



The Economic and Statistical Evaluation of Climatic Elements in Tabriz and Isfahan (in Iran)

Mohammad Yazdani

Ph.D. student of Climatology, Tabriz University, Tabriz, Iran

Department of Climatology, Faculty of Planning and Environmental Sciences, Tabriz University,
Tabriz, Iran

yazdani@tabrizu.ac.ir

Abstract

Climatic Elements involve potential values and play main role in this regard that is not truly known and acknowledged by the public. Among climatic factors, elements such as temperature, precipitation and freezing have most affected the formation and the growth of human societies. these elements can influence the agricultural production, thereby affecting the economic activities of humans in various scales. Currently, in developed countries they apply different statistical agro-climate models involving predictions and pricing methods and also the estimation of insurance value of climatic elements in order to manage the possible agricultural crises. In this study, with the aim of evaluating the economic value of climate, different climatic factors such as temperature, precipitation, and freezing have been estimated. Four products of namely, arable wheat, dry farm wheat, arable barley and dry farm barley have been chosen for Tabriz and Isfahan`s agricultural fields. The production amounts have given rise to the estimation of per hectare net income, which in turn is a function of climatic factors. Various statistical techniques including correlation, multiple and stepwise regression models have been applied.

Keywords: Economic Climatology, Statistical Models, Economic Valuation and Agricultural, Climatic Elements