

## **Development of Agro-tourism on the sustainability of agricultural production; Case study: Darkesh in North Khorasan Province, Iran**

### **Abstract**

North Khorasan Province is a hub of dry farming in Iran. Agricultural production and specially dry farming due to scarcity of water resources are decreasing sharply and many farmers have been forced to migrate to cities and employment in agriculture and horticulture has been challenged. In recent year, rainfall has reduced and this condition has become to an important and strategic problem in the world and this province. Also, shrinking farmland due to inheritance law in Iran, has led to the division of farmland, therefore this condition has increased costs and agricultural activity has become non-economic activity. Currently the ratio of rural population to big city in North Khorasan Province has decreased from 60 percent to 40 percent, during the last 10 years. Therefore planning changed to increase durability rural residents. Strategy for economic prosperity in the rural areas was introduced to aggregation small villagers, integrating of farmland and set up a workshop in new larger villages. In addition, the introduction of rural tourism as a source of income was another alternative to stay and live villagers and continue product in there. Accordingly, the identification of target or typical tourism villages in North Khorasan Province began the process of reverse migration from cities to villages. Darkesh, Esfidan, Roein, Astarkhy, Zavarem, Ostad, Khosraviyeh, Golian, Dasht, and Garmab were target villages in this province. The results showed that among 10 tourism target villages, former residents of four villages returned there and six villages increased agricultural production by integrating farmland and development of rural cooperatives. Also, the cultivation and production of medicinal plants was proposed for this region to improve the living conditions. Currently, developing the resorts and rural tourism houses and another hand, sales of handicrafts and agricultural products, caused to improve the situation prosperity and economic situation in the villages and increased the satisfaction of the living conditions of residents. This condition is more observable in Darkesh. Darkesh is one of the exclusive geographic regions in Iran and there are 149 species of medicinal plants with high price and economic value. We proposed to cultivate some medicinal plants (*Aloysia citrodora*, *Mentha piperita*, *Thymus vulgaris*, *Crocus sativus* and *Ziziphora spina-cristi*) in there. We observed life conditions had a big change after change to conventional cropping pattern and agro-tourist activities. This model could be appropriate to continue the livelihood lifestyle in other same villages.

Key word: Agro-tourism, Resort, Medicinal plants, dry-farming, livelihood lifestyle.