［北海道農業経済研究　第３巻第１号　1993.10］

SUMMARIES OF ARTICLES

The New Agricultural Policy with Reference to Hokkaido: Farmers in Hokkaido and Regional Support Systems of Their Labor

Chairperson: Susumu Usui
(Hokkaido University)

Japanese government published the so-called "Reformation of Agricultural Policy" in June 1992. We intend to discuss how farmers in Hokkaido should be reorganized in relation to this new policy. This issue was treated in the last year conference also. Today, we will discuss the same issue from the different viewpoints. The first reporter, Mr. A. Asami intends to clarify the regional farm labor organization theoretically. The second reporter, Mr. Uraya treats the custom application of feed production in dairy farming. Mr. Shiga, the third reporter, intends to analyze the roll of informal organizations of farmers in agricultural production. Four commentators will present other viewpoints on these reports. I, as a chairperson of the conference,wish today's discussion to be creative and constructive.

The Firm Economic Analysis on the Regional Agricultural Organization.

Atsuyuki Asami
(Obihiro University of Agriculture and Veterinary Medicine)

The Reorganization of regional agriculture is analyzed from the viewpoints of transaction in this paper. The transaction analysis is the latest method in firm economics. The structure of regional agricultural organization is explained by asset specificity and marketability. When the asset specificity is mixed, inter-organizational transaction based on "customer relationship" is chosen, because the customer relationship save the transaction cost to suppress opportunism. Regional agricultural organization is explained as an inter-organization. But the marketability problem is not solved by the customer relationship. To solve the marketability, regional agriculture is inter-organaized based on "regional incentive system". Transaction activities in regional agricultural organizations are explained by "agent-principal relationship". Opportunism is the most distressed problem in the agent-principal relationship. But this problem is also solved by the customer relationship and the regional incentive system.

The Movement of Farm Contractors for Roughage Production under the Regional Support in Nemuro and Kushiro Districts.

Takayoshi Uraya
(Hokkaido Prefectural Konsen Agricultural Experiment Station)

Dairy farmers in Nemuro and Kushiro districts have been rapidly expanding their farm size in recent years, so their working hours of cow raising and roughage production are very long in summer. To make working hours shorter, contractors for roughage production are introduced. By using the contractors, working hours of dairy farmers in summer are shortened, farmers' income increases and costs of roughage production decrease. The maximum charge for farmers is reported to be 50 thousand yen per hector for the capital saving management. For scale expanding farmers, it is 57 thousand yen. The contractors mostly produce high-moisture silage and put silage into a bunker-silo, because they must carry out their premise that they harvest the grasses in a suitable period. On the premise to harvest in a suitable period, the minimum charge for contractors is 59 thousand yen in the selfpropelled harvester system and 67 thousand yen in the pull-type harvester system. It is necessary to establish a system that guarantees them a continuous contract.

Regional Organizations for Innovation of Farm-Management

Eiichi Shiga
(Hokkaido University)

In the process of characteristic changes in farm management, the regional organizations themselves have been subject to restructuring in expectation of playing two roles; "transformation of given conditions" (to make and improve development conditions) and "progressive abilities" (to provide learning and training abilities to new technology).

It is pointed out that the regional organizations have played these two roles alternatively and, as a result, standardized farm management at a high quality level. It is also pointed out that such regional organizations should be positive in promoting regional agriculture to contribute eventually to restructuring of farm management and regional agriculture.

The Gaps among the Regions and the Causes of Differences in the Ratio of Participation in Upland Crop Insurance -A Case Study of Tokachi District in Hokkaido-

Hiroshi Tsukui
(Obihiro Ohtani Junior College)

The major factors to explain why farmers decide to participate in the insurance program for upland crops are investigated. The ratio of participation depends considerably on the ratio of damages from agricultural disasters and the rate of the premium. But it's not well explained by these factors. In taking the field investigations into consideration, it turns out that the ratio of participation is thrown into confusion by the organizational activities and the comprehensive crop insurance system. We then draw a figure that shows the relation between the change rate of the ratio of participation and the ratio of damages since 1984. It appears that cities, towns, and villages are divided into two groups. Then a

regression analysis, using a dummy variable that shows the gaps among the regions, is carried out. Consequently, the relationship between these factors and the ratio of participation shows the farmers' reasonable demand for insurance.

In addition, two points are indicated about the regional dummy variable. First, the group A consists of the areas between the coastal regions and covers most of the bean growing areas. It shows that the higher the ratio of damages, the less the influence by the comprehensive crop insurance system. Simultaneously, it shows that the farmers obviously behave in response to the level of risk, regardless of the strength or the weakness of the organizational activities. Secondly, the influences of the organizational activities are reflected in the amplitude of the ratio of participation and the index formed by the ratio of participation divided by the ratio of damages. As a result of the regression analysis these factors are found to be predictor variables, and the regional dummy shows that the a priori assumption was reasonable.

Farmers' Selection of Wheat Varieties and Risk Aversion Behavior

Yasuo Ohe*, Toichi Sasaki, Masaki Kanaoka
(*Chugoku National Agricultural Experiment Station)
(Hokkaido National Agricultural Experiment Station)

This study provides an economic analysis about risk aversion behavior, focusing on farmers' selection of varieties of wheat in upland farming areas in Tokachi, Hokkaido and clarified managerial factors that are considered to determine the aversion behavior. The main points mentioned in this paper are as follows;

1. The wheat acreage increased three times in recent two decades in Hokkaido. In every time, changes in variety are one of the major contributed factors.
2. Takune, a variety of wheat preferred by farmers in Tokachi, is preferred as a crop which enables farmers to take risk aversion behavior so that the higher the risk, the larger the ratio of Takune. Thus we can regard Takune as a crop which shows the degree of risk aversion.
3. In a logit regression analysis applied for Takune selection, the results show that it is correlated positively with farm size and negatively with age of the farmer. That means the larger the farm size and the younger the age, the more farms select Takune. Labor and productivity also have a positive correlation with Takune selection although farms without a successor and variance of yield of kidney beans show a negative sign. The results show that in general farmers who have better managerial condition tend to be risk averse.

Consequently, it is reasonable to say that further increases in farm size would raise necessity of the risk spreading function in the upland farming management. This role of risk spreading function played by Takune would be one of the important managerial conditions for stable evolution of farm management in the future.