Closing Remarks

Sukeo KAWANABE Director of Pasture Plant Department National Grassland Research Institute

Ladies and Gentlemen, Distinguished Guests and Participants,

At the end of the Symposium on "Pastures in the Tropics and Subtropics," I would like to express my gratitude to all the participants, in particular to those who came from overseas, for contributing so significantly to the success of the symposium.

Grassland farming in most of the Asian countries has been developed only recently along with the steady change in the food habits of the populations of these regions. Although up to now the level of technology and the productivity of grassland farming have remained somewhat low, the importance of this form of agriculture for supplying animal protein has been gradually recognized in the Asian countries, of late and the pace of development is accelerating. Therefore it may be said that the present symposium was particularly timely and significant.

During the symposium, 22 papers were presented, among which there were country reports dealing with the present situation of grassland farming and research in the respective countries. The effort made in developing an appropriate technology suited to the needs of each country was definitely impressive.

Technical papers involved 3 main subjects; effective utilization of local feed resources, contribution of legumes to the increase of pasture production and effective systems of management and utilization of pastures. All of these reports included achievements covering many years of research and technical progress. It was recognized that there is an abundance of herbage resources, agricultural by-products and wastes in the tropical and subtropical countries. Feeding value, methods of utilization and improvement of the quality of these products were reported and discussed, so as to enhance their potential as feedstuffs.

There were fruitful exchanges of information on pasture development, in particular, the reports on the various methods for making the best use of limited areas of land, such as roadsides and rice for herbage production were most interesting. It was also suggested that the use of green herbages present in plantations of cash crops, orchards and forest trees in the humid tropics should be further promoted through the integration of various farming systems including animal husbandry, forestry and crop growing. Emphasis was also placed on the utilization of legumes which supply protein to the animals and are able to fix nitrogen, in particular the tree crop *Leucaena leucocephala*.

In the discussion, the promotion of collaborative research on an interdisciplinary basis involving the participation of experts in grassland, animal husbandry and economics was strongly advocated since grassland farming is a complicated production system linking both plant and animal production.

In this regard, the information and the results of the investigations carried out in each

country which were reported for the last two days should contribute significantly to the promotion of more efficient production systems and utilization of pasture and fodder crops in the respective countries.

I am convinced that this symposium will be the starting point of fruitful exchanges of research information and of collaborative research for pasture development in the tropical and subtropical countries.

Once again, I should like to thank all the participants for their presentations and for their active role in the discussions which took place during the symposium.

Thank you.