

AGRICULTURAL RESEARCH FOR DEVELOPMENT (ARD) – TRILATERAL HUNGARIAN-VIETNAMESE-LAO SAMPLE TO DEVELOP POULTRY BREEDING IN SOUTH-EAST ASIA

Dong Xuan, K.D.T. – Szalay, I.T.

Association of Hungarian Small Animal Breeders for Gene Conservation (MGE)
Isaszegi ut 208., H-2100 Godollo, Hungary
Research Institute for Animal Breeding and Nutrition, Division for Small Animal Research
(ATK-KATKI), Isaszegi ut 200., H-2100 Godollo, Hungary

dothidongxuan@gmail.com; xuan@katki.hu; it.szalay@gmail.com; szalay@katki.hu

Summary

For decades, Hungary had provided aid to many developing countries in the world through different forms of collaboration. Hungarian aid to Vietnam in research for development started in the middle of the 20th Century. Following a short interruption period, Hungary continued collaboration in animal research and production by organizing conferences in Vietnam. Financed by Hungarian Ministry of Foreign Affairs, co-financed by the Canadian International Development Agency (CIDA) and managed by MGE and the specialists of ATK-KATKI, based on the earlier co-operation results with Vietnam, new Hungarian collaboration-aid projects (named in Hungarian NEFE) started in Vietnam and in Laos, in November, 2006. Through these projects Hungary provides a profile of research collaboration for helping Vietnam and Laos in development and poverty reduction in some respect. Formation of the framework of NEFE project network is an important element to determine, what can be expected from this scientific research mission. Regarding the ARD approaches, in our NEFE projects we studied the development of poultry breeding in Vietnam and through that the possibilities to establish a trilateral Hungarian-Vietnamese-Lao network for reducing poverty by developing poultry breeding in South-East Asia. The programme outlined here can be a tool for many rural people to produce high quality products both for own consumption and for market purposes in a sustainable way.

Keywords: ARD, South-East Asia, poultry breeding, Hungary

Introduction

After becoming the member of the EU in 2004, Hungary's activities in providing aid for development to developing countries is in accordance with the European Union strategy. For decades, however, Hungary had provided aid to many developing countries in the world through different forms of collaboration. Hungarian aid to Vietnam in research for development started in the middle of the 20th Century. Since the 1950-ies Hungary had trained a number of specialists for Vietnam in agricultural and many other fields of sciences. After the end of the South-East Asian war (since 1976) both Vietnam and Laos had got high education scholarships from Hungary forming specialists in different professions for their country.

Following a short interruption period, Hungary continued collaboration in animal research and production by organizing conferences in Vietnam with Thu Duc University (1st Vietnamese Hungarian Workshop on Small Animal Research, Sustainable Agricultural Development in Integrated Farming Systems, 1998), with National Institute of Animal

Husbandry (NIAH, Hanoi) (3rd Vietnamese-Hungarian Workshop on Domestic Animal Production and Aquaculture. Quality and Rural Development, 2003) and the Can Tho University (5th Vietnamese-Hungarian International Conference on Animal Production and Aquaculture for Sustainable Farming and Hungarian-Vietnamese MGE NEFE Project Major Conference, 2007). In the meantime, 2 Hungarian-Vietnamese conferences (2nd and 4th) were held in Hungary. This activity was initiated by the Institute for Small Animals Research (KÁTKI, Godollo) with its Hungarian partners: Research institute for Aquaculture, Fisheries and Irrigation (HAKI, Szarvas), and the Association of Hungarian Small Animal Breeders for Gene Conservation (MGE, Godollo) 10 years ago. Since 2006, Research Institute for Animal Breeding and Nutrition (ATK), as the legal successor of KATKI, together with MGE and HAKI has been developing this collaboration within the frames of Agricultural Research for Development (ARD).

Framework and application of ARD for Hungarian-Vietnamese-Lao co-operation

Framework

Financed by Hungarian Ministry of Foreign Affairs, co-financed by the Canadian International Development Agency (CIDA) and managed by MGE and the specialists of ATK-KATKI, based on the earlier co-operation results with Vietnam, new Hungarian collaboration-aid projects (named in Hungarian NEFE: Nemzetközi Fejlesztési Együttműködés – International Development Co-operation) started in Vietnam and in Laos, in November, 2006. Through these projects Hungary provides a profile of research collaboration for helping Vietnam and Laos in development and poverty reduction in some respect. Formation of the framework of NEFE project network is an important element to determine, what can be expected from this scientific research mission. Main viewpoints of our ARD framework are listed below:

- Definition of the ARD objectives was as important as to formulate properly the content of the project. The role of the Agricultural Research for Development (ARD) is to assist in creating optimal conditions that help the agricultural improvement in the developing countries in their effort to develop the countryside.
- The ARD is multi-dimensional. Furthermore ARD operates in different, sometimes changing environments. Therefore, analysis and intervention to develop the agriculture in developing countries cannot be one-dimensional nor is one response valid for all times and every situation.
- The ARD has to provide an analytical approach and need to be holistic. It is not a strategy for selecting interventions in countries; it is done from the local conditions of the partner country. Nor is it an instrument for designing the kind of support to various agricultural sectors, it is done from the specific natural conditions of the partner country.
- For partner country as well as development organisation, analysis of the local conditions is crucial for planning, programming, budget decisions, and for the design of an intervention.
- Causes and expression for agricultural development often differ between ethnic groups and traditions, regions and different geographical-ecological conditions. It is also worth analysing the collaboration conditions in the past and in the present giving the bases for the realisation of the project.
- A sustainable use of the environment is necessary to maintain long term efficiency in research for development. The option is not to fence off natural resources but to ensure

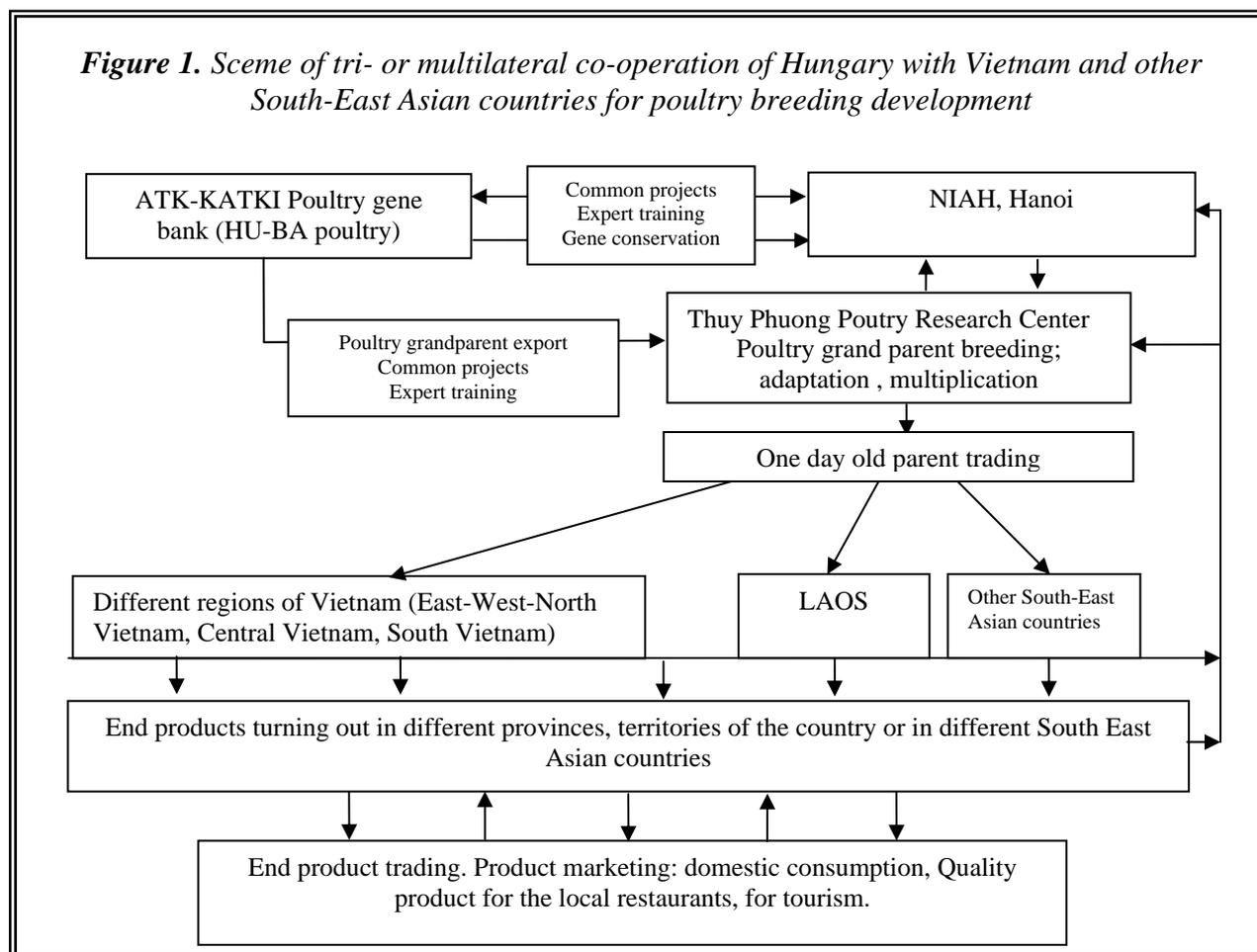
that their sustainable use and management provides a livelihood for both the countryside and the marginal regions.

- Conservation of domestic animal genetic resources (AnGR) has to be elaborated or maintained for a long period. Sustainable way of agriculture needs first of all local breeds. Introduction of exotic breeds may also be needed, but in this case separation has to be ensured and endangerment of local ones has to be excluded, if local and exotic breeds are (or may be) kept together. To purchase the knowledge on the traits of local breeds as well as studies for adaptation of exotic breeds under the climate, ecological and social conditions of the developing country is also indispensable in ARD.

Application of ARD

Regarding the ARD approaches, in our NEFE projects we studied the development of poultry breeding in Vietnam and through that the possibilities to establish a trilateral Hungarian-Vietnamese-Lao network for reducing poverty by developing poultry breeding in South-East Asia. The scheme of tri- or multilateral co-operation of Hungary with Vietnam and other South-East Asian countries for poultry breeding development is shown in *Figure 1*.

Poultry is a tool of poverty reduction for the rural poor to improve their livelihood, income generation and empowerment (*Sarkar et al, 2005*). Poultry breeding plays an irreplaceable role in the traditional family farming of Vietnam as well as of other South-East Asian countries (*Dong Xuan & Szalay, 2003, Tung 2005*).



The bases of the network development

1. Principal bases of the co-operation in the framework of ARD for poultry breeding are sustainability and gene conservation aspects of development. For more detailed study of these phenomena see *Szalay & Dong Xuan (2007)*.
2. Co-operation history, as well as present co-operation of the countries should play an important role in the implementation of the project. Next to the post-war period Hungary built some animal breeding stations for Vietnam institutions, which were completely installed by the Hungarian equipment. Built in the 70-ies, there are the Goat and Rabbit Research Station in Ba Vi, and the Poultry Research Station in Cam Binh, still in full activity. Cam Binh, chosen as the basic station for the HUBA turkey adaptation procedure, provides a great possibility for Hungary to refresh the Hungarian knowledge for Vietnamese specialists formed in Hungary.
3. Hungary possesses a rich scale of old poultry breeds (HUBA poultry, ATK-KATKI Poultry gene bank), which is the first basis of the trilateral co-operation in poultry research for development. These breeds represent old Hungarian, local for the Carpathian basin poultry breeds, which are excellent for high quality, low input production in Hungary. Since the end of the 1990-ies, KATKI and MGE sent to Vietnam (NIAH- Hanoi) several old Hungarian poultry breeds for studying their production and reproductive parameters under tropical conditions. In 2002 KÁTKI exported the first guinea-fowl population to Vietnam for the adaptation study. In spring, 2006 MGE sent the first HUBA turkey breeds and crosses for adaptation experiments to the Thuy Phuong Poultry Research Centre (TP-PRC NIAH). Evaluation of production and reproduction results of the Hungarian poultry breeds provides (or will provide) the second basis for the utilization of HU-BA poultry in South-East Asia (see *Dong Xuan et al., 2007* for detailed evaluation of adaptation experiments of turkey and *Bodi et al., 2007* for HU-BA poultry).
4. Before starting any type of breeding development programme the adaptation study is an indispensable procedure. It would be irresponsible for the donor country to export directly the breeds to a developing country without analysing production traits, reproduction parameters and capacity of surviving of the breeds under different ecological, economical, climatic conditions.
5. For collecting wide and deep arguments to expand poultry breeding development in Vietnam and Laos we analysed the local conditions from the great dense towns to the marginal mountainous regions. The so called poor rural areas of Vietnam and Laos are almost intact in their ecology and extremely rich in natural resources, therefore, ecological aspect have to determine the type of development.
6. Education and training on poultry breeding is also involved in trilateral co-operation. Basic information on breeds and special rearing methodology on old Hungarian poultry is provided by the Hungarian institutions, while – according to the results of adaptation experiments and experiences with the breeds in the tropics – complete technology for south-East Asian production is given by the Vietnamese institution.

Conclusions

ARD is an excellent tool for agricultural development in the developing countries. Hungarian-Vietnamese-Lao co-operation can be based on that framework, if completed with special aspects of local conditions and ecology. Poultry research for development (PRD) is a tool of poverty reduction for the rural poor, if applied for family mixed farms in a sustainable way, including aspects of agro-biodiversity and agro-ecology. Introduction of old Hungarian

poultry breeds into South-East Asia will enhance and strengthen the co-operation of historical background, if this process includes all aspects of gene conservation of local breeds which is vital to maintain sustainability of local agriculture. The programme outlined here surely cannot be applied for mass production of a whole country. Nevertheless, it can be a tool for many rural people to produce high quality products both for own consumption and for market purposes without considerable change of either their lifestyle or agro-environment around them.

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