

Resilience, Rights and Resources: Two years of recovery In coastal zone Aceh



Ducks as small-scale investment for women

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Small-scale livestock options in rebuilding livelihood

In the West coast of Aceh, the Aceh Rehabilitation and Reconstruction Agency has made significant progress in rebuilding the infrastructure of the area devastated by the tsunami almost 2 years ago. New houses have been rebuilt for most of the survivors to return to as their homes. In the agricultural sector, many programs have been focused toward either re-establishing the production system of food crops for food safety of the community or re-development of tree cropping either for production or environmental purposes. While these programs are being set up and running, livestock components can be established to complement with the on-going programs. Since livestock production is basically non-land-based activities, a production system can be set up quickly without having to wait for the soil condition to recover from the tsunami effects. Livestock components can serve as nutritional nourishment for the population in the affected areas, and there is also indeed a need to repopulate their livestock which were destroyed during the catastrophe. Poultry can easily be used to provide job opportunities and also to generate income in the resettlement area as well as in the area where the community have returned to their own land, because chicken or ducks are quick yielding and usually farmers are already familiar with. Goats were also very commonly found in villages before the tsunami, and their production can easily be re-established in the area in line with reforestation programs using tree legumes as sources of animal feed.

Livestock has been part of daily activities among farmers in most rural areas of Indonesia. Prior to the tsunami, buffaloes, goats, local chicken and ducks were the main species of livestock which can easily be found in West Aceh with large population sizes. Buffaloes, goats and also some cows can be found grazing in paddocks or common grazing areas, being raised under traditional system. Buffalo meats are generally preferable to the local community to beef as the custom for many generations. Local chicken and ducks were kept in the backyard in almost every farmer household, and they were raised under scavenging and subsistent system. Feed ingredients were obtained from local resources which were available abundantly and for chicken and ducks sago palms or rice bran was used mostly as the source of carbohydrate. In general, livestock was kept mostly only as saving for the family and not considered as a commercial activity, and therefore their productivity was not optimal.

Livestock in the aftermath

In the tsunami area livestock were completely wiped out, and therefore farmers must start their livestock production from the scratch. However since livestock was always considered only as a saving to the family or as a side farming activity the loss did not really have a great impact socially and economically in general. The recovery efforts were mostly focused on rehabilitation of food crop farming first. Mercy Corps, Spanish Red Cross, ECO and BRR have initiated in rehabilitation of livestock production through distribution of packages for farmers to start their livestock farming activities according to their choices. However, all production inputs must be imported from outside the tsunami areas.

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Figure 1. Women's discussion on improving livelihood opportunity through ducks activity (left) and Ducks in early post-tsunami (right)

In a livelihood meeting in Meulaboh organized by UNDP, 'Options in livestock for livelihood' seminar was presented and several international organizations expressed interests in developing livestock programs also. The duck program may also serve as a model in which other species of livestock can play important roles in rebuilding livelihood of these communities in an integrated mixed farming. It was generally agreed that livestock production can be designed to be complementary to other farming activities in improving efficiency and in using resources such as land, labor, and time.

Alternative models for supporting small-scale duck production

Livestock production has been shown to be a reliable source of income as a component of farming system in the rural areas, particularly in many developing countries. Most of the activities can be done by women or other members of the household and therefore labor cost can be minimized. A livestock production system based on an economic scale and commercially-oriented can improve not only welfare of farmers involved but also economic development of the area. A continuous and reliable supply of production inputs and fair trade in marketing system would guarantee sustainability of the production system.

Technology packages to support development of a sustainable production system are readily available from various research institutions, which may require some testing and adjustments to fit with the local conditions. Traditionally, duck farming is practiced under extensive rearing system because they serve mostly only as additional activities or saving to the farmers' households. If it is intended to provide a reliable source of income, then it must be practiced under intensive or semi-intensive rearing system through application of appropriate technology. The technical aspects must be combined with social and economical condition of the location and must be supported by the political will of the local government. Therefore, the technology application must be designed appropriately in a pilot project and scientifically sound for maximum results. This project will provide a field laboratory for testing and evaluating the application of technology package in a specific condition of Aceh post-tsunami.

The Indonesian Research Institute for Animal Production (IRIAP), within the Indonesian Ministry of Agriculture, has developed various technology packages for poultry production tailored for different agro-ecological conditions. However, these have not been field-tested under the condition of Aceh post-tsunami. It would be appropriate to test certain packages which might be suitable for the condition and beneficial for improving the livelihood during the rehabilitation stage. Layer ducks production under intensive rearing system is designed to provide daily income to farmers, complementary to other farming activities.

Why ducks? They are good egg and meat producers and not stranger to Acehnese. They are not hard to raise, and this species is resistant to bird flu. Ducks are particularly very attractive to displaced families because they produce quick income and there's a huge market. Duck farming can be used as an assurance to those leaving the barracks and starting their new lives.

KEY MESSAGE

The idea of raising duck receives an enthusiastic response mostly from the women, because it will provide them with something to work on in their new residence. While for the men, they can still find jobs in construction work. Since duck farming was traditionally under extensive system, proper training and supervision will help the families to develop intensive duck farming as an important source of income to the families, and in turn stimulate economic growth of the area.

Two locations have been identified as the sites for a study in designing an appropriate model to suit the socio-economic-cultural condition of people in Aceh Barat. In Peunaga Pasié village (Meurebo Sub-district) the target group is a woman farmer's group which has been under the supervision of 'Yayasan Annisa', and in Alue Raya village (Samatiga Sub-district) a farmer's group is being led by a local high school teacher who is also a duck farmer.

Duck as small-scale investment for women?

It remains to be answered. Initial results show that under the current condition small-scale duck production may provide an appropriate option particularly for women. Although many families have new homes to go to, however, some refugees are ambivalent about leaving their temporary quarters. On one hand, many are excited about leaving the communal barracks and moving into new houses. On the other hand, leaving the barracks means that they will no longer receive monthly living support from the government before they know exactly what to do for a living in the new houses. Meanwhile, other families are opting to start farming around their new dwelling during the day, but return to the barracks at night as a way of facing the transition period. In an interview, Ibu Aisyah, for example, said: "I started raising ducks which I received from ECO (European Aid Cooperation) during the day and return to barracks in the afternoon".

However, the establishment of small scale family duck farming requires a certain amount of money as their seed capital to start the business, either as subsidies or soft loans. This needs supports, such as micro-finance scheme, from various sources of funding such as donor agencies, local governments, banking institutions. The availability of capital and market will guarantee the sustainability of any livestock production and therefore the welfare of farmers.



Figure 2. Ducks are common in Acehnese for meats and eggs



Figure 3. Women are sharing the duck seedlings

World Agroforestry Centre (ICRAF) is one of 15 organizations under the CGIAR (Consultative Group on International Agricultural Research) umbrella. ICRAF aims to stimulate and conduct innovative research, development and capacity building to promote and support agroforestry for both human and environmental benefits. ICRAF has its headquarters in Kenya and six regional offices in the tropics and now cover 21 countries in Africa, Asia and Latin America. The research bulletins are summary results of collaborative activities of ICRAF and partners in the "Recovery and Resilience of Livelihood and Natural Resources", mainly in West Aceh, after the Tsunami of 26th December 2004. These bulletins were prepared, first in Indonesian language, for a workshop in Meulaboh on 30 November 2006. The primary objective was to share relevant result findings and observations among government and non-government organisations and individuals involved in the post-tsunami recovery in West Aceh. The workshop and preceding research activities were supported by Ford Foundation Indonesia, EU Asia Pro-Eco Program and CGIAR.

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