

Tropentag, September 14-16, 2022, hybrid conference

"Can agroecological farming feed the world? Farmers' and academia's views"

Development of rural communities and food security in Iran based on agroecological farming methods

Mahshid Soori¹, Ali Noorifard², Parvaneh Ashouri¹

Abstract

Iran, with more than 60,000 villages in different climates, has a high potential to benefit from various agroecological methods. Many villages in Iran are in unfavourable environmental, economic and social conditions, which has led to the migration of villagers to cities, food insecurity, land degradation, deforestation, etc. Therefore, by using various agroecological methods, these problems can be overcome to some extent. Agroecological farming consists of a variety of environmentally friendly farming methods that can produce crops or livestock without harming natural ecosystems.

Suburban and urban permaculture is a method to efficiently and optimally exploit space for food production and minimise wasted space. Multiple or mixed cultivation is the cultivation of two or more crops in the land during a growing season instead of planting only one crop, which reduces overall input costs, fertiliser, irrigation and labour costs, and leads to increased farmer income and better farm management. Mixed farming, that means growing crops and raising animals to produce meat or eggs or milk, together. Agricultural forestry is a land use management in which trees or shrubs grow around or between crops or pastures that lead to improve soil fertility, crop diversity and food resistance to climate shocks and increase income, diversity, carbon sequestration and reduce deforestation and erosion. Crop rotation is a method involving the cultivation of a variety of crops in an area in a series of growing seasons that reduce the usage of fertilisers, herbicides, and increase field resilience. Finally, the agroecological village method encompasses five stages including community identification, employment and strengthening of social organisations, educational and agricultural planning, implementation of the basic level and monitoring. This method is a logical evolution in rural development planning as it provides a comprehensive approach to the social, environmental and economic development of Iranian communities; by developing this method, the agricultural production will be increased and food resources for the growing population of Iran will be provided. The health, culture, income and economy will be improved, too. In this method, it is essential that different rural people be effectively involved in participatory processes, training sessions, and consultation networks.

Keywords: Agroecological farming, farm management, methods, rural communities.

¹Research Inst. of Forests and Rangelands, Agricultural Research Education and Extension Organization (AREEO), Rangeland Research Division, Iran

²Mihan Company of Tehran, Sales Department, Iran

Contact Address: Mahshid Soori, Research Inst. of Forests and Rangelands, Agricultural Research Education and Extension Organization (AREEO), Rangeland Research Division, P.O. Box 13185-116, Tehran, Iran, e-mail: souri@rifr-ac.ir