Abstract of the studies

Report regarding the progress status of the studies and the problems encountered in 2001, and the proposals regarding the implementation of further studies.

(1) Studies on evaluation and food policies

1) Studies on the evaluation of agricultural, forestry and fishery policies

Studies regarding the evaluation of agricultural, forestry and fishery policies have been conducted since 1998, and an interim report was informally submitted to the Administrative Department. A great deal of dedication has been given to the development of a policy evaluation method by the research team, all the members of which have participated enthusiastically in numerous meetings to evaluate activities at the Ministry of Agriculture, Forestry and Fisheries (MAFF). Ahead of the other ministries, MAFF began the implementation of policy evaluation in 2000, and it is expected to continue implementation according to "The Basic Plans for Policy Evaluations by the Ministry of Agriculture, Forestry and Fisheries" and "The Execution Plans for Policy Evaluations by the Ministry of Agriculture, Forestry and Fisheries", which are to be formulated based on Government Policy Evaluation Act, which became effective in April 2001. Furthermore, with the intention of realizing these plans, the involvement of and collaboration between the Policy Research Institute (hereinafter referred to as the "Institute") and MAFF in the development and improvement of evaluation methods has been clearly stipulated; thus, expectations for the Institute's competence are growing.

Under such circumstances, comprehensive evaluation agendas for "The Execution Plans for Policy Evaluations by the Ministry of Agriculture, Forestry and Fisheries" currently involve research pertaining to the "rice policy", as well as other studies in connection with management and safeguard policies. An achievement was made in the area of management policy, in which a metrical analysis of the effect of the management stabilization measures was conducted and the results were publicized.

The research pertaining to the "rice policy" and other relevant studies will continue, and in response to growing expectations and requests from the Administrative Department

for studies of policy evaluation methods, new agendas will be set in connection with the development and improvement of evaluation methods, with the purpose of reinforcing the research system.

2) Studies on the evaluation of the environment for food, agriculture and rural area policies

On the matter of environmental evaluations, the Institute has been a pioneer in adopting methods to evaluate external economic effects, using methods such as the contingent valuation method (CVM) and the hedonic method. These studies have been endeavouring to simplify and improve the accuracy of the methods by positively applying them to activities such as the evaluation of rural settings. Furthermore, these studies have been diligently engaged in the enhancement of public understanding of the importance of the multifunctionality of agriculture by utilizing research results as basic data to help illustrate the concept to local authorities in Japan and ASEAN nations, as well as to use in OECD discussions about agricultural multifunctionality. In addition, results concerning the calculation of the economic ripple effect created by the enforcement of the Food Recycling Law were achieved.

The study project, "Development of a Policy Evaluation Method Regarding the Promotion of the Cyclic Use of Organic Resources of Agricultural Origin", which was begun last year, will continue, and a new project, "Studies on the Organic Resources Recycling Policy and its Effect", will be initiated.

3) Studies on the causes of changes in international and domestic food supply and demand and on forecasting of food supply and demand

Because many conventional studies on food policies were conducted according to researchers' individual motivations, the results had been lacking in focus, and only a small number of in-depth consumption-related researches was known to have been completed. In 2001, as part of the special research conducted on behalf of the government, many achievements were made in the field of the supply and demand analysis of rice and vegetables, and the results were reported to the Administrative Department. A study project concern-

ing the refinement of a method to predict world food supply and demand was begun, and the development of a model has been undertaken.

Also, research on the development of an econometric assessment method to evaluate the influence of technical innovation on agricultural production, as well as research on the econometric analysis of dairy products, yielded many positive results.

Economic analysis pertaining to vegetable supply and demand shall continue. Also, as part of the special research conducted on behalf of the government, an analysis of the prices and supply and demand of fruit will be conducted.

4) Studies on food consumption trends and on food consumption policies

With studies on food consumption focusing on the quantities and prices of food products, as well as on the analysis of their quality, and with "safety" being of utmost importance, information regarding food labelling issues in Germany was forwarded to the Administrative Departments. Based on the assumption that food safety analysis will be a key issue in food and agricultural policies, a new research project, "Studies on the Development of Crisis-Management Systems for Food and Agriculture", is planned to begin.

In terms of food policies and consumption issues, current and past studies cover nearly every food item, with the exception of marine products. Preparations are being made for further research on the subject of marine products, which is scheduled to begin in 2003.

5) Studies on the efficiency and the stability of food supply systems from production to consumption and on related policies

Intensified by cases of BSE, the growing concern among consumers about food safety has increased consumer awareness of product history labelling (i.e. food traceability), and has increased the demand for more research with a holistic approach-one that considers all stages of the "food system", from production to consumption. Although the interim results regarding the food system for vegetables have already been acquired, it is felt that in order to acquire a more concrete picture of the system, further study is needed.

As part of the special research on behalf of the government, an analysis of food distribution costs is planned.

(2) Studies on rural development policies

1) Studies on policies for the development of management structure and operation of agriculture, forestry and fisheries

The New Fundamental Law has been established with the aim of enabling us to sustainably develop agriculture while emphasizing nurturing of various types of leaders. As one of the strategies, the status of initial stage of new start-ups, the support systems of new farmers have been typified. The ideal conditions for stabilizing their operations and institutional obstacles have been also studied. A new study will be carried out on the way how training programs designed to support prospective newcomers to the agricultural sector should be. Moreover, the financial circumstances of some agricultural corporations, financed by local authorities or agricultural cooperative associations, have been assessed in terms of local public welfare gains using a framework of economic analysis. An analysis of effects created on the local economy by agricultural corporations is planned.

Changes in agricultural land use between 1995 and 2015 were predicted using an analysis model based on agricultural census data, and the policy factors affecting the behavior of farm households during the adjustment process of farmland trades have been also clarified through use of a metric method. The roles of organizations and groups involved in the land-use coordination system will be systematically classified by breaking case studies down into patterns. A study will attempt to refine the function model by linking the data of sample farm households to micro agricultural census data.

Analysis of the agricultural census data has clarified the current conditions and movements of agricultural industry supporters (farmers, agricultural business organizations other than farmers, agricultural service organizations and agricultural hamlets) in a comprehensive manner, and these results are planned to be supplemented with new results from the analysis of statistical data acquired from different sources.

Regarding paddy farming, the study has

Regarding paddy farming, the study has clarified the movements of households by the type of their business structure and the status of their land use, and in order to produce a medium-to-long-term prediction of the regional structure of rice production, the data shall be used in conjunction with other statistical data analysis.

2) Studies on policies for stabilizing farming, forestry and fishing communities and for improvement in welfare of farmers, forest workers and fishers

The investigation of communities in hilly and mountainous areas has confirmed the existence of social conditions which make it difficult to find marriage partners, as well as subjective conditions that affect the marriage, and the ripple effects on households caused by difficulty in finding marriage partners. A new study will carry out case studies regarding the role that agricultural training programs play in urban female involvement in agriculture and their settlement in rural areas. In addition, the agricultural census showed a decline in the birth rate in rural areas in comparison to that in urban areas. A case study in rural areas will be conducted to ascertain the key factors behind the declining birth rate, as well as to consider measures against the phenomenon.

With regard to issues on the welfare of the elderly, the current status of rural nursing-care services and job creation have been investigated by the comparative study between rural and urban circumstances. A nationwide comparative study on the activities of nursing-care service will be conducted by reclassifying micro data of nursing-care service from the Ministry of Health, Labour and Welfare's investigation.

3) Studies on policies for economic revitalization in farming, forestry and fishing districts, hilly and mountainous areas

In order to revitalize the rural economy in the farming, forestry and fishing districts, the study explores a concrete way of coexistence of urban and rural communities. First, the index of rural revitalization has been revised by incorporating the forestry-related indicators. With the use of the revised index, a study will set up some revitalization categories on a regional basis, which will create diagonostic sheet.

In addition, with a focus on the interaction between rural and urban areas, the structures of agricultural cooperatives, production organizations, as well as the direct distribution of produce to urban consumers, reflecting the structural changes of the market, have been analysed. A new study will clarify the role of agricultural cooperatives in the advancement of regional agriculture and the revitalization of local communities through comparative analysis

Through case studies, a study will clarify the number of visitors attracted to "green tourism", regional cultural facilities and traditional arts, as well as the economic profitability and social and economic effects on local communities.

4) Studies on policies for the conservation and better use of resources in farming, forestry and fishing districts, hilly and mountainous areas

The increase of abandoned farmlands and disappearing of villages have sounded the alarm on the urgent action for the conservation of agricultural and forestry resources. As a countermeasure, a prediction model was developed to forecast the decrease of farmlands, and an actual condition survey was conducted to examine the model's effectiveness. The study will be finished by improving this prediction model by incorporating agricultural census data.

Toward realization of low-loaded rural society, evaluations of environmental loads and measurements of the potential availability of organic resources have been carried out in three Japanese regions. A further study will set up plans for the use of organic resources in these three regions. The study will also estimate the extent of the reduction of environmental loads and the economical efficiency of these plans toward a systemized method, with the intention to propose effective measures to vitalize both agricultural and industrial activities.

(3) Studies on international policies

1) Studies on the trend of international relations as to food, agriculture and rural areas and on international adjustment policies

In response to global food problems, research has been engaged in the development of a world food supply and demand model, and has been investigating the potential of food productivity in major regions around the world, taking environmental and resource-related factors and constraints into consideration. Also, information concerning food produc-

tion in major production regions, i.e. the Asia-Pacific region and South America, has been accumulated. The study will further its analysis using information about water and land.

The studies on the measures taken in the transformation of rural communities in developed nations have demonstrated an increasing emphasis on environmental conservation and the independent status of rural communities. A new study will be initiated on consideration of measures in response to new needs raised by rural communities, including the advancement of information technology. As for global policy planning under the WTO's system since China's accession, a study has clarified developing countries' requests to developed countries to open and expand their markets, and perform more research and investigation. The study has also evaluated food policies of the US, Canada, Malaysia, Singapore, Thailand and Australia concerning genetically modified organisms (GMOs), as well as the consumer response to GMOs. Also, the relationship between domestic GMO labelling and the WTO agreement was clarified, and theoretical aspects of the relationship between changes in trade and the environment were discussed. The study furthers by including field investigations and other relevant activities into its analysis.

Trends (such as those mentioned above) in each country constantly change in line with the status of international relations. It is vital not only to extend the range of subjects to secure more information in order to the accurate tracking of global trends, but also to establish an even more reliable database, with a particular focus on GMO-related matters.

2) Studies on the trends of food, agriculture and rural areas and policy direction in Europe

Through comparative studies on the revitalization of rural life in Europe, studies elucidated the current status of the operation of agro-environmental measures in France and the agro-environmental policies in Germany and the Netherlands. Under the studies, information on business promotion and the concept of environmental improvement from residents in green tourist areas are gathered and investigations into the advancement of the IT field into rural areas are carried out.

In relation to the food safety issue in France, research analysed measures related to the BSE case, and developed an understanding of a systematic approach to risk management. Also, it analysed consumer questionnaire results, and developed an understanding of the current usage of descriptive labelling as a corporate strategy. A new study will focus on leg-

islative system issues related to food safety.

As for the former Soviet republics, a study has confirmed that there are rather paradoxical circumstances under which the standards of agricultural protection are increasing in parallel with the progress of the negotiation for Russia's accession to the WTO, and that there are large amounts of idle resources held by economically and financially collapsed agricultural business operations that dominate a quarter of Russia's entire agricultural industry. The effective use of these resources will undoubtedly determine the future of the agricultural industry of Russia. A detailed study will be conducted on Armenia.

3) Studies on the trends of food, agriculture and rural areas and policy direction in the Americas and Oceania

Data was collected on new agricultural legislation to be implemented in 2003 in the US and Canada, and the intention of strengthening the provisions related to environmental conservation was confirmed. It was also confirmed that as part of state environmental conservation measures, there is a particular farm management system adopted by 46 American states, in which the provision of subsidies is linked to compliance with the environmentally—sound agricultural law. The study also confirmed that the Canadian environmental farm planning program, which functions as a differentiation strategy, promotes a self-assessment program that has been adopted by 10,000 farms.

An analysis of the current status of genetically modified crops cultivation in America was carried out, and research on the procurement procedures of the corn processing industry since the StarLink incident (September 2000) was conducted. The study has confirmed that the formulation of international standards for IP handling is in progress. In relation to the study, field investigations will be conducted concerning the trends of genetically modified food systems, the gap between the system and consumer awareness, and trends concerning trade friction. Furthermore, information will be gathered and analysed regarding genetically modified agricultural products in Brazil, and a new study will be carried out on Brazil's food supply and demand and its agricultural trade.

4) Studies on the trends of food, agriculture and rural areas and policy direction in Asia and Africa

For Asia and Africa, a wide range of studies were conducted involving the research of

the formulation process of South Korea's environmentally-friendly agricultural policy, the study of different agricultural structures amongst the nations of South Asia, the quantitative analysis of productivity in a comparison between agriculture and other sector and a quantitative analysis of agricultural outturns, the analysis of Malaysia's change of direction towards agricultural protection policy planning, and the analysis of the relationship between the actual state of rural finance and the rural structure in Vietnam. Using GIS, study confirmed agricultural trends in Thailand, where resources and environmental conditions put constraints on agricultural policy planning. Another research concluded that in Indonesia, since achieving self-sufficiency, the government has withdrawn its support for rice production, and this has led to a weakening of food supply capacity. There will be further detailed analysis being conducted regarding the

status of South Korea and Vietnam.

With regard to agriculture and agricultural cooperation in developing countries, the proposals that developing countries made in WTO agricultural negotiations were examined, and common problems were determined, confirming a need for Japan to reassess its action for improving the living conditions in Japan. A new direction in agricultural development cooperation, as well as the significance of Japan's participatory approach to agricultural development-originating from its own post-war experience-will be articulated, illustrating the importance of agricultural policy planning in developing countries.

In addition, new studies will be conducted on the expansion of China's rural economy by focusing on the analysis of trends in rural industries, as well as on livestock-breeding and the problem of desertification in Mongolia.