

The Effect of Cultivation of Medicinal Plants on Job Creation in Rural Areas

(Case Study: Villages of Kalat City)

Author: **Mansoureh Alipourkhasht** PhD Student in Geography and Rural Planning, Islamic Azad University, Mashhad Branch, Iran

Supervisor and Responsible Author: **Dr. Hamid Jafari** Associate Professor and Faculty Member, Department of Geography, Islamic Azad University, Mashhad Branch, Iran

Adviser: **Dr. Katayoun Alizadeh** Associate Professor and Faculty Member, Department of Geography, Islamic Azad University, Mashhad Branch, Iran

Abstract

The diversity of economic activities creates a kind of security for the villagers, so that if one of the crops is damaged as a result of weather disasters or the spread of pests, the villagers' economy is not completely endangered and the other crop can guarantee the minimum possible for them, therefore the production of medicinal plants and can be a national necessity, within a clear and comprehensive program, pharmaceutical self-sufficiency, employment and development of the agricultural sector and pursue in Currency exchange is effective for the country. The aim of this study was to investigate the effect of cultivation of medicinal plants on job creation in rural areas (case study of villages in Kalat city). The present study is applied in terms of purpose and descriptive-analytical in terms of method. The sample population includes 7 villages of Kalat city in which medicinal plants are produced. According to the research results, planting each hectare of medicinal plants creates an average of 103.1% more jobs compared to crop heads.

Keywords: rural economy, job creation, medicinal plants, Kalat city.

1- Statement of the problem

Man has long adapted his relationship with nature and engaged in economic activity in accordance with the conditions provided by the natural environment. The formation of various economic activities and the diversity and dispersion of these activities have been formed under the influence of the relationship between man and the environment; The subject is explained by geographers. The formation and development of different types of economic activities create different perspectives. Accordingly, the economy of the society is also affected by various economic activities and one of the main and important factors affecting the development of a region is the type of economic activities. Human economic activities are the subject of study of various sciences such as economics, geography, sociology, development economics, agriculture and the like, each of which deals with this issue with different views and attitudes (Firooznia, 1398: 340).

The main causes of population stagnation are economic inadequacies and failure to meet the economic needs of individuals and households at the origin of migration, which forces people to leave the area of origin and settle in the destination. Migration from rural to urban areas is the predominant trend of net migration in most countries, which has considered economic factors as the most effective factor in determining migration. Usually, those who have insufficient income and employment opportunities leave the village (Gharkhloo, 2003: 8). The problem of employment and diversity in economic activities

in rural areas can prevent rural migration to the city, so that both rural areas are sustainable and population growth in cities is prevented and urban problems are solved (Handy, 1984: 188). The country's villages have a weak economy and are vulnerable due to their heavy reliance on agriculture and its incomes and the lack of sources of employment and income other than agriculture. The agricultural sector is not able to increase income much due to the limited and non-increasing amount of land; Hence, the search for other sources of income according to the strengths and obstacles of each region of the country, direction

Economic diversification of the rural economy seems to be necessary to increase the retention capacity of the rural population and in other words the sustainability of the rural population (Yasuri, 2015: 20).

Cultivation of medicinal plants has high added value despite low water requirement. In medicinal plants, unlike some agricultural products such as wheat, which grow in large and good lands, it is possible in small lands. Since there are many small lands in Khorasan Razavi province, it is possible to cultivate medicinal plants in these small lands even by rural women. In addition, the resistance of most medicinal plants to drought and saline soils allows farmers in low-rainfall and arid areas to earn a good profit by planting them. Due to the limited water in our country, native medicinal plants can be a good alternative for plants that consume a lot of water (Afshar, 1396: 33-32).

Kalat city has limited land due to its mountainous nature and agricultural products, despite their potential in the field of horticulture, are not very diverse. Livestock in this sector also remains traditional and the production is only to meet the needs of the residents of the villages in the area. On the other hand, due to geographical isolation and the high risk of investing in it, no investment has been made in industrial and other activities and it has increased unemployment in this region. The service sector, despite its many tourist attractions in the region, has been inactive and has not created much employment. In addition to these issues, due to population growth and the daily increase of rural youth, the number of rural unemployed is increasing day by day, and it is imperative to find alternative solutions for employment of villagers in this area in order to stabilize the population and maintain the remaining population. N.

Therefore, the question of the present research is expressed as follows:

"What is the occupational status of medicinal plants compared to other crops in the study area?"

2- Theoretical foundations of research

One of the important approaches to sustainable development in rural areas is the diversification of economic activities because it can change the one-dimensional construction of the rural economy.

It is necessary to increase flexibility and reduce vulnerability to external shocks (such as drought and market problems). Employment of villagers in the economic cycle is one of the conditions and tools of employment and activity in society that should be considered (Saeedi, 1998: 180). Counts; This approach is considered as one of the most important strategies for economic development and sustainability of rural settlements in Iran because it has a positive effect on promoting the welfare and security of the region's economy (Hosseinpour, 2013: 98). Diversification of economic activities as a fundamental strategy creates employment, population stabilization, optimal use of renewable natural resources, active entry of rural economy in the national and international economy, increasing production and accumulation of savings, increasing self-awareness, personality and Individual and national identity, etc. becomes in the villages; Therefore, it has been emphasized and considered by international organizations in developed and developing countries. Economic diversity is more important in areas where the economy relies on unit cultivation and will bring the quality of rural life

closer to the quality of urban life and ultimately facilitate the process of rural development (Javan et al., 1390: 43). Countries are always trying to increase their share of foreign trade.

Iran, with its climatic diversity and consequently high biodiversity, has a very good potential in the field of production and trade of medicinal plants. So that the number of plant species in the country is over 7900 plant species, of which 13% are medicinal plants (Ghahraman, 1383: 43). Therefore, by taking advantage of this amount of species diversity, the use of medicinal plants and the supply of herbal medicine has always been a prominent feature of Iranian medicine and many medicinal plants have valuable reserves that must be cultivated. Their agriculture sought to reduce Iran's reliance on oil revenues by creating new sources of production. As mentioned, Iran has a suitable climatic conditions for the production of medicinal plants. Therefore, the production of these plants can put the name of green gold in the basket of export items of our country along with black gold. Despite Iran's brilliant historical background in this field, Iran's position in this science today is practically not in a good position in the world and the necessary measures to restore and restore this forgotten sovereignty seem inevitable, so it is necessary to By using new and forgotten medicinal plants, it provided the ground for stable and sustainable production of these valuable plants in order to increase the welfare, health and nutritional diversity of the society while using their nutritional and medicinal potentials. Dear, 1396: 10-9).

3- Research literature

Fortunately, in recent years, many efforts have been made to identify medicinal plants in terms of the type of plants and their distribution in Iran, ecological conditions, medicinal uses, cultivation and domestication, breeding important species and reviewing methods. Novin has been done in increasing the effective substances and studying their medicinal effects and interesting results have been obtained (Kashfi Bonab, 2010: 68).

Table (1), research background

Author of the year Title Result

Firooznia et al. 1398 The role of rosemary production and rose picking in the development of human settlements (Case study: Kashan city) The results showed that there is a relatively strong and direct relationship between the job components of rose and rose cultivation with the development of functions and functions Economic, social and physical – Ecology of flowers and roses has had a significant impact on the development of settlements.

Khosravi Pour et al. To follow.

Anabestani 1393 Analysis of Barriers to Diversification of Economic Activities in Marivan Border Villages Findings show that institutional-managerial barriers have been the main obstacle to diversification of economic activities in villages

Ghaderi et al. And the reformed seeds in the province pointed out that all farmers and experts had these ideas.

Irvani et al. 2013 Comparison of factors affecting the development of aromatic plants cultivation between the two groups of potters and potters in Kashan city They have allocated a larger percentage of their total land to the cultivation of aromatic plants and have been more satisfied with this job

Amini and Zahedi 2016 Evaluation of the effects of cultivation and flowering of Mohammadi flowers in rural society Case study: Lalehzar Kerman Golmohammadi cultivation as one of the agricultural sub-sectors has an important role in creating employment and income generation in rural society Lalehzar of Kerman province and livelihood Many villagers in this area depend on it.

Tsanaktsidis & et al

2012 Preliminary results regarding the characteristics of roses as a dynamic product and suitable for rural environment The results show the cultivation and exploitation of roses (production of roses, rose oil and roses) in western Macedonia in the presence of an integrated system. Managing production processes in the realm of agricultural economics is an environmentally friendly activity with quality and competitive characteristics in the market.

4- Research method

This research has been done as an applied research with descriptive-analytical method. In the descriptive method, the economic activities of the studied villages were examined. Then, the impact of this economic activity on job creation in the studied settlements was analyzed. Information and data by library method (books and articles, results of population census, housing, agriculture and settlements) and survey (visit and interview) and through face-to-face visits to the studied villages, referring to agricultural jihad and interviewing Experts and operators. To determine the statistical sample size, villages as a sample could be selected that according to administrative experts, exploiters and researchers, the production of medicinal plants was done in them, so 7 villages Abgarm, Aghdash, Qara Tikan, Garou, Qoleh Zoo, Sini And anthems were selected as samples.

5- Introducing the study area

Kalat city with an area of about 3502/962 square kilometers is one of the cities of Khorasan Razavi province and is located in the northeast of Mashhad. It is limited to Turkmenistan from the north, Sarakhs city from the east, Mashhad and Chenaran cities from the south and Dargaz city from the west. The average altitude of this city is 780 meters above sea level, which is 3040 meters in the west side of the city, which decreases in height to the east. Kalat city has two parts (Markazi and Zavini) and four villages (Hezar Masjed, Kaboud Gonbad, Zavini and Pasakuh) and two cities of Kalat and Zavini and 63 inhabited villages. In 2016, Kalat city had 24805 rural population and 11432 urban population (statistical yearbook of Khorasan Razavi province, 2016).

6- Research findings

The most important medicinal plants that are produced in the study area are listed in Table 2.

Table No. (2): Status of production of medicinal plants in sample villages in 1397

Row	Product name	Cultivated area (hectares)
1	egg syrup	2600
2	cumin	85
3	sesame	2
5	Rosemary	2
6	Lavender	2/0
7	Thyme Garden	1
8	Peppermint	1
	Total	2/8191

The growth and development of the agricultural sector has always been one of the main axes of economic development. With the transformation of agriculture and the strengthening of the rural economy, many indicators of sustainable rural development, such as job creation and permanent income for agriculture, will be realized. Most development theorists in line with therefore in this study the production of medicinal plants as an activity to diversify the rural economy and between the employment rate of medicinal plants and crops in the study area during the crop year

1398-1397 A comparison was made.

This comparison uses the average index of labor requirement per hectare (Table 3).

Table 3: Comparison of employment rate of medicinal plants and crops in the study area during the crop year

1398-1397

Plant type	Plant name	Labor requirement	Average labor requirement per hectare	Percentage difference
Medicinal	Egg Syrup	28 4/26	1/103	
	Cumin	38		
	Sesame	25		
	Rosemary	20		
	Lavender	20		
	Thyme Garden	40		
	Peppermint	20		
	Wheat field	10	13	
	Chickpeas	15		
	Lentils	15		
	Beans	15		

Findings from Table 3 indicate that the average labor requirement per hectare of medicinal plants is 26.4 days and the average labor requirement per hectare is 13 days. Therefore, medicinal plants per hectare have 103.1% more employment than crops.

7- Presenting suggestions

In order to develop the villages economically and in line with the purpose of this study, the cultivation and production of medicinal plants will create rural employment, provided that the following strategies are considered:

- Informing farmers about the benefits of growing medicinal plants.
- Training young indigenous forces to better exploit the planting of medicinal plants and prevent their migration out of the village.
- Creating a spirit of risk-taking among the residents of the studied villages in the field of changing the tendency of cultivation from traditional wheat and barley crops to medicinal plants.
- Creating a guarantee for the purchase of medicinal plant products by the Agricultural Jihad and preventing intermediation in this regard.

- The use of specialists and trained people in the field of agriculture, which increases the quantity and quality of plant products.
- Observing the appropriate standards for packaging of medicinal plants in order to increase people's consumption and exports, which ultimately leads to the development of the medicinal plants industry.

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