

# Green Growth & Organic Agriculture as Livelihood Strategy in Sustainable Rural Development

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**Abstract-** This paper presents the findings of a case study of a Tribal community pursuing a green growth & livelihood strategy based on organic agriculture. Using the sustainable rural livelihoods framework, the paper identifies three different organic livelihood strategies involving varying degrees of capitals. The paper concludes that understanding the implications of these different organic strategies and their rationales is a prerequisite for policy-makers to tailor policies and programmes aiming to assist rural communities benefit from organic agriculture as a vehicle for advancing green growth & sustainable rural development.

**Index Terms-** Chhattisgarh, Organic Agriculture, Agro-ecological Income, Livelihood Strategy, Market and Non-Market Values, Community.

## I. INTRODUCTION

With increasing concern about the environmental, economical and social impact of chemical-dependent conventional agriculture, have led many farmers and consumers to seek alternative practices that will make agriculture eco-friendly, profitable and livelihood sustainable. The alternative organic farming is potentially a profitable enterprise, with a growing global market, already being supplied by more than 90 developing countries. Entrepreneurs see a market for selling food that has been grown chemical free. Local consumers in India have a fairly well-developed perception about organic produce, are interested in buying certified organic foods, and even willing to pay more for them. To gain access to this market, however, certification is a prerequisite. As well as achieving this, the following issues are also important for developing countries: increasing technical know-how amongst the farmers about organic farming and organic inputs; good post-harvest handling (e.g. cold storage, quality grading, and packaging support); effective and efficient infrastructure and export logistics (to enable the fresh produces to arrive in good condition in the country of destination); and good and trustworthy relations with importers, traders and wholesalers in the target markets. This sector enables to meet the necessary requirements of producing and marketing organic foods, both the domestic and export markets; and can secure an extra premium for the poor farmers. Through research & development, extension and small-scale trials, enable the rapid expansion of organic farming and so significantly develop livelihood among the farmers, BPL families for both farm & non-farm activities. Organic farming used to be the principal farming method before “modern agriculture” was introduced. Organic foods and textiles are gaining market shares throughout the world. This is true not only

from a global market perspective seeing organic volumes and market values exchanged internationally and in domestic and local markets. It is also true from a perspective seeing organics as a livelihood strategy involving non-market values and perhaps symbolizing a globalization option: a chance to cope with globalization based on opportunities arising from a mix of global and local (Egelyng 2006). Organics are becoming an attractive option for rural residents to generate income and improve their livelihoods (Oltramari et.al 2002). This paper analyses organic agriculture as such a (community level) livelihood strategy. Inspired by the livelihood approach, particularly its ecological economics (natural capitals, environmental services and incomes) and social capital (networks) dimensions, the paper provides an analysis of market and non-market rationales for individual farmers as well as their communities to “go organic” and pursue organic agriculture as a rural developmental pathway.

## II. MATERIALS AND METHODS

This paper draws upon yearlong field research in tribal areas of Bastar, Sarguja & Korea a community of small family farmers in the state of in Chhattisgarh. More specifically, it focuses on socio-ecological implications of organic agriculture for local livelihood strategies. Data were collected using a variety of methods. These included participant observation, open-ended interviews, archival research and surveys (both quantitative and qualitative). The sustainable rural livelihoods framework (Scoones, 1998) is the approach used in our analysis.

## III. RESULTS

Today an organic food is the outcome of professionals and entrepreneurs born in Bastar who, with relatives and friends still farming in the community, established a local association in 2011, to promote “the quality of life of small family farmers through organic agriculture”. A project for small-scale agro-industrialization and a local association for agri-tourism supporting farmers and local residents developing tourism linked to organics part of the story as well as international development agencies, non-profit organizations, and prestigious academic institutions, supporting sustainable agriculture programs in Bastar. Today, Organic Farmers Interest Groups (OFIG) operates in the Bastar different areas commercializing a variety of foods (milk, honey, sugar, vegetables, rice, etc). After organic adoption their organic production will be “properly” certified organic - and Bastar’s agri-tourism program keeps expanding.

Out of the 44 certified productive units analyzed have different agro-ecological patterns and farms sizes. Farm size

ranges from less than a hectare (farmers producing honey ‘renting’ the use of a forest area for their hives) to farms over 40 hectares (up to 90). Most of these are connected to a local agro industry (sugar, jellies, canned foods, cheese). In addition to size, land use patterns also vary significantly among farmers. While some producers devote significant portions of the farm to timber (eucalyptus and/or pine trees), others do not manage this resource. Despite this variability, farmers across municipalities do share two common land use trends: agro-ecological diversification and preservation of areas with native forest.

Besides differences in size and land use, local organic producers are diverse in terms of their livelihood strategies. Table 1 (below) shows three basic typologies of organic producers found in the region. The main differences across these different types of organic ‘practices’ are the relevance of agro-ecological income in the household, and their position in the socio-economic network of organic activists, business communities, consumers and farmers. (Agro-ecological income can be defined as benefits flowing from practicing organic methods, for instance in terms of extra wildlife to harvest or extra output resulting from conservation biological control where a bio-diverse non-sprayed farm eventually provide habitat and food sources to beneficial, which help control pests). Family farmers (type 1) rely extensively on the agro-ecological resources of the farm for productive and reproductive functions, and they have lower levels of economic and social capital – less income and less education, less influential connections and less access to

information. Family farms are located outside the ‘downtown’ of the village, often in places of difficult access, i.e hilly terrain, dirt roads and limited communications. In contrast, most mixed households (type 2) work with tourism and hire labor to plant, weed, harvest, and process). In mixed households, at least one adult work off-farm in local jobs as teachers or municipal employees. Joining organic production does not prevent such households from establishing residency, which in practical terms means direct access to local services (phone, bus, stores, school, bank, pharmacy, etc) and networks (associations, gatherings, etc). A third category of organic households, which we refer to as “instrumental retreats”, corresponds to households which do not obtain significant agro-ecological income from organic production, but rather they use the ‘farm’ for personal, recreational, community service, and/or political articulation in the community. This category comprises professionals residing outside, including absentee owners, who sympathize with the local association for organic farming. These ‘instrumental retreats’, which are also certified organic and part of the local association for organic farming, are partially productive. Some have fruit trees, or chicken, or hives. However, this category of organic agriculture may be better understood as spaces of social exchange. Meetings, assemblies, workshops, and symposia are articulated by these organic ‘producers’, who contribute with their knowledge and connections to the advancement of organic farming in the region.

**Table- 1: Household typologies among certified (under conversion) organic producers.**

Particulars/ Criteria	Household typologies		
	Family farm	Mixed household	Instrumental retreat
Education	Primary	Primary/Secondary	College/Graduate
Labor	Family	Family/Hired	Hired
Self-consumption	High	Low	Not Relevant
Services	Poor	Standard	Depending on use
Off-farm work	Agriculture(if any)	Local Services	Professionals/entrepreneurs
Residency	Farm	Town	Town/City
Participation	Low	Medium	High
Off-farm income	Sporadic	regular	Always
Organization	Nuclear	Nuclear/individuals	individuals
Tourism	Not Common	Most of them	Private/informal

#### IV. DISCUSSIONS

A decade after a local association for organic farming was established in the region, three different typologies of certified organic producers can be identified in the community of Bastar: family farms, mixed households, and instrumental retreats. These three types of ‘producers’ do not differ so much in terms of their agro-ecological practices (diversification), but in relation to the role that the income resulting from organic production plays in the households. This in turn is deeply correlated to the capacity of the household to access social and economic capitals. Households depending almost exclusively on agricultural incomes do not fully participate in the decision-making process of the association(s) they belong to and have less educational resources – a characteristic shared with non-organic small family

farmers in the region such as tobacco producers. In contrast, organics have also fostered new typologies; the mixed household and the instrumental retreat. In mixed households, “organics” are an alternative extra source of income, and the tendency is to rely on services (tourism) rather than small-scale agro-industrialization. In instrumental retreats, unlike in the two previous types, organics are not that much of a productive, but a political tool. These institutional spaces serve to connect urban residents involved in the local reality of the producers. At the same time, retreats open the rich socio-economic networks of the urban/global society to the rural community.

## V. CONCLUSIONS

The diversity of organic 'productions' found in the community of Bastar can be interpreted as a response to adopt and adapt organics as a livelihood strategy in a rural community of small family farmers (Moreno-Penaranda, 2006). The three different ways in which organics occur in the community are deeply interrelated. While small organic family farmers manage the agro-ecological resources and their processing into foods, mixed households 'use' organics to develop alternative sources of rural income, such as agri-tourism. Both types of households are connected to the broader institutional, social, and financial dimension of organics through the networks of academics, entrepreneurs and other professionals involved in the experience. Given the complexity of these interactions, we argue that the role of organics as a livelihood strategy can be interpreted as a strategy to adapt organics to the local community. A policy to transform certified organics into an instrument of social change in rural communities ultimately depends on understanding the functioning of these networks.

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