



Organic Farming in Karnataka : Practitioners Perspectives

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Abstract – During the last two decades, there has also been a significant sensitization of the global community towards environmental preservation and assuring of food quality. Ardent promoters of organic farming consider that it can meet both these demands and become the mean for complete development of rural areas. After almost a century of development organic agriculture is now being embraced by the mainstream and shows great promise commercially, socially and environmentally. While there is continuum of thought from earlier days to the present, the modern organic movement is radically different from its original form. It now has environmental sustainability at its core in addition to the founders concerns for healthy soil, healthy food and healthy people. The empirical evidences of efficiency analysis of Organic and conventional farming systems are scarce or even absent. In the above setting, this study made an attempt to critically examine the contemporary alternate agriculture and the perception of organic farming as perceived by farmers.

Keywords – Organic Farming, Perception, Sustainable, Agriculture, Green Revolution.

I. INTRODUCTION

The input-intensive cultivation types of the **Green Revolution**, which was initiated in the sixties by the international agricultural research centers, are on the outer opposite side of the diagram. Here, the emphasis was on introducing so called high-yielding maize, wheat or rice varieties in the countries of the South, and the aim was to increase agricultural output. The yield of these varieties will only be higher in comparison to traditional land races if intensive use is simultaneously made of artificial irrigation, fertilizer and pesticides - and this costs a lot of money, which is why the Green Revolution coincided with accelerated structural readjustment in agriculture. Initially, there were enormous increases in yielding the good farming locations, especially in Asia. But by and by, the high-yield strains had to be crossed with more suitably adapted local varieties in order to maintain yield levels in the long run. In retrospect, with its massive interventions in sensitive agro-ecological systems, the Green Revolution has caused many environmental and social problems.

It is perhaps owing to these issues and their negative impacts, that the Intergovernmental Panel on Climate Change (IPCC) has noted that agriculture as practiced today (conventional agriculture, modern agriculture or GR agriculture) accounts for about one fifth of the anthropogenic greenhouse effect, producing about 50 per cent and 70 per cent, respectively of the overall

anthropogenic methane and nitrogen oxides emissions. Hence, present study.

Organic farming is being promoted and is gaining acceptance all over the world, especially in Southeast Asia, as part of the latest efforts to encourage agriculture systems that are both socially and ecologically sustainable. The system is based on minimizing the use of costly external inputs, such as synthetic fertilizers and pesticides, by increasing and efficiently utilizing farm-based resources (Ramesh et al. 2005). Organic methods have been adopted more rapidly in most industrialized countries (Lampkin and Padel 1994) than in the Third World (Scialabba 2000).

Several studies across the world revealed the fact that, farmers' attitudes and opinions towards organic farming systems (OFS) should be evaluated to identify their actual perceptions about OFS. Both their viewpoints and decision-making patterns for adopting organic farming, whether positive or adverse, should be determined for developing effective extension methods in the delivery of sustainable agricultural practices. Hence, the specific objectives of this study were designed to analyze the opinions of organic farmers (OF) towards organic farming.

1.1 Need for Sustainable / Alternative Farming System

The performance of the agricultural sector influences the growth of the Indian economy. Agriculture (including allied activities) accounted for 15.7 per cent of the Gross Domestic Product (GDP-at constant prices) in 2008-09 as compared to 21.7 per cent in 2003-04. Notwithstanding the fact that the share of this sector in GDP has been declining over the years, but its role remains critical as it accounts for about 52 per cent of the employment in the country. Agricultural sector also contributed 10.2 per cent of national exports in 2008-09 (Economic Survey, 2009-10). Agriculture provides food for more than one billion people and yields raw materials for agro-based industries.

According to the Food and Agriculture Organization (FAO, 2007), sustainable agriculture "is the successful management of resources for agriculture to satisfy changing human needs while maintaining or enhancing the quality of environment and conserving natural resources". In this context, Organic Farming considered to be most appropriate eco-friendly technology in contemporary agrarian crisis in the developing countries like India.

Last decades, organic farming received increasing attention in agricultural policy and rural development. For its defenders, organic farming is regarded as a more sustainable production method compared to conventional



practices. Moreover, as public concern for food quality and safety, animal welfare and the conservation of natural resources grows, the organic farming philosophy and practice become more important. Policy makers noticed this opportunity and have tried to create a stimulating framework for the development of organic farming. Hence, today a whole set of policy instruments exists both at European and national level, reflecting the willingness for active support, e.g. the European Action Plan for Organic Food and Farming (European Commission, 2004) Keeping in view the above situations the research study was undertaken with the following specific objectives.

Objectives of the Study

- 1 To review the need assessment of the contemporary alternate agriculture
- 2 To find out perception about meaning of organic farming and specific features of organic farming as understood by the farmers.

1.2 Research Methods

The present study based on purposive sampling the selection of sample organic farmers for the cases studies were chosen from four districts i.e. namely; Mandya, Chitra Durga, Gadag and Raichur Apart from the quantitative analysis of primary data , qualitative analysis was also done by in-depth case analysis of selected farmers

Scope of the Study

Broadly, the present study has been planned to cover five major issues. First, an overview of organic farming

1.3 Limitations of the Study

Since the study has covered only four Districts in Karnataka the results cannot be generalized to other districts.

The case studies was conducted in Four districts of Karnataka. Ten organic farmers were selected based on following criteria.

- a) A minimum of five years of experience in organic farming,
- b) Cultivating either annual or perennial crops. Farmers cultivating only perennial crops were excluded,
- c) Proximity to the university. The respondents belonged to Mandya, Chitra durga, Gadag and Raichur Districts in Karnataka.

II. Perception of Farmers About Meaning of Organic Farming

Table 1.

Sl. No.	Organic Farming means	Frequency	Percentage
1	Non use of chemicals of any type in farm production	4	40
2	Use of locally available materials which are eco-friendly	4	40
3	farm production	1	10
4	Preparation of compost and vermicomposting using farm materials	1	10

The table 1 revealed that 40 per cent of the respondents considered organic farming as non use of chemicals of any type in production,40 per cent opined organic farming as use of locally available eco-friendly materials in farm production. Substantial increase in the production of food grains is achieved through the use of improved crop varieties, higher levels of fertilizers and plant protection chemicals. Of late it has been realized that the increase in production achieved is at the cost of soil health and friendly environment. Sustainable production at higher levels becomes possible only when the factors leading to the continued maintenance of soil health are adequately taken care of. The modern farming systems aim at maximizing production through the use of increased quantities of external inputs such as fertilizers and plant protection chemicals without due consideration to their ill effects. Consequently, the traditional agronomic practices such as green manuring, use of farm wastes either as such or after composting and other soil ameliorative measures have not become part of the farming systems. This has resulted in a slow but steady decline in the productive and recuperative capacity of the soil. Indiscriminate use of fertilizers has caused several problems on the farm as well as outside the farm. A few studies shows that, plants become more susceptible to pests and diseases hence their control could be effectively done by using high potency poisonous chemicals. As a result their residue on plants their products and in the soil handled to health hazards In order to mitigate these health hazards and bring out natural balance and protection of ecosystem, organic farming movement has started in several parts of the world, in which no production. For one respondent organic farming was preparation of compost and vermicomposting using them in farm production, and organic farming was nonuse of hybrids and judicious use of water in farm production for another respondent.

The concept of organic farming has been perceived differently by the respondents.

To most of them it means the use of organic manures and indigenous methods of plant protection as against use of synthetic fertilizers and pesticides. Organic farming has been defined different but the description offered by Lampk in (1990) appears to be most comprehensive. Covering all essential features. As per this description, organic farming "is a production system which avoids or largely excludes the use of synthetic compounded fertilizers, pesticides, growth regulators and livestock feed additives.

To the maximum extent feasible organic farming system relies on crop rotations, use of crop residues, animal manures, legumes, green manures, off farm organic wastes and aspect, biological pest and disease control to maintain soil productivity and tills, to supply plant nutrients and to control insects, weeds and other pests.



2.1 Specific Features of Organic Farming as Understood by the Respondents

Table 2.

Sl. No.	Features	Frequency	Per cent
1	Use of locally available inputs in farm production	3	30
2	Eco-friendly and avoidance of exploitation of natural environment	6	60
3	Increases soil fertility and microbial activity	7	70
4	Higher tolerance to biotic and biotic stresses than that of conventional farming	2	20
5	Quality of the produce is good	2	20

Table 2 revealed slight deviation specific features or advantages of the organic farming as understood by the respondents has revealed slight deviations from each other, organic farming increases soil fertility and also microbial activity in the soil was the special feature of organic farming for 70 per cent of the respondents. Sixty per cent of the respondents were of the opinion that organic farming is eco-friendly and avoids exploitation of natural environment. Use of locally available inputs in farm production was the special feature of organic farming for 30 per cent. For twenty per cent each of the respondent's higher tolerance to biotic and a biotic stresses than that of conventional farming and quality of the produce was perceived good were the special features of organic farming. Majority of the respondents (70%) emphasized that organic farming would improve soil fertility status and microbial activity in soil. It is true that the organic wastes that are being added to the soil will certainly improve the water holding capacity of the soil and also bring about improvement in soil structure and texture. The organic manures added will also act as food material to the native micro flora. Thereby we could identify such soils as fertile. This findings in agreement with the findings of Tangaswamy (1991).

III. SUMMING UP

Organic farming is practiced in India since thousands of years. The great Indian civilization thrived on organic farming and was one of the most prosperous countries in the world, till the British ruled it. In traditional India, the entire agriculture was practiced using organic techniques, Organic farming was the backbone of the Indian economy.

An attempt is made to assess perception and understanding of farmers about organic farming results showed a mixed response.

The study indicates that the personal attributes towards environment quality of agro eco system and food security are the significant ecological factors which influenced and motivated the farmers to understand the unique features of

organic farming where the micro-level sustainability of the farming system has been ensured.

It was observed that high per cent of the sample farmers expressed soil health oriented motives followed by reason of health concerns, quality of organic produce.

The study confirms that, increasing global concern over environmental pollution and human health problems created by agrochemical residues in food and environment, resulting in the rising demand for organically produced commodities, assures a brighter future for such indigenous organic system. Further the results conclude that there is ample scope for expansion of organic farming depends strongly on the self-initiative of farmers.

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