

# International Symposium on Animal Research — Present Status and Problems —

Sponsored by  
The Tropical Agriculture Research Center,  
Ministry of Agriculture and Forestry  
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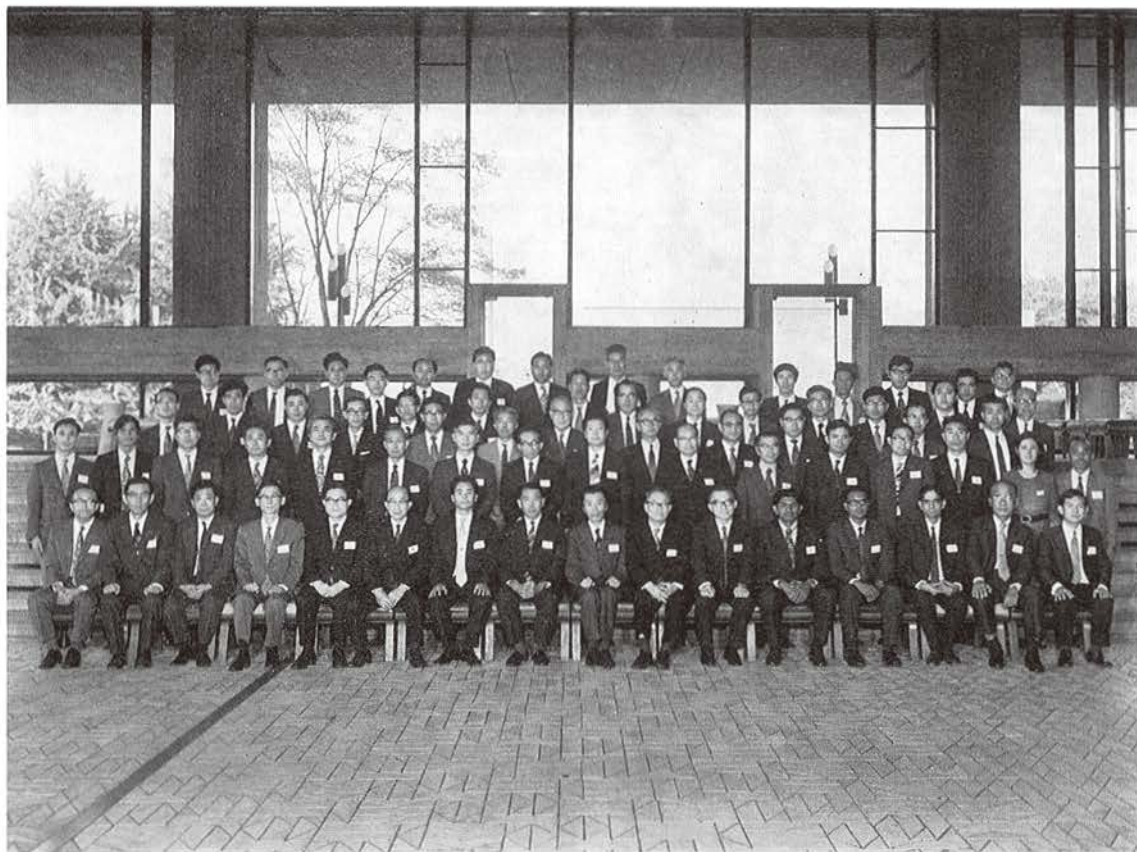
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The Tropical Agriculture Research Center has been sponsoring every year the International Symposium on some specific topics of tropical agriculture since 1967.

In view of the worldwide food shortage, particularly of animal protein, the subject of "Animal Production and Research" was taken

up for the symposium in 1973 so as to fulfill the requirement of animal protein for human health.

Looking upon the past and present status of our international cooperation in the field of animal science except animal health service, almost none of our research has been aimed



and pursued for utilizing the outcome from researches directly to tropical agriculture. We must confess our ignorance of animal production in tropical countries.

To promote animal production in tropical countries, it is urgent and essential to know the present status and problems in the field and to discuss the problems by getting together in a hall.

The symposium was restricted to discuss the present status and problems in animal production in a narrow sense and was intended primarily to figure out adequate research subjects for promoting animal production in tropical regions.

The opportunity of this symposium has, therefore, its real significance as our first step on the premise of extensive and organized international cooperation of animal research among tropical countries and Japan in the near future.

The 7th International Symposium was held in Tokyo during the period of October 23 to 28. The symposium was sponsored by the Tropical Agriculture Research Center (TARC) and it was organized by the committee chaired by Dr. Nobuhiko Onishi, director of the National Institute of Animal Industry, Ministry of Agriculture and Forestry.

The participants of this symposium paid a half day visit to the National Institute of Animal Industry in Chiba on the 26th of October and also visited Kyoto University and a farm raising the famous "Kobe Beef" cattle in the suburbs of Kyoto City on the 27th followed by a half-day sight-seeing tour

of Kyoto on the 28th.

The topics of the symposium and speakers were as follows:

1. Chau Khim (Republic of Khmer)  
Animal Production and Research in Khmer Republic.
2. Yamamoto, K. (Japan)  
Animal Husbandry in Japan.
3. B. K. Soni (India)  
Animal Research in India.
4. Himeno, K. (Japan)  
Present Status of Animal Research in Japan.
5. Kassim bin Ismail (Malaysia)  
Status and Problems of Animal Production and Research in Malaysia.
6. Abe, T. (Japan)  
National Plans for Improvement of Dairy Cattle, Pigs and Poultry in Japan.
7. Nishikawa, Y. (Japan)  
Present State and Future Problems of Research Works on Animal Reproduction in Japan.
8. Masintan Panjaitan (Indonesia)  
Animal Production and Its Problems in Indonesia.
9. Tatsumi, H. (Japan)  
Recent Progress in Environmental Physiology of Domestic Animals in Japan.
10. F. S. Mensalvas (The Philippines)  
The Present Status of Animal Production and Research in the Philippines.
11. Ishimaru, K. (Japan)  
Present Situation and Problems on Environmental Protection and Consolidation in Japan.
12. Siew Teck Wo (Singapore)  
Animal Production in Singapore—Present Status and Trends.
13. S. B. Dhanapala (Sri Lanka)  
Animal Production and Research in Sri Lanka.
14. Kameoka, K. (Japan)  
Present Status of Research in Animal Nutrition in Japan.
15. Tim Bhannasiri (Thailand)  
Animal Production and Research in Thailand.



16. Yoshida, M. (Japan)  
Recent Advances in Research on Feed-stuffs.
17. Bui Van Tro (Republic of Viet Nam)  
Animal Production and Research in the Republic of Viet Nam.
18. Fujimaki, M. (Japan)  
Present Status of Japanese Research on Animal Products.

Although there is an urgent need to strengthen animal production in each country to meet a great demand, modernization of the industry is seriously stagnated by many constraints resulting from the vast divergence in socio-economical and geographical situations together with financial and/or technical reasons.

There are, of course, unique problems entirely for individual countries and each country has to collect its own data to know what are the real potentialities of the animals in the region. Nevertheless, we recognized that there are many problems which are common in different countries in the tropics. Those are highlighted as follows:

### **Exchange of research information, findings and personnel**

All the delegates agreed that the exchange of information, findings and qualified research personnel between Japan and those countries in the tropics is essential and should have high priority in future collaboration. It was also emphasized that such exchanges would reduce unnecessary duplication of the research being carried on in different countries. The way of sending scientists from the TARC was highly appreciated.

### **Training programs of personnel at various levels**

The lack of qualified personnel in animal research was recognized as one of the major constraints for the development of animal production and sciences in all tropical countries. The training programs should be pro-

vided with an international collaboration for all levels including postgraduates, specialists and technicians. Financial supports for the programs are badly needed.

### **Preservation and utilization of genetic resources**

Preservation and utilization of genetic resources or germ plasms of the local animals that have been adapted for years to the tropical environments were particularly warranted by all the delegates. It was evaluated that dairy cattle, buffaloes, sheep and goat in India, buffaloes and ducks in Thailand and Indonesia are high performing under severe environmental conditions in the tropics, and thus germ plasms of these species should be propagated by an appropriate means to improve inferior native animals, either by means of frozen semen or fertilized ova. The germ plasm of these animal should also be preserved from extinction.

There would be some possibility to utilize germ plasms of Japanese Black and Brown breeds of cattle and high-performing Japanese Holstein for grading up tropical breeds to improve either meat quality or milking ability.

### **Need for particular fields of animal research**

It cannot be emphasized enough that there are a great need for research works in environmental physiology relating to heat





tolerance, nutritional studies of ingredients and their by-products to set up an adequate feeding standard for each animal species in the tropics, exploitation of new protein resources for animal feed, and management to reduce low productivity, low fertility and high

mortality.

### **Prevention and control of pollution**

The pollution problem due to animal waste resulting from over-pacing growth of animal enterprises has newly emerged both in Japan and Singapore in which very large scale operations are practiced with pigs and poultry. It was understood that every country in the tropics would face the problem before long and thus should be cautious to prevent pollution before it becomes serious.

It was strongly suggested that Japan should take the leadership in acting along with the line of the above mentioned highlights, since Japan has a large number of qualified research workers coupled with modernized facilities.