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**A CONCEPTUAL FRAMEWORK FOR USING POULTRY  
AS A TOOL IN POVERTY ALLEVIATION  
Revised version<sup>1</sup>**

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<http://www.fao.org/ag/aga/e-conf/poultry/default.htm>

**Abbreviations**

AsDB Asian Development Bank

DAC Development Assistance Committee

Danida Danish International Development Assistance

EU European Union

HYV High Yielding Variety

IDPM Institute for Development Policy and Management

IFAD International Fund for Agricultural Development

IMF International Monetary Fund

NGO Non-Government Organisation

OECD Organisation for Economic Co-operation and Development

PRA Participatory Rapid Assessment

## **ABSTRACT**

Stimulated by work pioneered in Bangladesh, the paper outlines a conceptual framework for using poultry as a tool in poverty alleviation. There is now evidence from several countries that small poultry enterprises with adequate institutional support targeting the poorest rural women and their families can help them take the first step out of poverty. However, for the concept to work as a poverty breaking tool (i) the beneficiaries must come from the poorest segments of the village, (ii) the cost of producing an egg must be lower than in the commercial sector, (iii) an enabling environment must be established to keep a small flock of hens, inter alia, access in the village to feed, vaccine, vaccinations services, micro-finance, marketing and other inputs and services, and (iv) the enabling environment must contain institutional and political space to provide the people involved the possibilities and opportunities to take the next step out of poverty.

In conclusion it is noted that for this concept to remain an important tool in the fight against poverty, it is necessary to have a reliable tool to document the achieved results and have an institutional and political environment in which sharing of information is encouraged. One of the next steps in replication of the concept will be to institutionalise a paradigm, which encourages processes in which experiences are accumulated and disseminated. The involved staff must learn from mistakes and successes and build up a framework that facilitates training, education, and research.

**Key words: poultry, poverty, framework, tool, paradigm, gender, empowerment.**

## **1. INTRODUCTION**

The title of this paper refers to a smallholder poultry development concept that implies small poultry enterprises targeting the rural poorest, who can take the first step out of poverty by using the concept. The concept is based on well-defined principles that can be used to develop a specific model within a particular area and these principles constitute the framework of the concept.

The smallholder poultry development concept has been developed in a unique learning process in Bangladesh over a period of more than two decades. It is seldom that a development concept, in its basics, is maintained over such a long period and that lessons learned in one project are incorporated in the succeeding project, especially when different donors are involved. It is also unique that the same stakeholders, and to a great extent the same persons, have been involved from the very formation of the concept till its present stages.

The Bangladesh smallholder poultry model has been analysed and described in several publications (Jensen, 1996, 2000 and Jensen and Dolberg (2002); Saleque and Mustafa, 1997; Saleque, 2000, 2002; Fattah, 2000; Ahmed, 2000, 2002; Dolberg, 2001, Dolberg et al 2002) and Sonaiya et al (2002). Furthermore, impact surveys have been conducted (Alam 1997 and Nielsen 2000) and a number of subject specific research papers have been produced such as on breeding (Amber (personal communication) and Rahman et al., 1997, Jensen 2000) and socio-economic aspects (Nielsen, 1997 and Nielsen, 2001).

The smallholder poultry concept is in a process of being institutionalised through networks.

The first network that was created was the International Network for Family Poultry Development supported by FAO (Sonaiya, 2000). With a limited budget, this network has contributed to information exchange with a focus mainly on African conditions. Later, the Network for Smallholder Poultry Development ([www.poultry.kvl.dk](http://www.poultry.kvl.dk)) was established in Denmark. With financial support from Danida, this network has been able to address a number of issues related to project implementation support, education and institution building, and coordination of research. The network is committed to, among other things, support promotion and development of poultry projects in relation to Danida agricultural sector programmes. It may also be mentioned that the idea of setting up a regional training centre in Bangladesh has been launched and that an increasing number of research institutes take an interest in smallholder rural poultry keeping. One example is the Sokoine University of Agriculture in Tanzania, which over the years has developed considerable capacity on smallholder poultry research.

The smallholder poultry development concept is in the process of being adapted in a number of countries such as Burkina Faso, Benin, Ghana, Eritrea, Malawi, Tanzania, Zimbabwe, Kenya, Senegal, Vietnam, Cambodia, Indonesia, and Nicaragua with donor support from Danida, EU, AsDB, IFAD, and the World Bank. In Malawi the adjustment has been through a successful pilot phase and is now in a stage of wider dissemination.

## 2. ESSENTIALS

The smallholder poultry concept is currently being tailored to prevailing conditions in other countries than Bangladesh. In this process, it is important to have a clear understanding of the basic elements of the concept or the essentials, which are prerequisites for a successful adaptation. The seven most important essentials are:

1. The *beneficiaries*, the target group, must be the *poorest* segment of the village population and in particular women;
2. *Empowerment* through participation, group dynamics, training and opportunities to establish small income generating activities;
3. The *comparative advantages* of village poultry keeping must be sufficient to reduce the cost per egg produced to be less than that in commercial egg production;
4. The concept must comprise an *enabling environment*, i.e. all input supplies including micro-credit and services shall be timely available in the village;
5. The concept encompasses only the poultry component as *the first step out of poverty*, but the possibilities and the opportunities for the beneficiaries to take the next step must be built into the enabling environment;
6. *Visions* to disseminate the concept countrywide and establish the required institutional capacity;
7. Quickest possible attainment of *institutional self-sufficiency* that is consistent with the overriding goal of poverty alleviation.

The rationales behind these essentials are:

**Targeting poor women.** A daily income of the value of one egg can have a substantial influence on a very poor family's livelihood while the impact on a better off family will be minimal. Furthermore, experience shows that the entire family benefits more from an income belonging to a woman than an income belonging to a man (Sen, 1999).

**Empowerment.** The poorest segment of the village is often invisible and do not participate in the community's activities. Furthermore, they are afraid of taking loans due to the involved risks. They have to go through an empowerment programme before they can comprehend the consequences of taking a loan and invest in income generating activities.

**Competition with the commercial sector.** The smallholders cannot compete with the commercial sector on productivity, i.e. egg yield per hen, because the same management skills and the same production facilities are not available in the village. They can only compete on the input costs by taking advantage of the feed available free of cost in the surroundings; the scavenging feed resource base and other comparative advantages.

**Enabling environment.** The smallholders are shifting from a *no input/low output* system to a *small input/higher output* system. The latter implies a risk both on input cost and on investment. In order to minimise these risks it is important that inputs such as feed, improved quality of chickens, vaccine, medicine and services such as veterinary services, extension services and access to micro-credit are available within the village, when required.

**Movement out of poverty.** The poultry activity is to be considered as a learning process for the beneficiaries, but it has to be realised that one activity alone is not sufficient to lift a family out of poverty (Todd, 1999 and Dolberg, 2001). The opportunities (the enabling environment) must be available and make it possible for the beneficiaries to establish a small poultry enterprise, to minimise the risks and to take the next step out of poverty by taking a new loan to another income generating activity.

**Vision.** The components of the concept are simple, but the adaptation process, establishment of an implementing organisation and maintaining the enabling environment are complicated and costly. To commence this process can only be justified if the vision is to develop a model for a specific country and subsequently develop the institutional capacity for countrywide dissemination.

**Sustainability - no subsidy at beneficiary level.** The poorest women and their families in the villages with financial services and support to establish and maintain small income generating activities require a large amount of funds. The only realistic sources are donor funds, but these will only be available for a limited period to a specific project. Consequently, the concept must be based on donor support to establish the institutional capacity in a specific area to reach sufficient numbers of beneficiaries, and after that, the beneficiaries' contribution shall be sufficient to cover the institutional operation cost. In this respect, it is important that from the very beginning no subsidies are involved at beneficiary level.

### 3. VISIONS AND OPPORTUNITIES

More than a billion people live in extreme poverty (on less than US\$ 1 a day) and the

pressing question is how can development assistance be used most effectively to reduce global poverty?

The Development Assistance Committee (DAC) of OECD is the principle strategy setting institution of the major bilateral donors. Some strategies are outlined in DAC's publication *Shaping the 21<sup>st</sup> century: The role of Development Cooperation* (World Bank, 1998, pp. 9-14). Some of the goals set forth by the donor community are:

- ?? Reducing by half the proportions of people living in extreme poverty by 2015;
- ?? Making progress toward equality of the sexes and the empowerment of women by eliminating disparities in primary and secondary education by 2005;
- ?? Implementing national strategies for sustainable development in all countries by 2005 to ensure losses of environmental resources are reversed both nationally and globally by 2015.

These goals point to a different role for aid, which is more about supporting good institutions and policies than providing capital. Money is important, of course, but effective aid should bring a package of finance and ideas - and one of the keys is finding the right combination of the two to address different situations and problems. (World Bank, 1998, p. 13)

Eradication of poverty has priority on the development agenda and it is realised that money alone is not enough; new ideas and new concepts have to be developed and implemented. To reach the target set by DAC approximately 50 million people must every year be lifted above the poverty line from now till 2015. Furthermore, institutional development, with emphasis on health (WHO, 2001) and education (Sen, 1999) needs to be improved.

The smallholder poultry concept developed in Bangladesh is one of the tools that have proven to be effective in reducing poverty in rural areas. Most notably, poultry production has proven to be a unique entry point for the poorest segment of the village population to reverse the poverty spiral.

The strategy is to develop a model by running a pilot programme in a given area, but with a vision to apply it countrywide. It is therefore important from the very beginning to have a conception of the end-of-project-situation and to incorporate the idea in the poverty reduction strategy paper. Focus should be on creating an enabling environment, selection of potential beneficiaries and formation of community groups, empowerment and on capacity building.

### **3.1 Enabling environment**

An enabling environment means access to credit and to all inputs and services required to minimise the risks in investment in income generating activities. It means that things needed are available in time within the local environment from the perspective of those that need them. Before the introduction of structural adjustments, state or heavily subsidized cooperative marketing boards were significant components of such an enabling environment in most developing countries or government departments were deeply involved in providing these services. At the present time the emphasis in development is on democracy and human rights with the associated organisational freedom and space for civil society. Such freedom

and space will permit the establishment of organisations - NGOs - that cater to the needs of the poor as it is seen in Bangladesh.

The main elements in the enabling environment for the smallholder poultry model are to allow for the establishment of institutions that work to ensure:

1. access to poultry production and health services;
2. access to feed;
3. access to improved hens;
4. access to credit;
5. access to marketing facilities.

Marketing is normally not a problem for the poorer segment of the village population; on the contrary, *the problem is that the poor do not have a marketing problem* - they have nothing to sell. However, if the production of eggs and chickens is to exceed the demand within the village, then marketing will be one of the activities constituting an enabling environment.

Establishing an enabling environment must be an integral part of a project. However, when established, the operating and maintaining of the activities constituting the enabling environment must be a pure business operation with full cost recovery.

### **3.2 Community groups**

Experiences show that the poor are creditworthy, can manage a loan and make rational investments if they get the opportunity and if they can comprehend the consequences. However, experiences also show that it is a difficult process to reach a level where the poor can comprehend the consequences and are willing to take the risk to invest in an income generating activity. It is always a risk to take a loan.

Establishment of community groups, composed of people of socially equal status, seems to be a valuable tool in empowering the poor. In the group they support each other, they become aware of their own strengths and rights, and they are informed about their possibilities to work themselves and their families out of poverty.

The process of establishing community groups and facilitating group support is not easy; it is time consuming and requires commitments. However, the empowerment process, which the group experiences, is an important element in teaching the group to make full use of the enabling environment and reverse the poverty spiral.

A village group, composed of members of socially equal status, is an excellent entity to disseminate improved technology, a cost-effective entity to disseminate extension messages, and a secure entity for disbursement of loans.

### **3.3 Capacity building**

In the early phase, it is important to have a vision of the end-of-project situation and to see the project in a bird's eye perspective with one eye, while at the same time with the other eye try to apply the perspective of the poor at the grassroots level.

All stakeholders must be involved in the pilot phase and the implementation set-up must be a mirror of the organisation to be responsible for the wider application of the concept.

Human resource development is often the most important activity in the pilot phase as well as in the dissemination phase.

Bangladesh is fortunate in having NGOs with capabilities to implement poverty alleviation programmes on a large scale. In most other countries, such capacity building needs to be a component in the programme. In this respect, it is important from the very beginning to have a strategy for transformation of the implementing organisation into a sustainable organisation, which is independent of donor support, and to have a strategy for human resource development and for other support that may be required.

### **3.4 Opportunities**

The main opportunity is development of an effective tool for poverty alleviation. In Bangladesh 200,000 new households are included in the poultry work every year for a donor support of less than 100 US\$ per household, not given to the beneficiaries but used for capacity building and human resource development. Impact surveys show that just two years after the programme is implemented, the number of beneficiaries living below the poverty line is reduced from more than 80% to below 50%. While these figures suggest that the approach described in this paper may be a helpful tool, it is clear that it cannot stand alone. A government's macro-economic policies need to be pro-poor in order for people to stay out of poverty. Thus, studies in Bangladesh (Rahman and Hossain, 1995) show that there is considerable movement of households *in and out* of poverty and this two-way movement resulted in a relatively small decline in the overall poverty with the proportion of extreme poor declining from 31 to 23% and the moderate poor stagnating around 29%. Likewise, an intervention with poultry as described in this paper will not protect poor people in Bangladesh against the natural disasters that hit the country from time to time, but it can help them build up their asset base, which in times of catastrophe is an important tool in the households' coping strategies (del Ninno et al., 2001).

However, to return to the main theme of the paper, other groups than the direct target group can benefit from the programme:

1. the enabling environment gives all the villagers access to poultry farm input supplies and services;
2. the concept pave the way for disbursement of micro-credit in a cost-effective way;
3. the village groups will facilitate easier formation of associations through formalised village livestock groups;
4. the concept helps people acquire the skills that are required for a business set-up to distribute input supplies to the villages;
5. the concept can form the basis for a marketing organisation for farm products;
6. the established beneficiary groups can be used by other NGOs, having the same target groups, to implement other activities, such as informal education for drop-out children from primary schools, extension activities, family planning, HIV/Aids prevention, etc.

In short, the initiatives will add to the social capital of the people (Dowla, 2001 and Karlan, 2002).



### 3.5 Closing remarks

The OECD and some politicians in donor and recipient countries have a vision and a strategy for poverty reduction. However, the development community, i.e. the technicians, professionals, researchers, and development workers must also have a vision to develop sustainable concepts ready for countrywide replication. The smallholder poultry development concept is a unique, but unfortunately rare example of such a concept, but it will need to be adjusted continuously on the basis of new experiences to develop a replicable model.

## 4. CORE PRINCIPLES

In September 1999, the World Bank Group and IMF decided that nationally owned participatory poverty reduction strategies should provide the basis for all their concession lending and debt relief, which has led to the development of poverty reduction strategy papers ([www.worldbank.org/poverty/strategies](http://www.worldbank.org/poverty/strategies)). These papers cover six core principles underlying the development and implementation of poverty reduction strategies. The strategies should be:

- ?? **country-driven**, involving broad based participation by civil society and the private sector in all operational steps;
- ?? **result-oriented**, and focused on outcomes that will benefit the poor;
- ?? **comprehensive** in recognising the multidimensional nature of poverty, but also
- ?? **prioritise** so that the implementation is feasible, in both fiscal and institutional terms;
- ?? **partnership-oriented**, involving coordinated participation of development partners (bilateral, multilateral, and non-governmental);
- ?? based on a **long-term perspective** for poverty reduction.

Nicolas Stern (2002), Senior Vice President and Chief Economist of the World Bank builds the strategy for 'pro-poor growth' on two pillars:

1. Creation of a good investment climate; and
2. Empowerment and invest in poor people.

The first of those pillars is encompassed in essentials (see chapter 2) three; four and five and the second pillar is encompassed in essentials one and two.

The poultry smallholder concept is tailored to these core principles. Also, the seven essentials defined in the beginning of the paper are in full accordance with these principles.

## 5. ADAPTATION AND REPLICATION

Practical experiences with adaptation and replication of the smallholder poultry concept are rare. However, lessons from the first phases of the process are available and some generalisations are possible. The critical point is still how to operationalise an adapted model, and how it can be replicated for wider dissemination. Malawi is in the middle of this process, but it will take some years before the model is institutionalised. This chapter will be more about the adaptation process and less about the replication process (Jere, 2001). The following steps are an essential part of the adaptation process:

1. awareness;
2. development of a specific model through field trials;
3. full scale test, pilot programme;
4. modality development.

Experiences have shown that it is essential to have a facilitator with in-depth expertise in the philosophy of the smallholder concept to guide the adaptation process; otherwise the process may easily be trapped in some of the constraints mentioned below.

## **5.1 Awareness**

Awareness is a key word in adaptation of the concept. Prejudice with respect to the capability of the target group is a common attitude among stakeholders and that goes from people high up in government to the village community. An awareness programme must therefore target all potential stakeholders, from the government level to the village community. The awareness process goes through a number of stages:

1. selection of a core group of staff to be responsible for the awareness programme;
2. deployment of a facilitator;
3. exposure to the Bangladesh model (visit to Bangladesh);
4. PRA analysis in a selected pilot area;
5. discussions and workshops;
6. selection of a task force to be responsible for implementation of a pilot project.

## **5.2 Constraints**

Constraints, which have to be addressed and that are related to the first step in the adaptation process, are:

### **5.2.1 Objectives**

It may be a wrong strategy to call the concept a smallholder *poultry* model because it is a general misunderstanding to relate the objectives of the concept to poultry production, e.g. egg production instead of *relating the objectives to poverty alleviation*. This was also the case in Malawi and the approach to formulate a Malawi model focused at the beginning mainly on disciplines related to poultry production and less on the socio-economic parameters.

The objective of applying the concept is poverty alleviation; poultry is only an instrument in the process of reversing the poverty spiral. It is important that this objective is clear and understood by the stakeholders at the outset in order to prioritise the socio-economic disciplines in the project formulation.

### **5.2.2 Target group**

It is surprising so many organisations and individuals that have a policy to target the poorest, but either on purpose or in reality exclude the poorest segment of the population from their activities. Common phrases are: the poorest do not have the capability to learn, the poorest are lazy, the poorest have chosen to live in poverty, or it is better to start with the better off

and then the poor will benefit through a trickle-down effect - an approach, which has been rejected long ago.

The truth is that it is troublesome to have the poorest as the target group. It demands a lot of work and commitment and the project staff do not have the experience to work with the poor. However, the example from Bangladesh clearly shows that the poorest both have the capability and the willingness to work their way out of the poverty if they get the opportunity.

In Malawi, the project has been through the same obstacles. The donor-supported projects, which were assumed to support the smallholder poultry concept, had in fact on purpose excluded the poorest segment. The local decision makers were reluctant to target exclusively the very poor and the same reluctance was observed in the village communities. The turning point was a very committed project staff that understood the objective of the Bangladesh concept and was willing to try to involve the poorest of the village population in the programme. They worked hard and committed in order to reach the poorest in the village.

The results from two full-scale test villages have been promising. In one of the villages there was only one family out of 55 potential families that did not contribute with savings and participation in group activities. In the other village, there were only three families out of 35 that did not want to participate or contribute.

### **5.2.3 *Easiness***

At first sight, the smallholder poultry concept is a very simple concept and an obvious entry tool for poverty alleviation programmes. It seems to be a common mistake, however, to think that it is easy to adapt the concept to different conditions. It is not just a simple matter of establishing a production system with, for instance a chicken rearer and a number of smallholder key rearers and organise a vaccination programme. Socio-economic parameters are often an overseen element and repeatedly it is completely neglected that the target groups are the poorest segment of the village populations. Another critical end neglected aspect is sustainability; the enabling environment must be maintained on pure business conditions. That is of utmost importance.

Even though the components constituting the concept may all be simple, it must be realised that the *interaction* between the components is a complicated matter. Furthermore, the target group is one of the essentials of the concept and to approach this group is far from being a simple matter.

### **5.2.4 *Institutional capability***

The capability or availability of institutions/organisations to develop and implement it countrywide in a specific country may be the most serious constraint. Very few institutions have in reality experiences and skills to target the poorest segment of the village population. Furthermore, it requires a high degree of effectiveness of the implementing institutions to establish and to maintain the enabling environment at village level in a sustainable way.

### **5.2.5 *Cultural, social, demographical, and infrastructural environment***

A common objection with regard to replication of the Bangladesh concept is the differences in the cultural and the social environment between two countries. That is of course a relevant objection and differences do exist. The fundamental question is, do the poor basically behave the same way, independent of cultural and social differences?

Preliminary observations indicate that the majority of the poorest wants to and is able to work themselves out of poverty if they get the opportunity. This behaviour seems to be independent of cultural differences and this observation is also supported by experiences from replication of the Grameen Bank concept. Amartya Sen, in his book *Development as Freedom* (1999) describes similarities in the behaviour of the very poor in his capability approach to poverty alleviation.

This does not imply that cultural differences are of minor importance, but only that target group response when exposed to the concept is very similar. The approach to organise and implement the concept has to be adapted to the prevailing conditions in a specific country and that is a complicated process.

### **5.3 Village model development**

In general, there is very limited knowledge about rural poultry production among villagers and extension staff, and it is important that facilitators in a model development are aware of that. Another important aspect is that the actors must have been exposed, in one way or another, to the Bangladesh model as it is today. It is of equal importance that the facilitator is aware of the complexity in the Bangladesh model and that the model has been developed over two decades. In short, simplicity is a key word in the first stage of formulation of the first prototype. Even though the first phase in the development of a village model has focus on the technical aspects, it is important that all involved in this process are aware of the essentials of the concept and are true to the idea behind these essentials. The model development can be divided into three steps:

1. draft model formulation;
2. field test;
3. model adjustment.

The draft model should be kept as simple as possible and with focus on the smallholder (key rearer). In fact it can be so simple that the model is composed of only the smallholder, based on local hens, and the supply and service activities. In Malawi, the model is composed of smallholders with 5 HYV (high yielding variety) hens and three local hens, breeders with 10 HYV parent hens, feed sellers and vaccinators as one enterprise, and egg sellers.

The field test must focus on simple technical aspects, but encompass protection, vaccination and supplementation. The basket system (chickens kept under a basket the first weeks of life) has proven to give a good protection, but the techniques have to be learned. Vaccination is an essential part of the field test, and the test will often reveal that vaccination against Newcastle disease is not enough to protect the chickens against epidemic diseases. Supplementation of feed is also an essential element, but it is important to optimise the use of the scavenging feed resource base.

The first field test may need some adjustment both regarding the components and regarding

the technical aspects. In Malawi, it was necessary to conduct a new field test before the full-scale test was carried out.

### **5.3.1 Full-scale village test**

Design of a full-scale test depends on the actual institutional structure of the involved agencies such as government, NGOs, and micro-credit providers. It also depends on the capability of the involved institutions. There are four important elements in the design of a test:

1. the villagers must experience the test as if an ideal institutional set up is in place and no subsidies shall be given to the beneficiaries;
2. all test activities at village level must mirror an end-of-project situation;
3. all potential stakeholders must actively participate both in design and in implementation of the test;
4. a strategy for all activities must be set up to simulate an end-of-project situation.

It shall be stressed that the villages selected for the full-scale test must be different from those selected for the field test. The villagers in the latter are 'spoiled' by free goods and will expect the same in the next test.

## **5.4 Modalities**

The strategy is of course that a programme for wider dissemination of the model must succeed the full-scale test. It is also obvious that such a programme requires donor support and involvement of a number of stakeholders, government, NGOs, private sector, village authorities and the beneficiaries themselves. The modalities for the next phase are essential elements in the full-scale test and the modalities must include:

1. specification of stakeholder responsibilities;
2. specification of activities, especially those involving donor or government support;
3. cost estimate of each activity;
4. supervision and monitor system including indicators.

The objectives are to develop an implementing organisation involving the government, NGOs, private sector and support institutions and organisations, and to develop a strategy for countrywide dissemination of the model.

## **6. PARADIGM**

A paradigm in this context means: 1) a framework concept comprising a set of mutually supporting activities, 2) a set of values expressing or clarifying the impact of the framework activities on poverty alleviation, and 3) methods to continuously improve and disseminate the concept and knowledge related hereto (Jensen, 2000). This paradigm is in many ways inspired from Thomas Kuhn's *The Structure of Scientific Revolutions* (1970).

It is important to be aware of the circular aspect of the approach in the paradigm and not, as is often applied, the linear approach. This means that impact has to be measured against socio-economic parameters related to poverty and not against production parameters related to

poultry.

Accessibility to information and experiences is troublesome with a very limited number of textbooks, databases, journals, or other media in which results and findings are published, and no training institutions directly targeting the concept. However, there has in this respect been progress in the past five years. The World-Wide Web has been an important media for dissemination, institutional networks have been established, and curriculum has been developed and applied in all levels of education and training.

The challenge is to continue and to refine this process. Poverty alleviation is complicated and especially in the case where the target group is the poorest segment of the village population. It is also naive to believe that it can be done without a substantial donor support. However, knowledge and cooperation is of equal importance.

The smallholder poultry concept is an important tool in the fight against poverty, but the objectives can only be accomplished if we have an effective instrument to share information and a reliable tool to document the replication ability and achieved results. One of the next steps will be to institutionalise a paradigm in which experiences are accumulated and disseminated, a paradigm which is adjusted according to mistakes and successes, and a paradigm which has a framework that facilitates training, education, and research.

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