

NEW CHALLENGES FOR THE ORGANIC FARMERS IN INDIA – TOURISM, SPICES AND HERBS

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Abstract

New Challenges for the Organic Farmers in India – Tourism, Spices and Herbs

Organic Farming can offer the Indian farmers the possibility to get an added value to their products. Those operating in the Ponda region/Goa benefit from an historical background and highly preserved biodiversity that may entitle them in the future for a GIAHS (Globally Important Agricultural Heritage Systems) project which will prevent these scenic landscapes to be destroyed. The spice plantations are a live Natural Sciences and History lesson for everybody and an attraction for the tourists who find here a pleasant environment, rich flora and fauna, rural tourism, ayurvedic medical care and an array of leisure activities in contact with Nature.

Key words

organic farming, spice plantations, sustainable development, rural tourism, India

1. Introduction

"In essence, the economic signal to organic aid is a policy signal towards a more sustainable economy and society." (O'Riordan and Cobb 2001, 34)

The reputation of organic farming as a sustainable mode of production has been a recurring object of quarrel mainly between those who deeply believe in its capacity to build up an efficient and reliable production system, whose advantages go beyond the environmental, economic and social benefits, contributing as well to a better health and harmony of all the living beings, and those who claim that it would condemn mankind to famine and ecosystems decay. In-between there is an array of others who position themselves in a less endeavoured way!

It is curious but understandable that in a period of deep economic and social crisis organic farming (as a mode of production, even if not certified) has been able to expand and diversify its offer. In my opinion the reason for this apparent incongruity, that contradicts those who assert that organic products are only accessible to rich people, lies on the search for a new paradigm based on a short cycle, i. e. locally produced (less food miles), fresher and healthier (nutritional concerns), less inputs (own compost and plants solutions to spray) which contributes to the reinforcement of the local production structure with less capital and less impact on the environment as well as for the strengthening of the community.

Thus it is not surprising that more and more studies point out the importance of sustainable agricultural systems, namely in the outskirts of the cities (urban agriculture), contributing to food security, poverty alleviation and ecological services.

In the case-study that I will present, the Ponda region in Goa, India, the historical background, biodiversity and sustainable production system of the plantations may also entitle them in the future as a "Globally Important Ingenious Agricultural Heritage System" (GIAHS), a project with the partnership of FAO, GEF, UNDP, UNESCO, CGIAR, ICCROM (International Centre for the Study of the Preservation and Restoration of Cultural Property) IUCN (World Conservation Union), ITC (International Indian Treaty Council) UNU-PLEC (People, Land Management and Ecosystem Conservation), governments, non-governmental organizations and indigenous peoples' organizations (www.fao.org/landandwater/giahs).

In 2002 FAO started this initiative for the conservation and adaptive management of GIAHS in order to safeguard and support world's agri-cultural systems. It aims "to establish the basis for international recognition, dynamic conservation and adaptive management of Globally Important Agricultural Heritage Systems (GIAHS) and their agricultural biodiversity, knowledge systems, food and livelihood security and cultures throughout the world" (www.fao.org/nr/giahs/en/). The most striking threats to the existence and functioning of GIAHS are namely rapid global technological and socio-economic changes. This explains that GIAHS project envisages the creation of a separate category for World Heritage for agricultural heritage systems.

In the case of the spice plantations in the Ponda Region, they are the live testimony of the importance that spices and herbs had in the past and portray the biodiversity achieved with the dissemination of new species. Correia wrote (2006, 354) that the "Portuguese played an extremely significant role in the exchange of plants between

the Continents, in the resulting effects on their economies, in the development of agriculture and in the change of dietary habits. This can be considered as the most outstanding success in the spectrum of Portuguese achievements because agriculture is the base of a complex socio-cultural life". Furthermore this author refers that "some of these plants have become extremely important to the economies of the territories where they were introduced, so much so that the inhabitants find it difficult to do without them" (idem., 355).

Ferrão also emphasizes the importance of the exchange of plants between continents during the Portuguese Discoveries in the 16th and 17th centuries, as "it has undoubtedly had some of the most marked and long-lasting scientific, technical, economic and social repercussions" (Ferrão 1994, 5) as this case-study illustrates. Goa was particularly important as a platform of adaptation and export of plants, namely spices, to other parts of the world, being many of them now shown to the tourists in the spice plantations.

The goal of this study is to present an example of rural development in Ponda, Goa, and discuss the validity of the multi-functionality implemented in these spice plantations in order to adapt them to the new concepts of tourism, namely rural tourism and nature conservation, combined with ecological services and beauty and wellness care.

2. Methodology

The fieldwork carried out in Goa in the beginning of December 2008, was an added value to get the information near the grassroots but most of all to feel the wholeness. As Bortoft explains "when things are seen in their context, so that intrinsic connections are revealed, then the experience we have is that of understanding. Understanding something is not the same as explaining it, even though these are often confused... The single phenomenon on its own is an abstraction. The aim must be to see the belongings of the phenomena, and so to encounter the phenomena in the mode of wholeness instead of separation. This wholeness, which begins to be experienced through seeing comprehensively, is then recognized as being a higher dimension of the phenomena." (Bortoft 1996, 290–291).

During the fieldwork in the Ponda Region I had the opportunity to make interviews to the managers and/or owners of the 3 largest spice plantations that offer tours to the visitors, participate in these tours and talk to some tourists. It was also important to feel the scents, sounds and emotions, as well as the flavour of the traditional Goan food served in the farms.

The remaining information was collected in the archives of the public library in Panjim, Goa, and in different publications in Portugal, as well as in internet sites.

3. Livelihood in Goa: a touch of history

There is not much information about the first communities that inhabited Goa. Mendes (1997, 142-143) quoting a monk interviewed by him at the Madre de Deus do Pilar Coventry in Goa Velha (on the 29th January 1863) informs that the first inhabitants in Goa constituted families (called *vangôres*) and these were classified according to the services that they supplied to the community. Later on they divided

the territory in provinces (*málos*) and villages (*gáos*). A certain number of families worked together in communities (*gaumpona*) and each family was represented in the agrarian council with one vote. Communities constituted by several villages (*gãocarias*) gave rise to quarters (*vaddó*) whose soils were divided into first and second quality. In the best soils they produced rice, the most important food in their staple diet, also used in religious ceremonies. The soils of second quality (*moródas*) were occupied by coconut trees (*cocos nucifera*), mango trees (*mangifera indica*) cashew trees (*anacardium*), betel nut palm (*areca catechu*) and other fruit trees. In *Chronica de Bisnaga* (1525, 96) there is a reference to the large presence of orchards and vegetable gardens with many fruit trees, most of them being mango trees, betel nut palms and jack-fruit (quoted in Dalgado 1988, 28). Fonseca (1986, 29) mentions chillies (*Capsicum frutescens*) ginger (*Zinziber officinale*) turmeric (*Curcuma longa*) onions (*Allium coepa*) and certain vegetables of daily consumption "as being extensively cultivated in some villages". All these plants are still quite present today in the spice farms in Ponda.

Dalgado, in his *Glossário Luso-Asiático* (1988, 27-29), makes large use of quotations dating from 1525 up to 1836, where the qualities of the mangos, especially from Goa, are reckoned as being the best. It is interesting to note in one of these quotations (Annaes Maritimos 1842, 270) the reference to the Jesuits for having grafted the mango trees and thus improved their quality.

According to Gracias (1994, 122) the Jesuits managed the Royal Hospital in Goa since 1579. In 1759 they were sent away and the hospital was taken over by the Government and renamed Hospital Militar (ibid, 126). This author refers that "Goa abounds in myriad herbs, plants, spices which have great therapeutic value and have played an important role in the accumulation of medical knowledge... Herbal medicine consisted of roots, bark, leaves, flowers, fruits, seeds, juices and gums of plant (Gracias 1994, 171). It is further mentioned that "Allopathic physicians made use of herbal medicine and indigenous medicine was sent from Goa to various Portuguese Feitorias (ibid, 171).

Garcia de Orta, a Portuguese physician and naturalist, who arrived to Goa in 1534, was one of the savants who contributed to the study of these plants and their medicinal use, benefiting from the knowledge that he got from the Ayurvedic practitioners, as one can read in his book "Colóquio dos Simples". According to Gracías he was surprised "to find that vaidyas were well versed in medicinal plants and several peculiar diseases. Many of the European travellers who visited the city of Goa in the first two centuries of the Portuguese regime were unanimous in praising the native physicians." (Gracías 1994, 154). The Vaidyas were practitioners of ayurvedic medicine; criticised and mocked by some authors (Mendes 1997, 107-114, for instance) they are praised by others like Orta, Gracías and Linschoten (who lived in Goa between 1583 and 1589).

In the 16th century Goa was an important political, religious but mainly trade capital, which contributed to its cosmopolitanism. "Via the Cape route, coral, linen, wool, foodstuffs, wine and arms were exported to Goa. And, via the Asian routes, Goa saw the arrival of products that were then to be shipped on to Portugal, products as varied as spices, fabrics from Gujarat, Bengal and other parts of India, cinnamon from Ceylon, Chinese silks, indigo and Indian furniture, Chinese and Japanese chests, ebony, diamonds, cowrie shells, coconuts and rice from several parts of Asia" (Disney 1981, 38; quoted by Santos 1998, 105).

"As someone remarked", writes Percival Noronha, Secretary Indian Heritage Society, "the greatness of Goa perhaps lies in its smallness" and concludes that "this tropical paradise has its roots firmly entrenched into the hoary past and diverse culture" (Fernandes 2006, foreword).

4. The Spice plantations in Ponda: past and present

Ponda (Fig. 1), actually with about 17,700 inhabitants, is only 28 km Southeast of Panaji (or Panjim - today the capital of Goa with 58,800 inhabitants), but five centuries ago the accessibility was poor and the region was hidden in dense forests; thus here the Portuguese did not destroy so many Hindu and Muslim Temples as it happened in more central areas. From this former period the Safa Shahouri Mosque, built in 1560 only 2 km West from Ponda, is perhaps the most important attraction of the city. Contrarily to the Christian the Hindus, who found in Ponda a safe place to keep much of the religious symbols that they could take with them during their flight, assimilated Muslim and European architectural styles and decoration elements that they incorporated in their temples. Most of the temples that are today mentioned in the tourist guides (see American Express Guide 2006, 410-11), such as Shri Nagueshi (1780), Shri Lakshmi Narasimha or Shri Mangesh Temples date from the 18th century.



Fig. 1: Ponda Region, Goa: Location of the spice farms (Scale 1:285,000 approx.).
Source: Google Earth.

According to Mendes (1997, 53) the Portuguese started ruling in the Province of Ponda in 1763, after having helped the former King of Sundem to fight back the Marathas. Some of the plantations that still exist in the region were formerly in the hands of Portuguese, as the Pascoal farm that was visited during the fieldwork.

In the case-study information collected in three of the spice plantations in the area that also offer tourist activities was used. These units correspond to 75% of farms with the same characteristics in the Ponda region, if my sources are reliable. They represent different types of farms, but all have in common the fact that they produce fruits, spices and herbs and combine several touristic activities, taking

advantage of the favourable natural resources and cultural diversity and monumentally. Among the large diversity of plants that are found in these farms, the most common spices are: cloves, nutmeg, cardamom, cinnamon, pepper, all spice, turmeric, ginger and vanilla. As tropical fruits there are jackfruit, breadfruit, guava, papaya, mango, pineapple, sapota, etc. Bettlenut palms, coconut palms and banana trees are also to be seen.

4.1 The Pascoal Spice Village

The Pascoal Spice Village belonged to a Portuguese called Augusto Henriques, who abandoned it in 1961, after the independence. In 1992 this farm was considered to be the best farm in Goa. It is a family farm with an area of 50 acres (1 acre is equivalent to 4,046.84 m²) and was bought in 1982. The owner is proud of having launched the first ecotourism unit in Goa, in 1993. He offers 11 cottages and a restaurant. In order to keep an idyllic environment, far from noise and pollution, he does not receive large groups of tourists, nor advertises as his neighbours. Visitors enjoy the quietness and beauty of the place walking around, watching the birds or paddling along the river in a canoe. He sells flowers and herbs in Goa. He is not certified as organic but he asserts that his production is organic since they practice the traditional agricultural methods (www.pascoalfarm.com).

4.2 The Tropical Spice Plantation

The Tropical Spice Plantation, located at Keri, is a 350 years old mixed plantation (spices, fruits, nuts and herbs), occupies about 150 acres and is owned by the third generation of a Goan family. Nearly 120 people work in a joint venture of three farms, including this one, in a total of 250 acres. They sell spices to cooperatives in Goa (most of this raw material will be used in medicines). Although they advertise their spices as being organic they just started a process of conversion into this mode of production which will be concluded in approximately three years.



Fig. 2: Tropical Spice Plantation: Explaining how "Feni" (cashew liquor) is distilled.
Source: Author.

In 1995 the family decided to start a project to diversify the activities and take advantage of the touristic flow that usually visits Goa. They offer a guided tour in

the plantation during which the names and main characteristics of the plants are explained. They also introduce the visitor into the art of "Feni" distillation (a liquor produced from the juice of cashew apples). The visit includes the "Goan Tarzan", who climbs and swings from tree to tree, and a traditional Goan meal. In the shop there is handicraft made from coconut shell and wood and also fresh oils extracted from the various spices and herbs grown in the plantation. They offer a leaflet "Living with Spices & Herbs" in several languages, including Portuguese, in which they explain how to use the different plants and their medicinal virtues.

In the last five years they introduced different touristic attractions such as the elephant bath (during which a visitor sited on an elephant will be flushed with the water that the animal pours from his nose) and last year they intended to show how to grind spices with old instruments.

The owner of this plantation also expressed his wish to control the visits to the farm. They only receive between 100 and 150 tourists per day, mainly foreigners but also schools, in order not to disturb the birds (about 75 species of birds are sighted in the plantation). Even so this represents about 50,000 visitors per year. In the future they will offer 5 to 10 cottages for the tourists who wish to be in contact with the Nature (tropicalspice@redifmail.com).

4.3 The Sahakari Spice Farm

Finally the Sahakari Spice Farm, in Curti, which exists for more than 300 years, occupies 130 acres and gives work to 70 people. There are three years that they are "totally" organic, which means that they already overcame the conversion period and are certified as organic. They have cross-bred cows that nor only give milk but also contribute to "the mini compost generation unit with the recycling of animal and vegetative waste in pits to produce compost. A bio-gas (Methane) plant attached to dairy unit is worth seeing" (Sahakari farm leaflet).



Fig. 3: Organic Spices from Sahakari Spice Farm.

Source: Author.

They started the visits to the plantation 10 years ago and are prepared to receive large groups of visitors, namely bus tours. They work together with an Ayurvedic

doctor, who is available for consultation. Body massage is also possible by appointment. They sell several medicines, oils and locally produced spices and herbs, as well as handicraft. After the tour a traditional meal is served in the farm. As added attractions they have elephant feeding, washing and ride, crocodiles sighting, bird-watching, walks along the garden and traditional dances and songs. (www.sahakarifarms.com).

As I had the opportunity to write in another article (Firmino 2009, 114) these examples are a lesson of multi-functionality and rationality in the use of resources, allowing an added value resulting from a myriad of activities centred on the spice production and, directly or indirectly, on Ayurvedic medicine. At the same time they create jobs, protect Nature by adopting sustainable farming methods and preserve gastronomic and cultural traditions.

5. New Challenges for the Organic Farmers in India

An analysis of India's agro exports to the European Union in 2007, published by APEDA (Agricultural and Processed Food Products Export Development Authority, Ministry of Commerce and Industry, Government of India) shows that EU is India's largest trading partner accounting for about 20% of India's global trade. In the year 2007, India exported the goods worth euro 29,4 billion to EU and imported the goods worth euro 26,2 billion. Netherlands, Germany, UK and Spain were the European top four countries and together imported more than 57% of agriculture products purchased by EU from India. Spices accounts for the second place (together with coffee, tea and mate represent 15%) of the 10 major group head products exported from India to EU (these 10 major groups constitute 84% of India's exports to the EU).

The agricultural export of India's major product groups to Europe has grown by 12.9% between 2006 and 2007. Spices (cardamom, ginger, saffron, turmeric) and essential oils registered one of the highest growths (+25%). Some other agricultural products of interest are cashew nuts, medicinal plants and other extracts, namely used primarily in perfumery, medicaments or for insecticidal, fungicidal or similar purposes; and also pepper, seeds of anise, badian, fennel, coriander, cumin or caraway, juniper berries, bay leaves, curry powder (www.apeda.com/apedawebsite/trade_promotion/study_report/).

In what concerns the organic farming "India is bestowed with lot of potential to produce all varieties of organic products due to its various agro climatic regions. The market is growing steadily; both the domestic as well as the export market" (www.organic-world.net/).

The cultivated land under organic certification is around 2.8 million ha (2007-08). This includes 1 million ha under cultivation and the rest is under forest area (wild collection). In 2006 India was fifth among the ten developing countries with most organic agricultural land (528,171 ha), which corresponded to 0.3% of total agricultural area and 44,926 organic farms, and was sixth among the 10 countries with largest wild collection areas (2,4 million ha) (Willer et al 2008, 36-40).

The EU regulation on organic production "considers the collection of wild plants and parts thereof, growing naturally in natural areas, forests and agricultural areas as an organic production method – provided that those areas have not, for a period of at

least three years before the collection, received treatment with products not allowed under the regulation. Furthermore, the collection must not affect the stability of the natural habitat or the maintenance of the species. The regulation also foresees standards for the collection of wild seaweeds and parts thereof" (Willer et al 2008, 36).

India produced around 396,997 MT of certified organic products, namely Basmati rice, pulses, honey, tea, spices, coffee, oil seeds, fruits, processed food, cereals, herbal medicines. And also not edible items such as organic cotton fibre, garments, cosmetics, functional food products, body care products, etc.

In 2007-2008 India exported 86 items with a total volume of 37,533 MT (from which 16,503 MT accounts for cotton) mainly to EU, US, Australia, Canada, Japan, Switzerland, South Africa and Middle East. The export of organic products in the amount of 100.4 million US\$ registered a 30% growth over the previous year. (www.apeda.com/apedawebsite/organic/Organic_Products.htm)

According to APEDA "organic farm produce enjoys a good demand in European Union (EU) market and India has an opportunity to export its organic produce to this market. The demand for organic products has risen because the EU consumer has become more health conscious and greater environmental awareness. The demand for organic food in the EU has now penetrated even to the rural areas." (www.apeda.com/apedawebsite/trade_promotion/study_report/)

Also in India, as the Indian Centre for Organic Agriculture (ICCOA) states, "a major reason for the growth in organic farming is increased awareness among consumers in the country, even though until recently food was mainly being exported. But over the last couple of years, the domestic market has started growing" (Willer et al 2008, 109).

The Indian Government, recognizing the difficulty smallholders face to access third party certification launched a national participatory guarantee system program, with the support of the FAO India office to facilitate organic assurance. Furthermore, it is "implementing a National Project on Organic Farming (NPOF) for production, promotion, certification and market development of organic farming in the country. Financial assistance is being provided for the capacity building through service providers, setting up of organic input production units, promotion of organic farming through training programs, field demonstrations, setting up of model organic farms and market development" (Willer et al 2008, 109).

Goewie (2002, 5) based on his experience with organic production worldwide states that this "is most auspicious in regions where local stakeholders (e. g., regional government, farmers, consumers, nature and environment protection organisations and research institutes) cooperate closely together".

India is apparently in conditions to offer these conditions and the results are expressed in the continuous growth of its organic production. "In several parts of the country, the inherited tradition of organic farming is an added advantage." (www.apeda.com/apedawebsite/organic/OrganicProducts.htm). Indeed in 1878, Fonseca wrote about the agriculture in Goa: "Manure, consisting of ashes, fish and animal excrement, is largely employed as a fertilizer of the soil" (Fonseca, 1986, 27). Thus it makes sense that farmers like the one at Pascoal farm, consider that they practice organic farming, although they are not certified, since they use the

traditional agricultural methods that are also followed by organic farmers.

Going back into the origins of the organic movement we find the work of Sir Albert Howard (1940) entitled "An Agricultural Testament", which resulted from his research in India in the 1920s. "According to Howard, the role of agricultural science should be to explicate the reasons for the success of traditional methods and to find ways to improving them. Understanding the workings of the natural order would enable humanity to work with nature and realize her potential abundance" (Conford 2001, 19). The farmers of the spice plantations in Ponda, who participated in this study, are embedded in this spirit as the Sahakari farm illustrates, since they present it as "a creation of generations with a touch of scientific and traditional farm practices put together".

6. Conclusions

As a first concluding remark I would like to stress the contribution of organic farming to the added value of the local production, which enables the farmers to export to markets like the European (even if this is accomplished by enterprises external to the farms). Taking into account the increasing interest in the Western countries for Ayurvedic medicine, and other alternative medicines that use herbal and spices teas and remedies, there is a market in India for the next years.

Besides the farmers aim at the multi-functionality in their farms, diversifying their income sources by combining rural tourism associated to several leisure activities, with care services, namely ayurvedic medicine and massages. Finally their historical background and well kept biodiversity, as well as the relevance of the activity to the local livelihood may entitle them in the future to get involved in a GIAHS project, as it is the case with two candidate systems in India (Traditional Agriculture in the Koraput Region – Orissa; and Soppina Bettas Systems – Western Ghats).

The characteristics of the spice plantations in Ponda just meet the criteria for selection of GIAHS sites that are presented as follows: "building on local knowledge and experience, these ingenious agricultural systems reflect the evolution of humankind, the diversity of its knowledge, and its profound relationship with nature. Those systems have resulted not only in outstanding landscapes, maintenance and adaptation of globally significant agricultural biodiversity, indigenous knowledge systems and resilient ecosystems, but, above all, in the sustained provision of multiple goods and services, food and livelihood security and quality of life" (www.fao.org/nr/giahs/en/).

This idyllic scenery may be threatened by the rapid transformation in the Indian society, which is visible in the vicinity of Ponda, namely the future shopping mall at Patto Plaza in Panjim (Fig. 4) which will introduce Western life styles (supermarkets and fast-food restaurants).

The fact that since the late 1990 European retailers (Metro, Germany) have been opening stores in India had as a consequence that the growth in sales of packaged foods between 1998 and 2007 rose in that country from 279 billion rupees up to 581 billion rupees (Millstone; Lang 2008, 87). According to Millstone and Lang (2008, *ibid*) "the Indian Government has attempted to keep out Western supermarkets, but Indian owned supermarkets are on the increase, despite protests from Indian farmers. Throughout India, the food people eat, and form in which they

purchase it, is changing, with an increase in sales of packaged food even in rural areas". Furthermore they inform that Wal-Mart, an American company that is the first grocery retail in the world (233 US\$ billion sales value in 2007) "established a joint wholesale enterprise with Bharti Enterprises, India, with the first outlet scheduled to open in 2008".



Fig. 4: Future Shopping Mall at Patto Plaza, Panjim, Goa.

Tab 1: Growth in Sales of Packaged Foods in India (1998-2007) (in billion rupees)

| Year | 1998 | 2007 | 98-07 % |
|-------|------|------|---------|
| Urban | 240 | 450 | 87,5 |
| Rural | 39 | 131 | 336 |
| Total | 279 | 581 | 208 |

Source: Adapted from Millstone; Lang 2008, 87.

We are not able to avoid globalisation and the changes going on are a consequence of this phenomenon. But, as experience in Western countries has shown, we all as consumers can try to transform it into a positive globalisation. As Giddens (2005, 29) writes, globalisation is not a mere incident in our lives. It is a change of the very right circumstances in which we live. It is our lifestyle right now.

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<http://www.fao.org/nr/giahs/en/>
<http://www.pascoalfarm.com>
<http://www.sahakarifarms.com>

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Summary

India is reputed for its spices and herbs which are used not only for gastronomic uses but also for medicaments as well as religious rituals. The knowledge about the virtues and medical properties of these plants have been preserved along the centuries and used to relieve the illness and suffering of the populations. The intensive contacts with merchants from different parts of the world, such as the Portuguese during the 16th and the 17th centuries, contributed to the enrichment and diversity of its flora which has been kept up to now, namely in Ponda/Goa, where the field work for this paper took place.

The Ayurvedic medicine is one of the Indian traditional medicines that make a large use of these plants. In spite of the achievements of the western medicine, which is also being widely spread in India, Ayurvedic massage, beauty care and medicaments are becoming popular in western countries although this kind of services is offered at prices relatively high in centres for alternative medicines and spa's, often located in the best rated hotels.

This interest for the Ayurvedic medicine in the western countries increases the demand for the plants used in its practice, especially those certified as being organic. Along with the original formulas imported from India some European laboratories created new ones "inspired" in the traditional medicaments, but they depend on the import of the raw materials from India, some of which are produced in organic farms and sold with the Fair Trade label.

This increasing demand for specific plants of the Indian flora, produced according to the organic farming methods is a new challenge for the local farmers, who have been launching other activities such as visits to the farms, with a guided tour to identify the herbs and spices, meals served in a traditional way, tours in the nature, bird watching, walk on an elephant, farm shop where handicraft, oils and fragrances can be purchased. Some also have accommodations; others work together with Ayurvedic healers.

In this study the advantages offered by organic farming associated with multi-functionality in the farm are tackled as well as the threats constituted by the rapid changes in the Indian society with impacts in its lifestyle.

