



An Entrepreneurial Tourism Project through Agro-Tourism Farm in Iran

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Abstract: This study aims to provide a mechanism that helps to achieve sustainable development through the implementation of Agro-tourism plans. Clustering theory employed to provide a technical guideline for execution of the project as a sustainable approach for improvement of welfare of marginal communities. A medium scale entrepreneurial project proposed – “Agro-tourism complex”. Results of this research produced useful implications for both public and private sector. Study revealed that such projects have potential for job creation, inverse migration, sustainability, and land conservation. The study is based on conceptual research method (Shuang et al, 2013). The study revealed that the welfare of marginalized indigenous communities, where the clusters of potentially available tourism products exist, could be improved dramatically if government policies and rural communities involve in shared vision.

Keywords: Agro-tourism complex, Clustering theory, Marginal Communities, Sustainable Development.

1. INTRODUCTION

Annual precipitation in Iran is about 273 mm, less than one-third of the world’s mean annual precipitation (Mahdavi 2004; Alizadeh 2005). The temporal and spatial distribution of rainfall is not uniform; about 75% of the nation’s precipitation fall in a small area, mostly in the southern coast of the Caspian Sea, while the rest of the country receives insufficient precipitation (Ahmadi et al. 2010). Agro-tourism, as a sustainable mode of tourism, has become an attractive economic means in rural areas around the world. Nowadays, new concepts are

emerging in this context to revive the rural areas and prevent their depopulation. Tourism is not simply a trip, but rather it is a complicated system composed of various sectors conducive to new ideas and entrepreneurialism (Fennell, 2006). Agro-tourism is one of these new forms of tourism where man and nature have close interactions. Concerns about ecological issues, the relation between man and nature, as well as, the impact of tourism on the environment (i.e., negative and positive); have brought new ways and approaches to doing tourism. This has been a response to mass tourism's negative impacts, especially after the 1960s and 1970s (Brouder and Eriksson, 2013; Lancouvar, 2002). Tourism managers and operators, either in the public sector or in commercial sector, are keen to combat the negative impacts of tourism, as well as, its utilization for improving underdeveloped areas. This goal will not be achieved unless there is a close cooperation with the communities and indigenous people through their empowerment. Agro-tourism is an agent of such empowerment (Gil Arroyo et al, 2013).

Another entrepreneurial venture is desert tourism. 'Tourists in the modern era can visit remote and exotic 'frontier' locations, which may involve the re-enactment of exploration myths through the retracing of famous historical journeys' (Laing and Crouch, 2011, p.1516). In fact, many rural communities, especially in Iran, where deserts occupy a large land area, are located around the perimeter of the deserts. Most of these communities are dependent on specialized subsistence farming. Therefore, tourism can make a big difference in the livelihood of these communities. In this type of environment Agro-tourism and desert tourism can be combined and offer a unique experience to tourists and economic welfare to the marginalized communities (Papoli -Yazdi and Saghay, 2006).

1.1. THEORETICAL BACKGROUND

Clustering theory employed to design different dimensions of the Agro-tourism project as a potentially effective plan that will contribute the improvement of the local community's economy in a sustainable framework in rural areas. Clustering theory is a strategic theory proposed by Marshall in 1890 (Kuah, 2002). Porter (1998) defined the concept of cluster as "*groups of interconnected firms, suppliers,*

related industries and specialized institutions in particular fields that are present in particular locations". According to this theory, the cluster of Agro-tourism will design and calibrate based on the local conditions. In this regard, Porter (1998a, 78) stated:

Today's economic map of the world is dominated by what I call clusters - critical masses, in one place, of unusual competitive success in particular fields. Clusters are a striking feature of virtually every national, regional, state and even metropolitan economy, especially in more economically advanced nations. Clusters are not unique, they are highly typical, and therein lies a paradox: the enduring competitive advantages in a global economy lie increasingly in local things - knowledge, relationships, motivation.

A general profile of the study area was provided in the first part of this article that followed by investigation of unique resources and agricultural productions that modeled based on the clustering theory. Therefore, the establishment of an Agro-tourism complex was proposed. To provide an instruction for implementation of such project, a comprehensive Agro-tourism model provided (Figure 2). Cluster theory is a practical framework that guides our proposed tourism model that combines numerous types of tourism activities under one umbrella of tourism system. While 'cluster' is defined as the geographical concentration of industries which gain advantages through co-location (Galvez-Nogales, 2010); Agro-tourism system offers potential for various tourism activities to different demand (market).

Interestingly, despite the numerous definitions of Agro-tourism or Agri-tourism (which are used interchangeably), it 'comprises an extensive range of generic tourism products based on farm resources and agricultural outputs located in working farm environments (Flanigan et al, 20140).

The Agro-tourism project has the potential to overcome some of the well-known problems in the developing countries including Iran. Most of the developing countries dominated by a large agricultural sector and a large proportion of population live in non-urban areas that are dependent on farming. In fact, 'it is

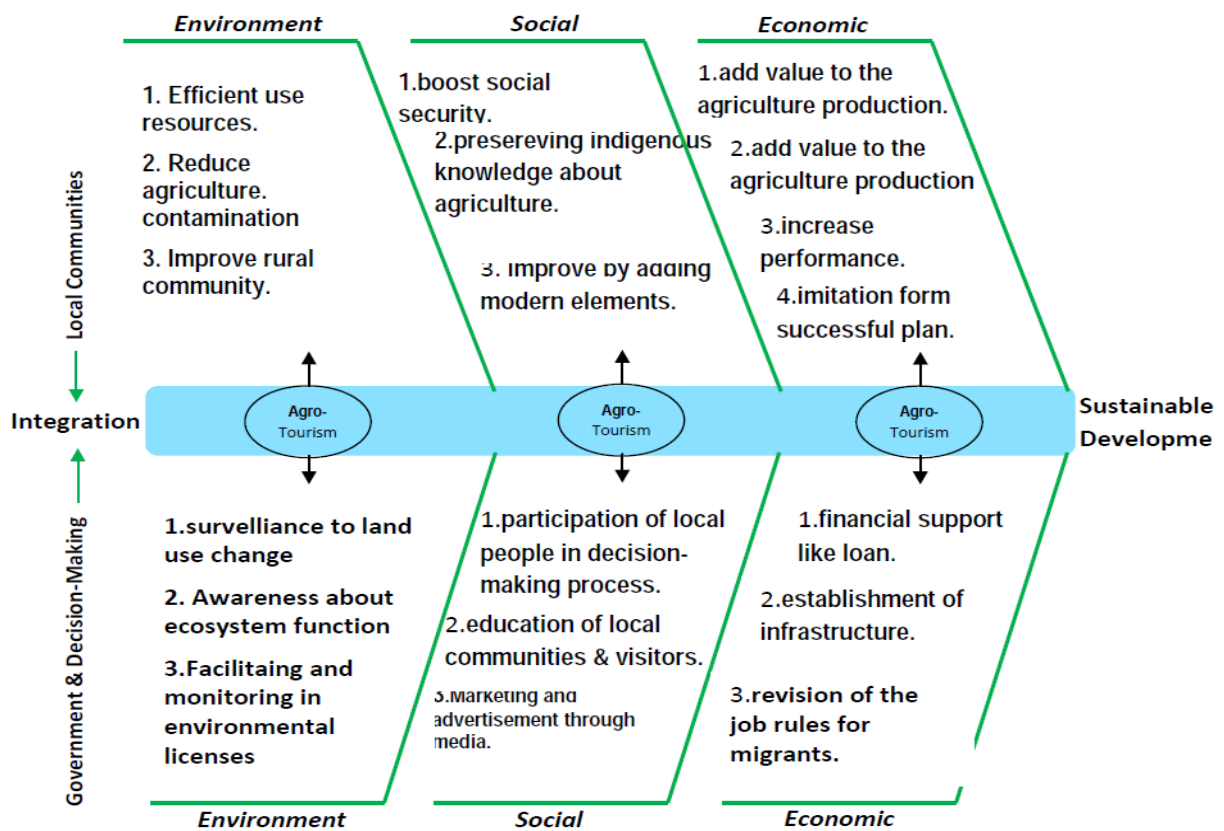
this sector where poverty is most widespread and found in its worst forms. Small-scale farmers, and the rural communities in which they live, are imprisoned within a “cycle of equilibrium” of low margins, resulting in low risk-taking ability and low investment, which leads to low productivity, low market orientation and low value addition which, in turn, nets low margins’ (as cited in Galvez-Nogales, 2010, 3-4). In the meantime, most of the rural areas, especially in Iran, have potential for varieties of activities in the context of tourism

Adhering to cluster theory and its principles establishes a logical understanding of and an approach to such bio-geographical areas for a solution. On this ground, Agro-tourism cluster is not an isolated policy and it strongly linked to tourism sector in general. These types of ventures have implemented in various developed and developing countries around the world where ‘tourism’ and ‘agricultural clusters’ have coordinated with tangible success (USAID, 2003). Nevertheless, cluster theory, although a useful school of thought has its own weaknesses and threats. These are both internal and external. In the case of Iran, as it is a huge market with an immense consumer spectrum, the proposed Agro-tourism cluster combined with unique crops can accommodate/manage the external threats; however, at the present, the internal weaknesses are acute and require tackling head on. Porter (1998) suggests that internal weaknesses can include obsolete products and production technologies, obsolete infrastructure, obsolete labor training and education, obsolete R&D, and obsolete institutions, internal or regulatory inflexibilities.

To supplement the theoretical background, a multifunctional Agro-tourism model needs to commit to addressing and integrating three pillars of sustainability (social, economic, and environment/ecological) (Lehtonen, 2004). To achieve the objectives of sustainable rural development, the Agro-tourism venture need to integrate the programs that address the three pillars of sustainability. As shown in Figure 1, those programs need to be identified and their implementation should be clarified. The second dimension of the model (Figure 1) is a cohesive and integrative involvement of policy makers and local communities. Without a shared vision, commitment and consensus between policy makers and local people, the implementation of each program at

individual and collective level will not be possible. In a way, the model functions like a system that each part of the system needs proper functioning. The challenge is to come up with assessment frameworks that enhance meaningful communication and attribution of responsibilities between the local and the national levels.

Figure 1. Multifunctional Agro Tourism model.



Source: Adopted from Yang et al (2010).

2. METHODOLOGY

2.1. Study area

The south Khorasan province is a 102,460 square kilometer area and is located between 30° , 32' to 34° , 36' north latitude and 57° , 01' to 60° , 57' east longitude (Figure 1) (Badiie , 1983). It is 6.22 percent of the country's area. The south Khoarsen province is bounded by the Razavi Khorasan province in the north, the Sistan & Balochestan province in the south, Afghanistan in the east and Yazd province in the west. This province consists of seven counties named: Birjand, Ghaenat, Ferdos, Nehbandan, Sarbisheh, Darmian and Sarayan. It also encompasses 20 towns, 18 districts, 48 rural centers and 22,230 villages.

In the past, this region has experienced severe droughts and a shortage of rainfall. This shortage has been obvious even within this relatively humid region of the province in recent years. Prolonged droughts have threatened different sectors such as agriculture, natural resources and the environment with costly consequences. In a region where drought occurs on average once every four years, the uncertainty often results in conservative cropping strategies geared to the cultivation of low-risk, low water-consuming, low-value crops like wheat and barley (Nazari- Samani and Farzadmehr, 2006). Therefore, the first stage of this research mapped the existing potentials that are compatible with deserts and arid biomes, which are also economically viable and profitable. A major volume of saffron, barberry and jujube in Iran, and worldwide, produced in South Khorasan province (the study area). On the other hand, climatic conditions, elevation above sea level, and soil properties have led to high commercial and medicinal values of these products, which exclusively produced in the province. It provides a high potential for the development of natural resources in this arid land. A case specific data collection and planning with investment opportunities at the regional and local scale are requirements to pursue developmental projects for unique agricultural products such as saffron, barberry, and jujube.

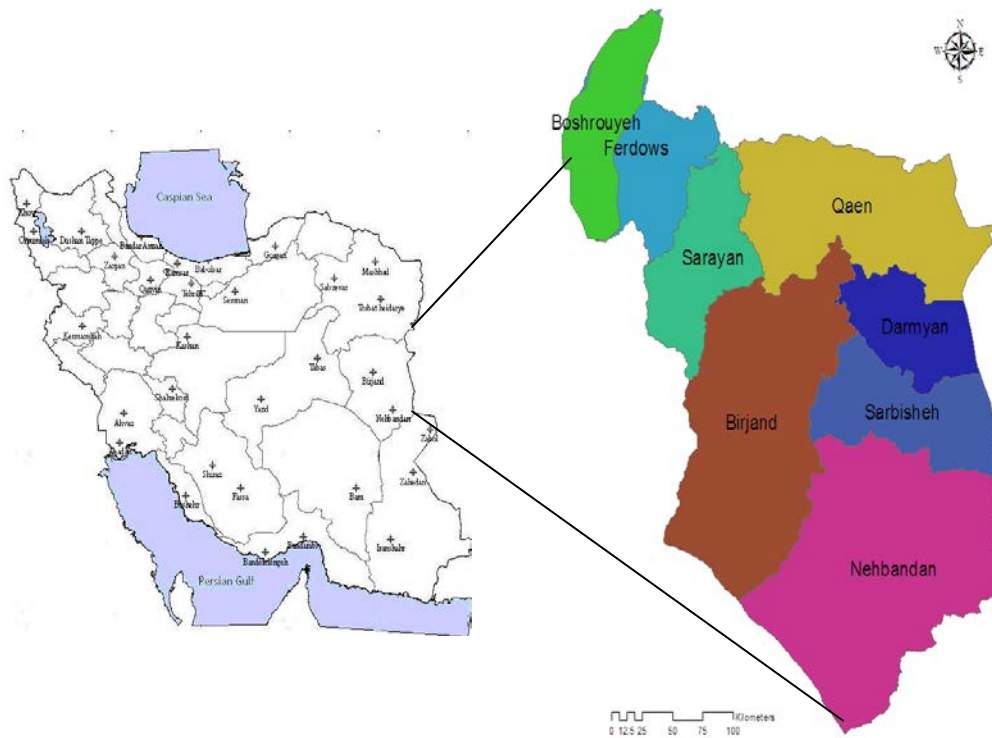


Figure 2. Location map of the study area. South Khorasan, Iran.

Agro-tourism cluster initiatives, if receives the support of policy and program, can overcome the much-needed problems of marketing, government policy and continuous failures. However, this requires careful planning and local initiatives with strong participation of all the stakeholders.

2.2. Agro-tourism Cluster

There are several valuable agricultural productions such as Saffron, Barberry, and Jujube, which have both national and international uniqueness. These productions are well known for curative and medicinal purposes, as well as, highly marketable as they are unique and rare in quantity. South Khorasan province of Iran ranked first as the location of these productions at the international and national markets.

According to the theoretical background, the cluster of each product demands a participatory process and diagnosis of weak points of all elements that hampers the production. These are measurable and can be managed. Design and execution of a cluster is not a straightforward process; therefore, it requires

knowledge and expertise, as well as, stakeholder's solidarity, cooperation throughout the cluster process. As Galvez-Nogales (2010, 13) noted: "conducting a diagnostic study, identifying priorities and design, and implement an action plan. Moreover, the latest cluster initiatives share an emphasis on participatory strategic planning processes to develop policies and strategies for strengthening national [and international] competitiveness'.

2.3. Design and construction of Agro- industry complexes

After identifying the potential areas along with feasibility study in the region, design and selection of plant species for cultivation is very crucial. Creation of recreational sites and utilization of suitable plants to attract foreign and domestic tourists are necessary. Moreover, breeding of certain bird species such as the ostrich and camel that complemented with aquaculture and breeding of ornamental flowers, will enhance the variation of product development in the cluster structure. These have in line with environmentally friendly approaches and projects. The element of authenticity is significant in Agro-tourism ventures from sustainability point of view (Daugstad and Kirchengast, 2013). Agro-tourism by its definition, is conducive to a sustainable rehabilitation of rural areas as it is 'describe a combination of agricultural production and tourism that encourages short and long-term visitors to farms or rural areas for the purpose of enjoyment, education, and/or active involvement in the activities of agricultural production and farming life' (Yang et al, 2010: 375). The Agro-tourism compatibility with clustering theory is manifest in the nature of the clusters/facets that are embedded in its structure. The notion of cluster theory and environmental issues are also relevant to sustainable development of rural areas. "On a more abstract level, Agro-tourism embodies the natural and the cultural environment (landscape, built environment and local customs), providing a conceptual hyper structure to the visitor that supports and promotes economic rural development while being compatible with sustainability principles - economic efficiency, environmental protection and social equity" (as cited in Aikaterini et al, 2001: 10).

3. RESULTS AND RECOMMENDATIONS

3.1. *The Introduction of Scientific Knowledge at Different Levels*

The study revealed that with governmental and institutional support through R&D, plant species, phenological phases, and applications of these plants for medical and industrial use would bring extra income as well as a revival of some of the endemic species in this region. The following examples (i.e., sample of clusters in proposed Agro-tourism) are some of the endemic plants that have remained with no proper analysis for their medicinal values not to mention their culinary use nationally and internationally.

3.1.1. *Saffron*

Saffron is the most important crop grown in South Khorasan province with a great potential. The province is well known as the main bio-geographical location for the production of saffron. The size of cultivated area for this crop is about 10,554 hectares, which produce 50 tons of dry saffron per year (24.6 percent of the country's total production) (Figure 2).



Figure 2. Saffron plant; endemic to the study area.

Saffron is a spice derived from the dried stigma of the flower of the saffron crocus (*Crocus sativus*), a species of crocus in the family Iridaceae. The flower has three stigmas, which are the distal ends of the plant's carpels. Iran ranks first in

the world production of saffron, with more than 94 percent of the world yield (<http://www.payvand.com/news/13/oct/1220.html>).

‘A 22-week multicenter, randomized, double-blind controlled trial of saffron in the management of mild-to-moderate Alzheimer's disease published in 2010, showed 15 mg twice a day was as effective as donepezil (Aricept) at 5 mg twice a day, with significantly less vomiting as a side effect. Another 16-week, randomized and placebo-controlled trial also published in 2010, showed that 15 mg of saffron twice per day was both safe and effective in mild to moderate Alzheimer's disease (Founder, 2012). Its uniqueness is also illustrated by the fact that it shuns mechanization, requiring of its would-be possessors that it be painstakingly harvested by hand , as no doubt has been done for tens of thousands, if not hundreds of thousands of years.

3.1.2. *Barberry*

Barberry (*Berberis vulgaris*) grows in Asia and Europe; the plant is well known in Iran and has been used extensively as a medicinal plant in traditional medicine. The fruit of the plant has been used as a food additive. In Iran, more than 5,000 tons of barberries are produced each year. The plant is a shrub, 1-3 m tall, spiny, with yellow wood and obovate leaves. Medicinal properties for all parts of the plant have been reported, including tonic, anti-microbial, anti-emetic, and antipyretic (Fathollahzadeh and Rajabipour, 2008).

The South Khorasan province produces 8,408 tons of barberry per hectare. The total area under cultivation of this crop registered as 6,442 (Figure 3).



Figure 3. Barberry as a commercial and medicinal crop.

3.1.3. *Jujube*

The Jujube fruit is another crop cultivated and produced in South Khorasan province. This fruit is useful in culinary, medical and pharmaceutical industries (Figure 4). The province has a very high potential for cultivation of this crop. The region produces more than 96 percent of the country's total crop. The cultivation yield of this crop is about 1,866 tons per year.



Figure 4. Jujube fruit.

Jujube fruit benefits are well known since ancient times. Jujube fruit is used as herbal medicine for thousands of years in China and other Asian countries. As

this fruit is highly nutritious and packed with various vitamins and minerals, it helps in the formation and maintenance of the blood stream, body hormones, bones, muscles, skin, hair, body enzymes and neurotransmitters. Jujube fruit has potent health benefits. It has calming properties and is a good source of natural antioxidants. Medical studies have found that jujube fruits and extracts have the capacity help lower blood pressure, reverse liver disease, treat anemia, and inhibit the growth of tumor cells that can lead to leukemia. Jujube extracts are also used in skin care products used to diminish wrinkles, relieve dry skin, and treat sunburn pain (<http://foodfacts.mercola.com/jujubes.html>).

3.2. Animal Husbandry and Fisheries

Previous studies have revealed that the existence of warm water pools make some of the semi-arid areas suitable for aquaculture. Aquaculture can be conducted profitably in a wide variety of conditions and environments. The choice of production system and crop product is affected by local conditions, such as water availability and quality, site topography and climate. Nevertheless, there is an increasing trend of white meat export from this province to other regions. The area can become self-sufficient in providing food sources for the visitors as well. The region is popular for its camel herding and fisheries. In the fisheries sector, there are 127 aquaculture fields associated with both cold and warm water. The uniqueness of honey production in this region is well known as Iran's best quality natural bee flower pure *Polyflora Honey*.

The aforementioned clusters are among many other items that can be incorporated into Agro-tourism system. The sustainable approach to this process depends upon a commitment to local knowledge, local product, and local effort. The area has tremendous potential to invigorate a systematic development of its potentials and products if only a formidable program is in place to achieve a sustainable environment for the growing population. The *Clustering theory* can be a useful and implementable guideline to this end.

4. Conclusion

This study has attempted to apply a conceptual approach believing that ‘the power of conceptual research in tourism is evident from its impact on both the world of thought (e.g. embodiment, tourist mobilities, authenticity) and the world of practice (e.g. tourism area life cycle, pro-poor tourism, responsible tourism). Given its theoretical inadequacies, the tourism canon relies heavily on the development of its concepts’ (Shuang et al, 2013, p. 84). This study aimed to develop a practical model towards sustainable development in marginalized rural areas with unique environments and varieties of potentially marketable products. This is possible through the combination of agricultural projects, and entrepreneurial Agri-tourism .However, it must be adapted to these unique environments and their culture. This is a supply side approach; however, the market/demand needs to be identified with respect to these potentials. With the strong domestic market and a rapidly growing international market for authentic tourism products, this issue can be structured based on cluster theory and modeling. An entrepreneurial approach will stimulate innovative ideas in the context of agriculture and tourism (Yang et al, 2010).

This process and its practical nature have been considered as entrepreneurial actions because of the creativity and innovations of farmers at cultivation and harvesting of crops that are inherently unique. South Khorasan province has high potential for viable plants such as saffron, barberry and jujube. Not only foreign tourists, but also, domestic tourists are interested in visiting the different phenological stages as well as harvesting and processing. Consequently, with suitable management, desert land, which bears unfavorable environmental conditions, could be converted to desert biomes with commercial and ecological value (i.e., reconciling economics with environment); not to mention the importance of natural resources and pristine environments for tourists from industrialized regions (Rahbar, 2000). Agri-tourism can contribute to the integration of the deprived rural areas and close the gap that exists between marginalized regions and urban areas. In addition, Agro-tourism is a path towards sustainable practice and rural institutional building capacity. Finally yet importantly, this study is sharing the same view that Agro-tourism in the

framework of cluster theory, 'in order to achieve its intended positive effects, it should, in a nutshell, improve incentives for producers and agribusiness; provide core public goods; enhance the climate for private investment in agriculture; build effective institutions; and reduce the environmental drag. Similarly, given the differences between clusters in developing countries, a one-size-fits-all approach should be avoided' (Galvez-Nogales, 2010, xi). To be safe than sorry, we recommend that such project should begin as a pilot program first, then problems and flaws can be detected before actual project begins.

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