SUSTAINABILITY AND GENE CONSERVATION AS GUIDING PRINCIPLES OF THE HUNGARIAN-VIETNAMESE POULTRY RESEARCH FOR DEVELOPMENT

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Main Steps of Recent Hungarian-Vietnamese Poultry Research for Development

1999 - 2000
Adaptation studies of Hungarian chicken: Export of Yellow Hungarian and Godollo New Hampshire chicken to Vietnam

2002
Adaptation studies of Hungarian Duck and Guinea fowl

2006
Adaptation studies of Hungarian Turkey

2006 - 2007
MGE-NEFE (ODA) project on turkey breeding in Vietnam
(Supported by the Hungarian Ministry of Foreign Affairs and CIDA, Canada)

2007
NEFE (ODA) Micro-project: start of Hungarian-Vietnamese-Lao co-operation on poultry breeding (Supported by the Hungarian Embassy in Vietnam)

5 Conferences
Guiding principles of co-operations:

Sustainability

and

Gene conservation
Sustainability

Meeting the needs of the present without compromising the ability of future generations to meet their own needs.
Ecological and agricultural sustainability

Configuration of civilization and human activity so that society, its members and its economies are able to meet their needs and express their greatest potential in the present, while preserving biodiversity and natural ecosystems, and planning and acting for the ability to maintain these ideals in a very long term.

Preservation of agro-biodiversity and agro-ecosystems is the basis of sustainable agriculture.
The Need for Conservation of Local Breeds

Evolution and formation of the local breeds is the result of natural adaptation process of animals to the local natural and human environment, which is the basis of their sustainable use in present agricultural practices.

Breeds, selected for production in artificial environment, cannot be used efficiently in sustainable way.

The main value of local breeds is their local, sustainable use, which is clearly represented by family mixed farming in South-East Asia.
Comparison of relative productivity of local, indigenous breeds and intensive breeds (hybrids), affected by low, medium or high environmental stress (after Steinfeld et al., 1997)
Figure 2. Relative frequency of breeds being or not in danger of domestic animal breeds with known population size, by world regions (Source: FAO, 2000) (Total number=100%)
Concept of Hungarian Poultry in Vietnam

Sustainability and gene conservation

1. Local breeds and their position in agricultural traditions and present practice and the possible effect of introduction of exotic breeds on them must be under serious and permanent control.

2. Choosing the proper exotic breed should mean, that the breed is adaptable to that climate, rearing and feeding conditions in family farming of poor regions (sustainable production). For this, adaptation studies are necessary.

3. Isolation of exotic breeds from the local ones (physical or biological isolation) have to be well organized.
Concept of Hungarian Poultry in Vietnam

Sustainability of production and marketing

1. Introduced exotic breeds have to be market oriented, meeting the farmers’ and consumers’ expectations of productivity and quality of products.

2. Introduced exotic breeds should add something special to the local market.
Hungarian Turkey in Vietnam
from Godollo Poultry Gene Bank
Hungarian Landrace Guinea-fowl varieties in Vietnam

from Godollo Poultry Gene Bank
Hungarian Goose varieties proposed for Vietnam
from Godollo Poultry Gene Bank
Marketing, quality control

Elaboration of *Hungarikum* (special Hungarian) poultry products and their quality control.

Development of breeding and reproduction methodologies for old Hungarian poultry breeds.
Future prospects for development

1. Saving agro-biodiversity and variability of any kind?
2. Organic (ecological) agriculture, production control?
3. Ecological type family mixed farming?
4. High quality, healthy food??

Let’s try to delete question marks!

In this process, local poultry breeds, together with the properly chosen exotic (including Hungarian) ones, should play an important role as genetic bases for sustainable agricultural production in South-East Asia, even in the near future.
If guinea-fowl and turkey were able to choose ...