

Social and Ecological Impacts of Agricultural Land Use Change

H. R. Doroudian¹ and A. Doroudian

Assistant Professor of Agricultural Engineering, Lahijan Branch, Islamic Azad University. darya717@yahoo.com
PhD Student of Sociology, Tarbiat Modares University. atefeh.doroudian@gmail.com

Received: August 2016 and Accepted: January 2018

Abstract

Agricultural land use change is one example of the cases in which the free market economy has failed to protect the environment. It stands only second to the current water shortage as the major problem of agriculture in present-day Iran. The problem of land use change has led to the degradation or even devastation of large portions of the cultivable area to pose serious threats to food security, self-sufficiency, and sustainable employment in rural communities with obvious grave social, cultural, and economic consequences. Protecting agricultural lands has become even more difficult due to the development pressures of both tourism and industry; the imminent water crisis; the declining agricultural productivity due to soil degradation; changes in rural lifestyle; and the absence of deterrent laws and the bureaucratic corruption. Study has revealed that low income levels, rising production costs that make agricultural production uneconomical, inefficient agricultural practices, difficulties in product marketing and sales, lack of funding, unrealistic increases in property prices, and increasing cost of living are important factors underlying the changes in land use. It has also been established that land use change causes such irreversible environmental damages as soil erosion and desertification; natural disasters including landslides, flooding and climate change, reduced vegetative cover, reduced biodiversity, and loss of soil fertility with such adverse environmental consequences as soil and water pollution by unauthorized industrial pollutants, especially along the rivers, coastal areas, and areas next to drinking and irrigation water resources. All of these ultimately lead to the gradual annihilation of agriculture that poses a serious threat to food security. In addition to its environmental impacts, land use change causes structural changes in the social, economic, and physical structures of rural areas. The dire consequences include income inequality and engrained social injustice and discrimination in rural areas, frustration and conflicts at the household level, cultural confrontations, loss of social and individual identity, increased tendency for immigration, reduced motivation for long-term agricultural planning, reducing numbers of sustainable and productive jobs, and ultimately irreversible social and cultural consequences. The present article addresses some of these aspects in detail.

Keywords: Food security, Employment, Community, Land conservation.

1 - Corresponding author: Lahijan Branch, Islamic Azad University.