Current situation of family livestock husbandry in the hillside villages of Palawan Island, Philippines

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Abstract

This study aims to report the current situation of livestock husbandry in Southern Palawan hillside villages and to determine the difficulties in promoting family livestock husbandry. The field research was conducted in June and August 2010. The main subsistence activity in the villages is agriculture, and each household grows upland rice, cassava, and vegetables by shifting cultivation. Not a few villagers grow coconuts trees to harvest copra. The gathering of non-timber forest products such as wild edible fruits is also conducted. Varieties of livestock such as chickens, water buffaloes, and cattle are raised in the village. In addition, chickens are the most popular livestock in the hillside villages. However, only households who raise chickens are popular. There seems to be some scope to promote family livestock husbandry in tribal hillside villages, but some households suffer from a lack of subsistence foods. Small livestock that consume different foodstuffs of people, such as goats, seems to be worth promoting.

Keywords: family livestock husbandry, hillside agriculture, shifting cultivation, socioeconomic development, tribal people

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Introduction

In the hillside areas of Southern Palawan Island, numerous tribal people conduct shifting cultivation and continue subsistence-based livelihoods (Tsuji, 2006; Tsuji, 2010). The many tribal people living in hillside area still maintain their traditional lifestyles, which are different from the lifestyle of people living in lowland areas. However, due to the rapid expansion of the market economy and to the change in social system, their subsistence-based livelihoods have been threatened. In addition, those tribal people are often discriminated and suppressed by people living in lowland area due to the ignorance of hill tribe’s culture (Moriya, 2010). To secure their livelihoods, their socioeconomic development is crucial.

Usually, peasants in the rural areas of Southeast Asia have engaged in not only agricultural activities but also other subsistence and economic activities (Takai et al., 2009). For example, Palaw’an people, who are one of the tribes of Southern Palawan Island and are known for shifting cultivators, have intensified their land-use in shifting cultivation and have increased their collection pressure of non-timber forest products (For example, Eder, 2006; Dressler and Pulhin, 2010). And Molbog people, who are also one of the tribes of southern Palawan Island, conduct not only shifting cultivation but also fishing (Tsuji, 2005). However, little attention has been paid to family livestock husbandry of shifting cultivators.

This study aims to report the current situation of livestock husbandry in Southern Palawan hillside villages and to determine the difficulties in promoting family livestock husbandry.

Materials and Methods

Study area

The field survey was conducted in a KB village, in Southern Palawan Island, Philippines. It is one of the “Last Frontier” areas in the Philippines. The island has accepted migrants from other areas of Philippines. Rapid population growth of the Island since 1960s has severely affected the Palawan indigenous people and their livelihoods. Rapid population increase leads competition for natural resources use and land tenure conflict between migrants and tribal people such as the Palaw’an. The Palaw’an are indigenous people and known for shifting cultivator. Shifting cultivation, which is called kaingin in Tagalog language, is still main subsistence activity for many of the Palaw’an people.

Study village

The KB village locates hillside of Bataraza municipality, Southern Palawan Island (about 200 m in altitude). The villagers are the Palaw’an people and the village consists of 25 households with more than 200 people. The village locates remote area from the center of Bataraza where public market locates. More than three hours are needed to reach the village. The main subsistence and economic activities in the KB village is agriculture and all households engage in upland farming by shifting cultivation. The land of KB village is legally controlled by the nickel mining company but the impact is not reached nearby the village yet.

Methods

The eight households are randomly selected. Interview and direct observation are conducted to study the agricultural activities and animal husbandry. Interview research was conducted to clarify 1) main subsistence, 2) economic activities and 3) problems of animal husbandry in the village. The field survey was conducted at May and August 2010.
Results and Discussion

Main subsistence and economic activities in the village

All households conduct shifting cultivation. Each household cultivates at least one agricultural field in hillside. Every year they cut down bush or forest to use newly opened field. The fields of previous year were usually fallowed. Although fallow periods could not be figured exactly, favorable period is found approximately seven years based on our field observation.

In the field, they grow upland rice, cassava, aroids, maize and some vegetables. Those crops are grown in mixed cropping and the first cropping is engaged in rainy season (May-September). Upland rice, cassava and banana are major subsistence crop for the villagers, and especially, cassava is their staple food.

When we visited the village in May 2010, shoots of upland rice are about 30 cm in height. Some villagers were really in hunger in that time due to the shortage of their foodstuff. Some villagers said that they already consumed almost all of their foodstuffs harvested from upland field and that they do not have enough money to buy their daily food.

In addition to upland rice farming, most households farm their coconuts trees. Interview research revealed that they have 30-300 coconuts trees per household. They harvest copra from the coconuts for 3 to 4 times per year. After they dried the copra, they sell those to the middlemen. The gathering of non-timber forest products such as wild edible fruits is also conducted. To trade dried copra is the main source of cash income for the KB villagers.

Current situations of livestock husbandry

In surveyed eight households, six kinds of livestock are raised: chickens, dogs, cats, water buffaloes and cattle (Table 1). No pigs and goats are raised in the village.

Table 1. Number of livestock raised in the study village (May 2010).

<table>
<thead>
<tr>
<th>Types of Livestock</th>
<th>Total number (Heads)</th>
<th>Number of livestock per household</th>
<th>Household owning livestock</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average (Heads)</td>
<td>Range (Heads)</td>
</tr>
<tr>
<td>Chickens</td>
<td>23</td>
<td>2.9</td>
<td>2-6</td>
</tr>
<tr>
<td>Dogs</td>
<td>9</td>
<td>1.1</td>
<td>0-4</td>
</tr>
<tr>
<td>Cats</td>
<td>6</td>
<td>0.8</td>
<td>0-2</td>
</tr>
<tr>
<td>Water buffaloes</td>
<td>2</td>
<td>0.3</td>
<td>0-1</td>
</tr>
<tr>
<td>Cattle</td>
<td>3</td>
<td>0.4</td>
<td>0-2</td>
</tr>
<tr>
<td>Ducks</td>
<td>4</td>
<td>0.5</td>
<td>0-4</td>
</tr>
<tr>
<td>Pigs</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Goats</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: Eight households out of 25 households are surveyed.

Chickens are the most popular livestock in the village and all surveyed household raise chickens. Chickens are range free in the village and 2.9 chickens per household are raised.

More than half of households keep dogs and cats. Dogs are range free and are expected to be watchdogs. Villagers explained that some dogs can be used for hunting wild animals such as bush pig. Cats are range free and are expected to protect rice granary from rats.

In total, two water buffaloes and three cattle are kept in surveyed households. Cattle and water buffaloes are raised for selling to get cash income. The villagers do not recognize those animals for the works such as draft animal. The owner of cattle and water buffaloes take them to the grazing place every day and chain those animals with a rope. We can also find the fence to avoid cattle and water buffaloes enter into the footpath and agricultural fields scattered in the forest.
Ducks are raised only in the one household. This household is an exception keeping many livestock. This household raises one water buffalo, two cattle, three chickens, two cats, four dogs and four ducks.

**Possibilities of promoting family livestock husbandry**

Number of livestock in the village and our field observation shows that so far the villagers do not intend to devote their time to animal husbandry.

No pigs are raised in the surveyed household. In our observation at public market in lowland area of Palawan Island, demands for pork seem to be so great among Christian people. But some households suffer from a lack of subsistence foods in KB village. In addition, Palaw’an people are slightly affected by faith of Muslim. It seems that they do not like to keep pig, although they have a nature to keep it. It is not suitable for the KB village to promote pig husbandry. In this context, we would like to suggest that the villagers need to sketch the demand of their own foodstuffs before starting to feed pigs.

The KB village is surrounded by forest. So the village situation seems to have potential of plant resources for using livestock husbandry. Owning large livestock such as cattle and water buffaloes need a large amount of money. It's too expensive for many of the villagers to purchase such livestock.

Small livestock that consume plant resources in the forest and different foodstuffs of people, such as goats, seems to be worth promoting.

**Conclusions**

This case study shows that livestock husbandry in the Palawan hillside village still do not actively conducted. And villager’s main source of cash income is limited to the selling copra. There seems to be some scope to promote family livestock husbandry in tribal hillside villages. The village situation seems to have potential of plant resources for using livestock husbandry.

To encourage small livestock husbandry such as goats in addition to poultry, may have a possibility to enhance their given socio-economic condition under proper livelihood support for them. The strategy should be discussed now and seems to be worth practicing in near future.

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**References**


