Introduction

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This is the final report of socio-economic sub-group of ICCAP. Our sub-group has conducted economic and new institutional economic analyses of agricultural problems, of the impacts of climatic change to agriculture, and of possible measures in order to cope with these impacts.

There are five components in the research of the socio-economic subgroup.

(1) Econometric analyses of the impacts of climatic change to yield and area sown of wheat and barley in Adana and Konya using the government statistical data, our farm survey data, and Dr. Kimura's RCM projection. Tsujii, and Gultekin.

(2) Study of farmers' economy, and farmers' perception and responses to climatic changes, technological changes, natural resource changes, and policy and institutional changes. Tsujii, Erkan, Asami, and graduate students.

(3) A regional agricultural mathematical programming model analysis of the relation among products' structure, water use, agricultural policy, and climatic changes in Adana and Konya. Umetsu..

(4) Institutional economics analyses of the use of natural resources (commons) such as water and pasture by farmers, pastoralists, and the government. Umetsu, Asami and Tsujii.

(5) A sector-wise economic study of the interactions among climatic changes, agricultural production and policy by the IO analysis. Kagatsume.

We have done three village and farm surveys in Adana and Konya during the period from late 2002 to 2004. We have also done three other village and farm surveys during 2003 and 2006. These farm surveys contributed directly and indirectly to the other studies in the socio-economic sub-group. Three master theses analyzing the data collected from the farm surveys on rural credit rationing, rural manure market evolution, and rural female labor emancipation were completed. A master thesis on farmers' resource use problems for sugarbeat production in Konya was also written by using the farm economy and behavior data collected from two farm surveys in Konya in 2004.

A time-series agro-climatic econometric analysis of the relationships among monthly weather data, yield and area sown of wheat and barley production, economic and technological factors, and policy factors has been done. The result of this analysis was used for quantifying the impacts of climatic change to wheat and barley production in Adana and Konya in 2070.

A regional risk programming model analysis of the relation among agricultural products' structure, agricultural policy, and climatic change and water availability was done in the LSIP region in Adana.

New institutional economics analyses of the roles of water users' association and of government pasture conservation have also been done.

A several papers have been published in international and Japanese journals, and many more are to be published.

An I-O analysis of the relationship between inter-sectoral dependencies and climatic change was done. This report presents what socio-economic sub-group has done in the ICCAP.

I like to ask critical comments and questions about methodology and results of socio-economic sub-group shown in this report from the public and from the other participating researchers of other sub-groups of the ICCAP.