking place in the domestic and international economies, agricultural strategy in India can have a re-look at the north-east hill economies. The disadvantageous geographical situation and severity of the terrain have been standing in the way of industrial development and trade particularly of the Food Processing Industries which can thrive only through value addition and cost efficiency. It is high time to explore this untapped sector as processed fruits, vegetables, mushrooms, ginger, spices and rice etc. are having good demand in the local and export market. At present, many of such processed fruits and vegetables are imported to this State from other States and neighboring countries through Myanmar. At the same time some of the units in this sector have been established and are being run successfully, catering to the local demand. This indicates existence of potential for inclusive growth.

Conclusion

The agriculture is the backbone for any developing nation. It is very vital that due recognition and support be given to this sector in the larger interest of the economy as a whole. The challenges faced by this sector are to be deliberated by the policy makers and efforts be made for the suitable measures to make group farming strong enough to face these challenges. This may be possible by the

coming together of government agencies, regulators, NGOs and financing agencies. Group farming, producing organic products can compete with international brands provided they maintain high quality standards to meet international requirements as envisaged by Araku Emerald and Manipur's Passion fruit. Organic group farming will lead to inclusive growth.

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