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Research Article

STUDY THE AGRICULTURE AND RURAL AREA (CASE STUDY: IVAN TOWNSHIP IN ILAM PROVINCE, IRAN)

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ABSTRACT
Agriculture is one of the most important economic sections in the most developing countries. Agriculture is certainly a major contributor to rural development in many countries. It is one of the most important economic sectors in Iran. Beside, agricultural sector which accounts for 27% of GDP, 22.9% of employment opportunities, 82% of food supply and 35% of non-oil exports, plus considerable raw materials for industrial use dominate the Iranian rural economy. This study tries to investigate the food security index in rural areas. The target population was rural resident in Ivan Township in Ilam province west Iran (N= 32000). The result of research showed that the food security index was 96.2%.

Keywords: *Food Security, Rural Areas, Ilam, Iran*

INTRODUCTION
Agriculture is one of the most important economic sections in the most developing countries. According to the FAO's latest reports approximately 40 percent of the active economic population all over the world is working in this section, most of them living in developing countries. Agriculture, as shown above, is the main source of livelihood for millions of people in the world. Therefore, it is imperative to promote change and growth in this sector in order to alleviate poverty. Potential positive impacts of agricultural development include increased food production and consumption, income, and employment. Agriculture, forestry, and fisheries provide the foundation for economic development in a broader sense. Agriculture is grounded in rural areas, so that agricultural and rural sectors are interlinked to each other, in Iran (Hayati and Karbalaee, 2013). Agricultural Development generally tries to raise agricultural production and productivity and is of a technical nature. Rural development, though, by definition is oriented more toward benefiting primarily the poor. Thus, there is the fundamental distinction between pure agricultural and rural development. Rural development is a strategy to improve socio- economic status of poor. Thus, if the general definition of rural development is accepted, i.e. the improvement of the welfare of all members of the rural populations is justified (Anriquez and Stamoulis, 2007).

Literature
Agriculture is certainly a major contributor to rural development in many countries. It is one of the most important economic sectors in Iran (Ahad and Inayatullah, 2013). Over the past thirty years Iran has experienced very rapid population growth by annual average 4.2 percent, insignificant rural development and severe environmental degradation. There is evidence that these three phenomena are connected in a mutually reinforcing manner. This nexus is commonly known as a "Vicious Circle" in literature. As a developing country, Iran has 65 000 villages with about 22 million people living in rural areas. They are living under poverty line and their survive depend on agriculture, whether directly or indirectly (Golmohammadi, 2013). Beside, agricultural sector which accounts for 27% of GDP, 22.9% of employment opportunities, 82% of food supply and 35% of non-oil exports, plus considerable raw materials for industrial use dominate the Iranian rural economy (Ghambarali *et al.*, 2013). The most recent data from the Food and Agriculture Organization of the United Nations (FAO) show that over time there has been significant progress in reducing the total number of undernourished people globally, and the same is true for poverty. There is evidence that agricultural growth has a high poverty reduction pay-off:

• A 1 percent per annum increase in agricultural growth, on average, leads to a 2.7 per cent increase in income of the lowest three income deciles in developing countries (World Bank, 2007; De Janvry and Sadoulet, 2009).

• Investment in agriculture is 2.5 to 3 times more effective in increasing the income of the poor than is non-agricultural investment (World Bank, 2007).
• Agricultural growth, as opposed to growth in general, is typically found to be the primary source of poverty reduction (Diao *et al.,* 2007). The most important problems related to rural and agricultural development in Iran cited by researchers are: limitations of macro-economic policies in the agricultural sector, the small size of agricultural lands and production scales, and insufficient investment in infrastructure. Kalantari *et al.,* (2008) declared economic management and planning challenges. Lack of investment intourism, lack of basic infrastructure, and limited access to agricultural production markets, are other main challenges of sustainable economic development of rural areas in Iran (Namdar and Sadighi, 2013).
Perma (2013) believed the infrastructure could effect agricultural development. Aspects impact the infrastructure can be defined as follows:
1. Infrastructure increases agricultural production and productivity
2. Infrastructure reduces cost of production
3. Infrastructure increases the regional value
4. Infrastructure and the social benefits
5. Infrastructure and the economies of scale
6. Infrastructure and accelerator effects
7. Infrastructure and increased welfare of producers and consumers
8. Infrastructure and reduction in price oscillation (Perma, 2013).

MATERIALS AND METHODS

Methodology

The study was done on a descriptive-surveying method that uses field and documentary data. The aim of this study was to in investigate the food security index in rural areas. A descriptive survey design was employed in this study. The target population was rural resident in Ivan Township in Ilam province west Iran. Data was collected through a questionnaire. The reliability of the questionnaire was calculated using a Cronbach alpha coefficient (alpha >0.7) for different sections after conducting a pilot study. One of the methods was used to calculate the food security index is the parameters of calories per person per day are the amount of calories in the day or in a year. In other words, calculate supply and demand for calories.
[x4{x3/(1+x5)}]0/23[({1+x6)}(1+x2)^n]+0/77FSI
X1 = the per capita supply of calories per day than the calories
X2 = annual growth rate of per capita energy supply per day
X3 = index of food products
4 X = self-sufficiency index
X5 = change in production
X6 = changes in consumption

RESULTS AND DISCUSSION

Results

According to medical experts, the amount of calories our body needs an adult with the age, weight, and body type can vary from 1500 to 2700. The mean body weight and calories required was not declared, thus in the region, the base was used in this study the average adult human body needs calories, 2100 calories per day maximum.
How many calories your body needs in a year? (Calories per day*365)
A=2100 x 365=766500 calories
To assess the food security index, the total product of research area and the amount of calories was calculated.
The last step was to calculate the amount of calories produced in the area of research, the ability to provide the number of people or populations in the year.
The result of research showed that the total production of agriculture crops could be provided food security for 173177 people in this region.

Discussion and Conclusion

Agriculture plays a significant role in making occupational opportunities for the rural male population. Agricultural sector has also enhanced food security and caused a decrease in the number of immigrations to urban regions as well that in itself is a significant factor for sustaining the rural territories. The result of research showed that the food security index was 96.2%. The index of food security in the region was far higher than the average in the country.

REFRENCES

Ahad U and Inayatullah M (2013). Challenges to the Agricultural Development In Iran. *International Journal of Innovative Research and Development* **2**(10) 85-91.

Anriquez G and Stamoulis K (2007). *Rural Development and Poverty Reduction*: Is agriculture still the key? (The Food and Agriculture Organization of the United Nations).

De-Janvry A and Sadoulet E (2009). Agricultural Growth and Poverty Reduction: Additional Evidence. *The World Research Observer* **25**(1) 1-20.

Diao X, Hazell P, Resnick D and Thurlow J (2007). *The Role of Agriculture in Development*: Implications for Sub-Saharan Africa. Research Report 153. (Washington, DC: International Food Policy Research Institute (IFPRI)).

Ghambarali R, Alibaygi A, Rasekhi B and Pezeshki V (2013). Challenges of Sustainable Rural Development From Perspective Of Villagers. *International Research Journal of Applied and Basic Sciences* **7**(5) 253-258.

Golmohammadi F (2013). Sustainable rural development in Iran: challenges and opportunities (case study: south Khorasan province), *Technical Journal of Engineering and Applied Sciences* **3**(2) 170-185.

Hayati D and Karbalaee F (2013). Revising Agricultural Development by Rethinking Rural Development Strategy in Iran. *Technical Journal of Engineering and Applied Sciences* **3**(14) 1411-1417.

Kalantari K and Shabanali Fami H (2008). Major Challenges of Iranian Rural Communities for Achieving Sustainable Development. *American Journal of Agriculture and Biological Sciences* **3**(4) 724-728.

Namdar R and Sadighi H (2013). Investigation of Major Challenges of Rural Development in Iran Utilizing *Delphi Technique. Journal of Agriculture Science and Technology* **15** 445-455.

Perma MM (2013). Rural infrastructure and agricultural development. *International Research Journal of Agriculture and Rural Development* **2**(1) 49-54.

Petrick MJ and Katharina K (2013). Rediscovering the Virgin Lands: Agricultural Investment and Rural Livelihoods in a Eurasian Frontier Area Original *World development* **43**(1) 164-179.

Valdes A and Foster W (2010). Reflections on the Role of Agriculture in Pro-Poor Growth, *World Development* **38**(10) 1362-1374.

Weinberger K and Lumpkin T (2007). Diversification into Horticulture and Poverty Reduction: A Research Agenda, *World Development **35***(8) 1464-1480.

World Bank (2007). World Development Report 2008: *Agriculture for Development*. (The World Bank, Washington, DC).

World Bank (2012). WDR 2012 Home Page - Data & Research - World Bank