

SMALLHOLDER POULTRY MODEL

FOR

RURAL DEVELOPMENT

Case from Bangladesh

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INTRODUCTION

The terminology semi-scavenging is used for small poultry flocks under partly controlled management condition and where the scavenge feed account for a substantial part of the total feed consumed. A Semi-Scavenging Poultry Model is an integrated system to provide supplies and services to establish and to maintain a semi-scavenging poultry sector.

Scavenging poultry account for far the largest number of livestock in the developing countries. Scavenging hens are, however, more or less neglected as an income generating potential by institutions as well as by the poultry holders themselves. The main activities to improve scavenging poultry holdings have been introduction of cockerel exchange programs and vaccination campaigns. However, the effect has been rather small because these projects have not been components in a comprehensive production and management system for poultry production.

In Bangladesh a successful model for semi-scavenging poultry holding has been developed. In 1997 a total of 1.2 million semi-scavenging smallholders were established within this model and the number is increasing with 200,000 per year.

THE BANGLADESH MODEL

The Model is a three pronged organization where each prong has its specialized functions. The institutional structure behind the Model is the Government through the Department of Livestock Services, DLS and NGO's, mainly Bangladesh Rural Advancement Committee, BRAC.

INTEGRATED SEMI-SCAVENGING PRODUCTION MODEL		
Production	Supply/sale	Service
Breeders	Parent Stock	Village group
Hatcheries	Feed	Training
Chicken Rearers	Vaccine/medicine	Credit/savings
Smallholders	Marketing	Extension

Production line

Breeders. Small low cost parent farms with 25 parent hens per farm. The hens are kept in confinement and fed with balanced feed. The Parent Stock are of improved breed such as White Leghorn, Rhode Island Red and Fayouimi and the male and female are of different breed.

Mini Hatcheries. Small low cost hatcheries operated with close to 100 % solar energy. Black pillows filled with rice husk is heated in the sun and the eggs are placed into a cylinder between 2 pillows for hatching. Each hatchery has a capacity to hatch 1,000 chickens per month.

Chicken Rearers. Small rearing farms, each with a capacity of 200- 300 chickens. The chickens are reared in a low cost house from day old to 8 weeks of age. The chickens are fed with balanced feed supplied by the local feed seller.

Smallholders. Small farms with only 10 hens, mainly improved breeds supplied by the Chicken Rearers and a few Desi hens(local breed). The hens are kept under semi-scavenging conditions and fed with 30 -70 % supplemented feed and scavenge for the remaining part.

Supply line

Parent stock. The parent stock are supplied by DLS to market price for day old chickens. The breeds are mainly Fayoumi, White Leghorn and Rode Island Red. Private breeders could as well supply the parent stock.

Feed. The feed is supplied by a number of small feedsellers located in the villages. The sellers purchase local by-products from the milling industry and mix it with fishmeal, vitamins and mineral. A feed seller sells about 1 ton of feed per month.

Vaccine/medicine. A number of Poultry Workers are trained to vaccinate the birds. The Government supplies the vaccine and the Poultry Workers charge a vaccination fee.

Marketing. The eggs are collected by Egg Collectors and marketed in the nearby towns or the poultry holders sell the eggs and chickens themselves in the village.

Service line.

Group formation. The involved NGO forms small village groups with some 30 members. The groups hold weekly meetings to discuss relevant subjects and new poultry holders are selected from the groups.

Training. Before a poultry holder is established she has been through a 4 days training programme followed by refreshment courses.

Credit. Depending on the activities each member is provided with a small loan ranging from USD 25 to USD 200. The repayment period is 1 year.

Extension. Extension services are provided as a cooperation between the Government and the involved NGO.

Modification: The 12 model components are all of equal important. However, several of the components can be compiled in a cooperative or a commercial operation and thereby be adapted to other conditions than prevailing in Bangladesh.

SMALLHOLDER

Smallholders, with about 10 hens, constitute 95 % of the units in the integrated model. The sustainability of the model relay therefore fully on the viability of the smallholders.

A smallholder is a rather complex operation and, even small in size, it comprise several activities such as: production of table eggs for sale, brooding chickens by use of Desi hens, rearing of pullets for sale, and rearing of cockerels. This complexity of activities does it possible for the individual smallholder to adapt her operation to the prevailing market condition and demand.

TARGET GROUP AND IMPACT

The main target group is poor, landless and destitute women, many of whom are head of households and illiterate. About 10 % of the households in the project area is directly involved in the programme.

Profile of a household before and after 2 years in the programme			
	Before	After	Difference
Weekly income, Taka	269	430	161
Under poverty line, %	80	52	28
Number of chickens	6	16	10
Number of cattle	0.2	0.6	0.4
Children in school, %	86	99	13
Milk consumption, l/month	0.8	2.6	1.8

Average figures from 1,000 interviews

Socio-economic aspects.

To be involved in the process of establishing and operating a small flock of poultry is very educative. The women learn the value of proper finance- business- and production management. Very often, therefore, the participating women, after having been in the poultry programme for a year or two, starts other economic activities in addition to the poultry business. The response to proper management is very quick in poultry rearing and the road is very short between training and experienced practical impact of new technologies and therefore very educative.

A small flock of 10 hens can, in many areas, provide the same income as a woman day labour,

which means that the woman can stay at home and take care of the children and other family activities without affecting the family income.

Awareness

Scavenging poultry account for by far the largest number of livestock in developing countries, but is more or less neglected as an income generating activity by institution and by the poultryholder themselves.

Awareness goes for institutional staff as well as for the smallholder. The smallholder themselves shall change their views of poultry keeping from "just something there is around" and which can be useful for festive occasions and when there happen to be surplus for consumption to recognizing poultry as an economic resource with a substantial income generating potential. The *development community* shall be aware of this potential and in particular the scope for using poultry programme as a poverty-breaker for the poorest sections of the rural population. Poultry programmes can, therefore, effectively be used, as model cases on technology development and transfer for the group of rural people not easily reached through *traditional* agricultural development programmes.