

**Backyard Pig Rearing: Economic Impacts on Livelihood and the
Need for Sustainable Practices in Rangamati, Bangladesh.**



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Chapter 1

Backyard Pig Rearing: Economic Impacts on Livelihood and the Need for Sustainable Practices in Rangamati, Bangladesh.

Abstract

The study was undertaken in three areas of Rangamati - the Rangamati Sadar, Kaptai, and Bangalhalia to understand the pig farming business and the profit of the local farmers. From each area ten families were randomly selected and analyzed based on their experience in pig farming. Most of the pig raisers were females, with age ranging from 28 to 48. They invest very little in the housing of pigs; and feed includes rice husk mainly with kitchen waste. They face challenges in pig rearing due to lack of adequate husbandry knowledge and government facility, and inadequate knowledge on disease and its prevention. Few farmers seek veterinary aid when their pigs fall sick to disease. Unknowingly, these farmers put themselves at the risk of zoonotic disease. Building awareness in pig raising may help them in practicing pig farming in the safest way and producing safe pork supply to the consumers.

Keywords: Pig farming, hybrid, socioeconomic, disease, public health, knowledge.

Chapter 2

Introduction

1.1 Background of the study

As a Muslim dominated country, pig is considered taboo for the majority of people in Bangladesh. However, for some small communities pork is considered edible and has social importance in festivals. Thus, pigs are reared in small scale by those people from the community which mostly includes hill district ethnic people. The most common way to rear

pig in those areas is by backyard farming. The production and profit from the pig rearing is unnoticed and less reported.

The purpose of this report is to identify the possible profits, and the ways to improve the economic status of pig farmers. Pig rearing is primarily carried out by underprivileged individuals in the districts of Rangamati and Khagrachori who lack the resources and know-how to increase production. (Hossain M *et al.*, 2011).

Since raising pigs is a cultural taboo to Muslims (Nahar N *et al.*, 2015), people who rear this animal must have been facing difficulties for a long time. Pig health isn't very much well recognized in these places and finding proper health care for pig is a bit troublesome. In order to address ailments in pigs, pig farmers employ a combination of conventional and biomedical interventions. According to Nahar N *et al.* (2012), apart from providing medication, livestock keepers frequently offered injections to their ailing pigs, leading to discontent and skepticism when pigs succumbed to their illnesses despite receiving the recommended therapeutic regimen. (Nahar N *et al.*, 2012).

Despite facing problems with raising pigs, still some people choose to raise pig. The aim of this report is to identify how those farmers raising pigs and how this farming is improving their livelihood at all and also to understand if rearing pig improved their knowledge about the husbandry. Pig-rearing has demonstrated robust marketing demand in specific places. The primary composition of the market sector consisted of residential homes and wayside buildings. (Ritchil C H *et al.*, 2013). The study areas observed a prevalent occurrence of farmers possessing a restricted understanding of pig farming. Other significant challenges in pig production included inadequate laboratory facilities, limited access to medicine, high costs, and limited supply of vaccines. (Ritchil C H *et al.*, 2013). The main obstacles identified were malnutrition, insufficient scientific understanding, and a lack of veterinarian and extension services. (Ritchil C H *et al.*, 2013).

In contrast to other countries, none of the participants relied solely on pig raising as their primary source of revenue. Instead, pig rearing served as a supplementary means of earning for them. The potential causes for this phenomenon may be attributed to limited land availability and socioeconomic deprivation. (Islam *et al.*, 2021). The purpose of this study was to get insight into the current state of pig raising in Rangamati and the financial gains seen by marginal farmers through local market trading.

1.2 Aims and objectives:

- To assess the economic, and social status of pig farmers.
- To understand the demand of pork in locality
- To know the costing of pig rearing.

Chapter 3

Materials and method

The study was purposely done in the Rangamati district, particularly in the areas of Lemunchari, Kaptai, and Bangalhalia, due to the significant concentration of tribal population in these regions. The areas of study that were chosen through a randomization process. Two villages were chosen from each location, and within each village, five tribal families were selected to participate in backyard pig farming. A single representative from each pig farm was selected to provide responses to the questionnaire. The individuals in question are actively engaged in the tasks related to the maintenance, nourishment, and supervision of the pigs. To evaluate the level of success and current status of backyard pig farming among tribal communities, an analysis was conducted to calculate the money generated by backyard piggery farming.(Shyametal.,2017)

Chapter 3

Results and discussion

2.1 Socioeconomic condition

The socioeconomic condition of pig farmers was discovered to range from lower middle class to marginal. Most pig farmers in rural areas don't build any pig housing; instead, they rear pigs on the extra territory in the backyard of their homes. Pig farmers in the Kaptai neighborhoods of Bangalhalia mostly raise pigs to produce piglets. Their primary goal in raising pigs is to sell them as meat. On the other hand, it has been noted that piglets are raised mostly for meat purposes in Rangamati due to the city's high demand for pork. There are more female pig farmers than male. Female farmers often range in age from 28 to 48. While marginal farmers have less education, the majority of farmers have SSC or HSC level education or lower from that with no education. Locals refer to the cross between Deshi and a developed breed of pigs called hybrid. Three places have experienced an increase in the production of hybrid pigs. Piglets of the hybrid kind are generally more expensive than Deshi. They produce three times more meat as the Deshi breed.

2.2 Income from pig raising

This table calculates and shows the annual income and expenses. The cost of manpower is not included in the annual income calculation. Pig farmers utilize their family's work to build a fence around their home out of waste. The average cost per Upazilla for growing pigs is 2264 taka, while each Upazilla earns 1186 taka from selling the pigs. In addition to their primary household income, the locals raise pigs for profit.

Table 1: Annual income per family from backyard pig farming (in taka)

Income statement	Kaptai (n=10)	Bangalhalia (n=10)	Rangamati (n=10)	N=30
Annual household expenditure				
Cost of piglets	3650	2790	22680	9706.666667
Cost of feed	18240	18120	0	12120
Labour cost	0	0	0	0
Housing cost	0	0	150	50
Veterinary cost	150	150	500	266.6666667
Miscellaneous	500	500	500	50
Total expenditure	22540	21560	23830	2264.33333
Gross Annual Income				
Sale of piglet	4400	3500	5230	4376.666667
Sale of adult pig	30700	21000	38700	30133.33333
Total gross income	35100	24500	43930	34510

Total net annual income	12560	2940	20100	1186.66667
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Farmers here continue to raise pigs as a secondary source of income due to the ongoing demand for pork and piglets in those locations, make pig farming profitable in the long run. From the table, it can be seen that Rangamati has higher piglet demand and prices than the other two areas. This also demonstrates the significant profit in pig farming in the Rangamati Area.

Constraints of pig rearing

Pig farmers' main concern when the study's data was collected was the lack of proper veterinary care for pigs. They deal with unidentified pig diseases that kill pigs in large numbers throughout the surrounding regions. They know very little about pig disease and how to prevent it. To boost output, a veterinarian extension programme on pigs is necessary. Piglets die primarily as a result of poor management, which they are completely ignorant of. Additionally, due to religious restrictions, it is difficult for pig breeders to produce profitable pigs (Hossain ME et al., 2011). It has been discovered that many of them eat the deceased pigs that passed away from diseases that are unknown to them. These practices increase the risk that pork consumers will contract a zoonotic disease. These pig producers have not addressed the public health issue. To ensure the safety of both humans and pigs, this unrecognized pig farming must be exposed.

Reference:

RitchilCH.et al.,‘Socio-economic status of pig rearers and management system of native pigs in Bangladesh’, Indian Journal of Animal Sciences,vol. 83, no.11, 2013, pp. 118-120.

Hossain M E, et al.,‘Production systems of swine in the rural areas of Rangamati and Khagrachari districts of Bangladesh.’- Bangladesh Journal of Animal Science, vol.40, no.1–2,2011 pp: 28–33.

Islam A et al.,‘Pig raising practices by unprivileged, ethnic people in Bangladesh.’- Insights Vet Sci, vol.5, 2021, pp: 001-005.Nahar N, et al.,‘Pig illnesses and epidemics: a qualitative study on perceptions and practices of pig raisers in Bangladesh.’-VeterinariaItaliana, vol.48, no. 2, 2012, pp : 157-165.

Nahar N, et al.,‘Cultural and Economic Motivation of Pig Raising Practices in Bangladesh.’- *EcoHealth*, vol.12, 2015, pp :611–620 Shyam J ,et al.,2017. ‘Economic Contribution of Backyard Piggery in the Livelihood Security of Tribal Families of Assam.’- International Journal of Livestock Research, vol.7, no.2, 2017, pp : 135-143.