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Cattle Fattening and Its Roles in Socio-Economic Development of Fatteners: A Learning from Northern Part of Bangladesh

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ABSTRACT

Income-generating activities (IGAs) are the activities that are adopted to maintain the livelihood of people, particularly those who are marginalized and grassroots. IGAs also help to meet the daily needs of the doers by ensuring earnings through producing products. However, to explore the role of cattle fattening in improving the socio-economic status of the fatteners or farmers as IGA was the paper's main objective. Mainly, the respondent's survey with an interview schedule was used as the data collection method. Shibganj village was chosen purposively as the study area due to the prevalence of cattle fatteners reported. The study found that women were the major portion of the fatteners who were rearing and fattening cattle in separate rooms in their own house rooms in their own houses. Initially, they invested on average fifty thousand takas for purchasing cattle, and after rearing for a duration (average of six months), they sold the cattle to the local market. They were financially benefited by selling cattle, which also played a vital role in changing their social status. Almost all the fatteners opined that cattle fattening improved their social and economic conditions than before. Moreover, some problems were reported such as lack of emergency support for cattle, financial weakness of the fatteners, instability of price, and high-rate interest of loan.

INTRODUCTION

The economic importance of animal resources of Bangladesh is immense. Cattle fattening is a very important initiative in this country. Cattle fattening is the conversion of unhealthy lean cattle into well-fed cattle in a short period of time for meat production. Nowadays, cattle fattening has become an income-generating activity. Cattle fattening system is very important and profitable business for Bangladesh. Every year around 40-45 lakh cattle, buffaloes and sheep are sacrificed during Eid al-Adha. About 70% of this number are Cattles. As a result of fattening of Cattles, the very poor people can benefit more in a short period of time, and as a result of such income-generating activities, unemployment in the country is eliminated. Cattle fattening is a regular occupation of prominent people of this country. There are many Cattle farmers in Thakurgaon who are changing their family status by earning year-round income by fattening different breeds of Cattles. As a result of fattening of Cattles, the demand for non-vegetable meat is met in the country, as well as the financial and social aspects of the country are also developing. Therefore, there is no alternative to fattening cattle to meet the demand of beef in the country.

In addition, cattle fattening is an essential component of socio-economic development as it contributes significantly to enhancing numerous elements of livelihood improvement. The increasing demand for animal products, particularly beef, can be attributed to causes such as population expansion, urbanization, economic advancement, and evolving customer preferences (Agus & Widi, 2018). Beef cattle production plays a crucial role in generating wealth, enhancing lives, and alleviating poverty, especially for pastoralists (Kibona & Zhang, 2021). Cattle fattening offers significant advantages, including enhanced food security, greater household income, investment prospects, and sustainable agriculture through the generation of manure (Indrawirawan *et al.*, 2022; Mlote *et al.*, 2013). In addition, it provides employment possibilities and generates cash through the sale of beef animals that have been fattened (Mlote *et al.*, 2013). Continual attempts are being made to improve the effectiveness of beef cattle production. These efforts concentrate on areas such as operational and breeding management, genetics, rumen microbiomes, and feed composition (Terry *et al.*, 2021). Research has demonstrated that implementing enrichment measures during the early fattening stage can have lasting impacts, enhancing the physical attributes of beef cattle carcasses (Ishiwata *et al.*, 2006). Research conducted by Muktasam *et al.* (2022) has demonstrated that including Leucaena into cow diets yields tangible economic advantages for producers. In addition, the inclusion of Leucaena in low-quality animal feeds has been found to result in substantial enhancements in cattle fattening profits (Dahlanuddin *et al.*, 2017).

The economic advantages of beef cattle fattening are apparent, since research indicates that households involved in this industry have cash profits and enhanced livelihoods (Yuzaria & Suryadi, 2011). Research has also emphasized the need of comprehending socio-economic elements that motivate individuals to engage in beef cattle fattening. This underscores the necessity for enhanced management strategies to improve production systems

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and provide advantages to livestock keepers (Sarma *et al.*, 2014). In addition, a comprehensive evaluation has been conducted to determine the level of competitiveness in cattle fattening enterprises across different locations. The findings indicate favorable results and advantages when accompanied by effective administration and governmental assistance (Nurlaelah *et al.*, 2020). Cattle fattening is a crucial activity that not only boosts economic growth and enhances people's quality of life, but also plays a pivotal role in guaranteeing food security, creating jobs, and promoting sustainable agricultural practices. To ensure the continued socio-economic development, it is crucial to establish effective management techniques, employ novel feeding methods, and receive sufficient assistance for cattle fattening.

Problem Statement

Cattle fattening is often a problem. Farmers need a lot of money to fatten their cattle and sometimes farmers get less than the amount of money invested in fattening the cattle. Due to lack of capital many times farmers face obstacles in fattening cattle due to lack of proper training, farmers cannot fatten cattle on time. Due to the rise in feed prices, the financial crisis of the farmers often leads to sick cattle which cost a lot of money in medical treatment and because of the illness, the production of beef decreases. As a result, the farmer faces losses.

A farmer cannot properly select a farm without the opportunity of openness and plenty of light and air. As a result, there is a problem in fattening cattle due to various problems, the amount of money that the farmer spends is less than the source of income, as a result of which the farmers suffer financially and socially. And its impact falls on the farmer's family. As a result, the family falls into various crises. Finally, it can be said that due to lack of economic and proper project management, farmers face various problems.

Rationale

To find out how cattle fattening farmers are doing economic development and to analyze how they are contributing economically. There is a lack of ample employment opportunities in the context of Bangladesh. We hope to become self-reliant through experience and knowledge by participating in this survey program. Through fattening of cattle many educated, less educated and uneducated unemployed people will be able to provide their own employment. Also, those who used to roam for jobs will become self-reliant.

The cattle fattening system has become a great tool for the financial development of the country. Our research on cattle fattening will inspire many farmers and farmers to do this and they will improve their quality of life by doing cattle fattening and help to make the country a financially developed country. Exporting various parts of cattle body to foreign countries by taking appropriate measures by the government will bring money to the country. Therefore, we think that through cattle fattening, as people improve their quality of life, it will also help to make the country a developed country.

LITERATURE REVIEW

Livestock is acknowledged as a crucial element of Bangladesh's rice-based agricultural production system. The nation's economy is heavily reliant on agriculture. One of the four components of agriculture, together with crops, livestock, fisheries, and forestry, livestock contributes around 6.5% of the GDP and 13% of all foreign exchange profits, which is a significant amount to the national economy (GOB, 1991). In Bangladesh's traditional agriculture and mostly subsistence economy, livestock is essential (Haq, 1992). Livestock is a major source of income for landless people and small-scale farmers (Ahmed, 1992). According to estimates from the FAO from 1996, Bangladesh has a total population of 24.34, 0.88, 11.55, 30.33, 123.00, and 16.00 million cattle, buffaloes, sheep, goats, chickens, and ducks, respectively. Bangladesh's cattle are an integral and integrated part of the nation's agricultural farming systems, and they are ranked third among Asian nations and 12th globally (Alam *et al.*, 1994). In comparison to other countries in the European Economic Community (EEC), Bangladesh has a higher population of cattle (Allen, 1990), and it is distributed more densely (2.6 cattle and buffalo heads per hectare) than other Southeast Asian nations (Assaduzzaman, 1996). Although there are a lot of cattle in Bangladesh, they are among the worst in the world in terms of productivity per animal. According to reports, developing nations in Asia, Africa, and Latin America are home to 75% of the world's cattle population, but they only produce 34% of the world's meat (Rahman, 1992). According to the FAO (FAO, 1998), Bangladesh produces roughly 290000 metric tons of meat annually, of which 161000 metric tons are from cattle. If correctly developed through study and implemented in regard to breeding, feeding, management, and disease control, modern technologies can increase productivity to a far greater level. For instance, a lot of farmers would fatten bulls in the three to four months leading up to Eid-ul-Azha so they may sell the animals for a profit. Even some landless individuals engage in year-round fattening programs as a means of subsistence. Small farmers in Bangladesh are now heavily invested in the cattle fattening industry for the production of beef (Sabur *et al.*, 2000).

It has been noted that the main sources of protein for Bangladeshi citizens are milk, meat, and eggs. Cattle significantly contribute to the GDP by producing meat and hides. Bangladesh offers considerable potential for beef cattle operations (Begum *et al.*, 2007). It has a high demand all year round, not only around Eid-ul-Azha. When compared to the expected demand of 70 lacs for Eid-ul-Azha, Bangladesh had about 60 lacs healthy cattle, including buffaloes, according to the department of livestock services (DLS, 2017 cited in Hossain *et al.*, 2019). When buying native male cattle at the local market, the majority of farmers (71.5%) raised them until they

were 2 years old (Huq & Amanullah, 2009). According to Roy *et al.* (2009), 25% of Bangladesh's population is directly and 50% indirectly involved in activities related to cattle. Economically speaking, beef fattening benefits rural hard-core impoverished and poor people. It is a profession that was passed down from their ancestors, who started the world's first civilization. In rural areas, they are typically maintained on tree leaves, shrubs, Napier grass, bushes, cheap concentrate, and straw that has been treated with urea-molasses. The average feed cost was 27% of the overall cost of fattening cattle. For animal procurement, labor, housing, and health management, respectively, the rest made up 61, 6.0, 2.0, and 4.0% (Roy *et al.*, 2009). According to research by Haque and Sultana (2007), the minimum roughage-to-concentrate ratio for feedlot diets was 30:70 while the average roughage-to-concentrate ratio for native cattle diets in Bangladesh was 78.4:21.6. In the latter, silage or high-quality hay made up the majority of the roughage, while grains dominated the concentrate. Rural women favor keeping beef cattle as a domestic animal because of its docile nature, simplicity of handling, and suitability for conservation work (Hossain *et al.*, 2019).

Bangladesh's agriculture farming and agribusiness systems are wholly dependent on cattle. An expanding industry for employment and revenue generation for the rural poor, particularly landless, destitute, and divorced women, is beef fattening. The rural poor can reduce their poverty by using cattle fattening as a tool. Small farmers in Bangladesh are increasingly turning to cattle fattening for the production of beef (Ahmed *et al.*, 2010). One benefit of rural farmers fattening cattle during the Eid festival is that they employ locally accessible cattle feed resources. The beef fattening program in Bangladesh's rural areas has been supported in recent years by the country's women farmers. There are limited and inconsistent references of small farmers in rural areas fattening cattle in the literature (Hossain, 1986; Hossain *et al.*, 1996a; Huq *et al.*, 1997; Hashem *et al.*, 1999). It is the process of transforming an undernourished, 1–2-year-old cattle into a fattened one by giving it specifically controlled food within a set time frame to produce more meat. Hundreds of families living in Bangladeshi communities rely on this practice as their main source of income. Farmers employ a variety of mass-produced cattle feeds in the conventional fattening process, and some even use illegal substances like narcotics and steroids to speed things up. Since their method of fattening cattle differs from the conventional way in a healthier way, generating more meat devoid of any chemical residue, it can be referred to as a "safer" process (The Business Standard, 2022).

Livestock is one of the most significant agricultural sub-sectors in Bangladesh and is crucial to the development of the nation's economy (Sarma *et al.*, 2014). In rural areas, 80 to 85% of households retain cattle, and the majority of them are tiny, marginal, and landless farmers (Hossain *et al.*, 2016). According to Hossen *et al.* (2008), livestock can be thought of as "cash income" for rural farmers because it is always accessible for sale or barter. Small farmers in Bangladesh now depend heavily on the production of beef from their cattle. 2019 (Kamal *et al.*). In Bangladesh, it was thought that stimulants like steroids and feed additives were being used (Islam *et al.*, 2012). An essential component of agriculture, cattle farming contributes significantly to Bangladesh's rural economy (Hashem *et al.* 1999). According to Sharma and Ahmed (2011), poultry, cattle, goats, sheep, and buffalo make up the majority of Bangladesh's livestock resources. Despite having a high density of cattle per unit area, their productivity is low, primarily because of insufficient feed supplies and low genetic potential (Pandit 2005). Their growth performance is extremely subpar as a result. during the revered Eid al-Adha holiday. Muslims usually perform Kurbani, or the sacrifice of killed animals. Each year to commemorate the occasion, cattles, goats, camels, and sheep are put to death. The meat is then divided, with a third going to friends and family, a third going to the less fortunate, and the remaining third going to the immediate family. The third-largest Muslim-majority country is Bangladesh. Every year, Muslims in Bangladesh celebrate Eid. Every year at this time, 1.8 million cattle are sacrificed (Sujan *et al.* 2011). Small farmers in Bangladesh are now heavily invested in the cattle fattening industry for the production of meat (Sharma and Ahmed, 2011).

Direct and indirect costs made up the two main categories of costs associated with fattening cattle. The direct cost of raising cattle included a variety of variable expenses, including the price of the animals, the feeder, the feed, the cost of medical treatment, etc. (Mulla, 1997). Contrarily, indirect costs included the depreciation of valuable capital and equipment, including long-lasting drinkers, spades, buckets, rakes, and labor expenditures. It was apparent that the operation of fattening cattle contributed significantly as an additional source of income. According to Table 2, the average cost of fattening cattle is Tk 16316, with a Tk 21875 return per animal. Farmers made Tk 5559 per cattle after 3–4 months of fattening cattle using technology (Sharma and Ahmed, 2011). It implies that raising cattle for consumption is a lucrative alternative source of income in rural areas. The majority of the participating farms were content with the additional net income they were getting through short-term cattle fattening. Additionally, the cattle fattening industry has emerged as a significant agribusiness sector of agriculture in Bangladesh and is a feasible and viable option for the poor and extremely poor. It offers the farmer year-round employment and extra revenue. Cattle fattening could be a key factor in the study area's efforts to combat poverty, develop rural self-employment opportunities, and increase the availability of animal protein (Sharma and Ahmed, 2011).

Domestic beef fattening operations have developed throughout the area as a result of the villagers' substantial profits from the business. Through the enrichment of animal resources, domestic beef fattening has significantly improved the living and livelihood conditions of the

grassroots population over the past few decades. After satisfying local demand, the company has improved the prospects for exporting beef to various parts of the nation. Additionally, the increased domestic cattle output has begun to reduce reliance on cattle imports from the neighboring nation (BSS, 2022). According to a survey, many farmers engage in cattle fattening in the three to four months leading up to Eid-ul-Azha so they can sell the animals at a profit. In Bangladesh, cattle fattening has grown to be a significant industry. For the purpose of putting on weight, farmers typically employ rice straw, green grass, wheat and rice bran, molasses pulse bran, pumpkin, carrot, and banana. Sometimes urea and molasses are used to cure straw. Treatments with urea, molasses, and straw increased the body weight of beef cattle. For beef fattening, farmers typically employ cattle older than three years (Sobhan 2014).

It is regrettable that large amounts of steroids are utilized in Bangladesh to fatten animals. With the aid of dangerous medications, the traders shorten lengthy processes. For slow results, safe approaches are abandoned, and 63.7% of farmers use medicines to fatten their cattle. Such meat can result in cancer and kidney problems if consumed. Women who eat fatty beef experience infertility. Trading and farming businesses are utilizing excessive amounts of hazardous medications to fatten livestock for the Eid market, breaking the law and endangering public health. This procedure could kill cattle in addition to having a significant negative influence on their health. Cattle merchants have been using inexpensive steroid medications as Oradexon, Betamethasone, Decason, Dexamithson, Paractin, Steron, and Presdnisolon with the assistance of veterinary quacks and dishonest livestock officers (Sobhan 2014). The 2010 Fisheries and Livestock Act forbade the use of hazardous medications and steroids to fatten livestock. Seventy-six percent of farmers use steroids as growth hormones. Including 65.39 lakh slaughtered during the time of Eid-ul-Azha in 2013 as opposed to 37.96 lakh in 2009, the number of cattle, including cattle, buffaloes, goats, and sheep, has expanded dramatically in recent years. Cattle's kidneys and intestines were harmed by the over use of medications. Their bodies' ability to discharge water is compromised, and the collected water is absorbed into the animal's flesh, making it bulky (the New Age, 20 September 2014).

Farmers fatten different breeds of oxen and bulls, such as cross breeds, Pabna breeds, Australian Friesian breeds, and Pakistani Shahiwal breeds, in the northern districts of Dinajpur, Nilphamari, Gaibandha, Kurigram, Lalmonirhat, Thakurgaon, and Panchagarh (Sobhan 2014). To encourage their cattle to grow quickly, some farmers inject them with steroids and hormones and feed them a lot of urea. Steroids induce fluid to build up in calves, giving them the appearance of being fatter. These substances weaken their immune systems and leave them susceptible to illness. Cattle that have been artificially fattened appear big, but their lives are shorter. According to the Daily Star, September 30, 2014, those who consume meat from such cattle may have renal issues, liver failure, gastric ulcers, diabetes, pancreas diseases, high blood pressure, and skin conditions. On September 29, 2014, the high court ordered the government to create a seven-member committee and tasked it with developing guidelines to prevent the selling of calves that have been drug-fattened. The Fisheries and Livestock Act of 2010 forbids the use of steroids and other dangerous cattle-fattening medications, which is important to note in this context (the New Age, September 30, 2014). The Fisheries and Livestock Act of 2010, which forbids the use of toxic chemicals for cattle fattening, must be put into effect immediately. Additionally, raising public knowledge about the usage of dangerous chemicals for cattle fattening is the only option (Sobhan 2014).

Farmers in Bangladesh are becoming more interested in raising and fattening bulls as a result of high local prices that make it possible to do so and an Indian crackdown on cattle smuggling. Along with the increase of bulls during the last five years, the technique has become more popular among farmers. According to the Department of Livestock Services, 33.42 lakh cattle were subject to the special regime in 2017 (Parvez, 2022). This regime includes feeding the cattle a healthy diet and placing restrictions on their freedom to move. Farmers are currently raising 41 lakh cattle, which will likely be sold in marketplaces before Eid-ul-Azha, when Muslims worldwide slaughter livestock as part of their sacred tradition and demand soars. The majority of the fattened bulls are sold at Eid-ul-Azha, when half of all the livestock processed for meat throughout the year are killed. This also supports the export-oriented leather and footwear sector, which earns close to $1 billion annually, with supply of hides and skins, the essential raw materials for leather. Farmers and livestock officials claimed that since India began a crackdown on cattle smuggling into Bangladesh in 2014, investments in dairy and cattle fattening have grown. The ban caused a drop in the supply of livestock from India, which had previously provided Bangladesh with 20 lakh animals annually. As beef prices rose in response to a decline in the import of cattle from India, cattle rearing gained popularity, especially among educated young people (Parvez, 2022).

Bangladesh, a nation rich in agricultural resources, is making development in a number of ag-related industries, which has led to a 10.04% increase in the GDP of the sector. Producing vegetables increased by 20%, exporting fruits increased by 50%, and the poultry industry had 15% growth from the previous year. The Food and Agricultural Organization (FAO) earlier this year ranked Bangladesh as the fourth-largest fish producer nation. All of these accomplishments indicate that this nation has excellent agriculture prospects. The Bangladeshi government has taken the initiative to create and put into effect proper Agricultural policies. In turn, the flexible policies pushed the private sector to advance in order to boost agricultural sector productivity and non-crop agriculture output. Despite all of these successes, this nation's agriculture

trails many others in terms of the production and consumption of milk and meat. In 2014, there were 4.52 million MT of total meat produced, but there was 6.73 million MT of demands. The recommended daily intake of meat is 120 g, yet the average person barely consumes 80g. Once more, the recommended daily amount of milk is 100 ml, yet the average American only consumes 80 ml. The supply side is obviously in deficit. Numerous cattle breeds have been widely adopted for beef production in various parts of the world, including Angus, Belgiun Blue, and Brahman, among others. They each weigh, on average, 700 kg, 800 kg, and 850 kg. The Frisian variety of dairy animals produces the most milk in the world, at a rate of 60 liters per day. Bangladesh Cattle Development hence has a very broad scope. Since 1975, crossbreeding has been used to advance meat and milk production. However, only 34% of cattle have been crossed to create hybrids to date. The government should create accommodating and friendly livestock regulations that support the private sector in order to reduce the protein gap and maintain the country's nutritional position. In order to better the future of cattle in Bangladesh, this will enable the government and private sector to collaborate more closely (BIOLIFE, 2015).

Moreover, about the modern and scientific method of cattle fattening, the scientist and professor of animal science department of Bangladesh Agricultural University, Faculty of Animal Husbandry, O.M. Muzaffar Hossain described that the right time, necessary materials and methods for fattening cattle. He said, usually cattle can be fattened within 3-6 months. The proper time for fattening cattle is monsoon and autumn. Because a lot of raw grass is available at this time. By doing this it is possible to fatten cattle at the right time. Ananya's director, Mahafuz Ali Quadri, said that cattle fattening requires less capital. Capital comes up with profits in less time. Employment is created for unemployed youth and women. This method has become popular in the country as it is currently very profitable. Furthermore, Abul Kalam Azad, Associate Professor of Animal Science Department, Animal Husbandry Faculty, Bangladesh Agricultural University (Bakribi), said that this type of injection causes the cattle's cells to divide rapidly. In many cases, the amount of water in the cells increases and the cattle appears fat. But the quantity of beef is high but its quality is very low. Usually, those injections are used before the sale of the cattle, so it is slaughtered before it is completely exhausted, so it remains in the cattle's body and it enters the human body, which causes various problems to people. Cattle fattening changed Md Shamim Mia's life. Home of Md. Shamim Mia of Sahadubi village, he started the farm with one cattle. Later he sold the cattle for taka. 48000/- thousand. His wife Most Shirin Akhter purchased 3 cattle with a loan of Rs. Gradually his farm started expanding. Shamim Mia's number of cattle gradually increased as her farm became profitable. Currently, he has 25 cattle in his farm. The estimated value of which is 15 target Rs. Shamim Mia's cattle is now known as the model of the northern part of the country. Shamim wants to upgrade his distressed farm to at least 50 cattle. In order to create employment for some people in his farm. Its main goal is to play a role in eliminating unemployment in the country and to develop itself as self-reliant.

Objectives

a) To analyze the cattle fattening process.

b) To see how cattle fattening is playing a role in the economic development of farmers.

c) To find out how the cattle fattening program is playing a role in improving the social status of the farmers.

METHODOLOGY

This study has adopted mixed approach where qualitative is dominant. The explorative research method has been used as study method. Shibganj upazila under Thakurgaon district have been selected as study area. The study used a purposive sampling method for selecting samples, and 40 cattle-rearing farmers have been selected as sample used a purposive sampling method for selecting the samples, and 40 cattle-rearing farmers was selected as samples for the study. The interview method was followed, and the interview schedule was used as the tool of data collection. The tabulation, graph, frequency, percentage etc. have been used for data analysis through using SPSS software version 25.

RESULT AND DISCUSSION

Demographic Information

The study found that the number of entrepreneurs aged 41-50 years was the highest (37.5%) of the total surveyed entrepreneurs in the study area. The second proportion was aged 31-40 years was 32.5%, the third proportion was 20-30 years was 22.5%, the fourth proportion aged above 50 years was 7.5% of the total surveyed entrepreneurs in the study area. From the in the above, it was seen that there were cattle fatteners of different ages, particularly, most of the entrepreneurs was 41-50 years old. Moreover, the study found that women cattle fatteners managed 90% and male farmers manage 10% of the farms. It was observed that the participation of women entrepreneurs was relatively higher than that of men. Because, since the farms were in their homes, women were participating more in the management of the family as well as the farm. The study found that 85% of entrepreneurs had family members between 4-6 while 10% had 2-3 members. It was also seen that 5% entrepreneurs had above 6 family members. It seen that that most of the farmers have 4-6 members. It can be said that the parents who did not adopt family planning they were unaware about birth control policy and standard family size as well. Furthermore, it was seen that 60% of the entrepreneurs had primary education while 30% attained secondary education, 7.5% attained higher secondary education and 2.5% attained graduation education. It was seen that the educational qualification of the entrepreneurs was very low. It is said that if their educational qualifications were high, they could manage the farm better.

Nature of the Production Process

This study showed that farmers bought cattle at different prices. Among the respondents, 50% farmers purchased cattle above 50,000 bdt, 20% purchased cattle between 41,000-50,000bdt, 15% purchased cattle between 31,000-40,000 bdt and 15% purchased cattle between 20,000-30,000 bdt. It can be seen that farmers in the study area purchased cattle above 50,000 bdt for doing their business. Moreover, it was observed that entrepreneurs purchased cattle of different ages. About 57.5% of the entrepreneurs purchased 21-25 months old cattle, 37.5% purchased 15-20 months old cattle and 5% purchased 7-14 months old cattle respectively. From the data, it seen that most 21 to 25 months old cattle were purchased by 57.5% entrepreneurs in the study areas. Moreover, the study found that almost all of the respondents had received cattle fattening ideas from various non-profitable organizations like ESDO. It was seen that 97.5% of respondents received incentives from ESDO for fattening cattle while 2.5% farmers received incentives for cattle fattening from RDRS. It seen that ESDO and RDRS built aware and capacity among the local people for cattle fattening in the study area.

The data from the study showed that some farmers started fattening cattle long ago and some farmers were fattening cattle after receiving training from ESDO. It was seen that 37.5% farmers fatten cattle for 3 to 5 years, 27.5% farmers fatten cattle for 6 to 8 years, 22.5% farmers fatten cattle for 9 to 12 years, 10% farmers were fattening cattle above 12 years and 2.5% farmers were fattening cattle for 1 to 2 years respectively. Analyzing the data, it can be seen that most of the farmers are fattening cattle for 6 to 8 years in the study area.

Cattle fatteners give vaccines for their cattle every 3-4 or 6 months to keep cattle healthy. From the collected data, it can be said that 55% farmers given vaccine to their cattle every 3 months while 37.5% given every 6 months and 7.5% given vaccine every 4 months respectively. It can be said that most of the farmers given the vaccine to their cattle after every 3 months. Moreover, it seen that the farmers spent a lot of money on the treatment of cattle due to various diseases. It found that 40% of farmers spent 1000-1500 bdt per month on cattle treatment, 32.5% spent 1600-2000 bdt, 25% spent 3000 bdt, and 2.5% spent at least 2100-3000 bdt respectively. According to the collected data, it can be seen that the farmers spent more than three thousand bdt monthly for the treatment of their cattle. It is worth mentioning that 100% of the farmers of the farmers feed grain, green grass, urea molasses etc. to fatten the cattle. This study also found that the farmers who feed the grass to the cattle by collecting the grass from the local market and fields. For instance, 60% of the farmers collect the grasses from local fields and rest of the farmers buy grass from the market to feed their cattle.

From the information obtained from the farmers, it can be seen that every farmer received a training of 2 days or 3 days from ESDO and RDRS on cattle fattening. Out of all respondents, 67.5% farmers took 2 days training, and 30% farmers took training for 3 days while 2.5% farmer did not take any training. It can be seen that some farmers started fattening work by taking 2 days and some farmers 3 days training on cattle rearing and fattening from various non-government organizations like ESDO and RDRS.

According to the data of the respondents in the study, it can be seen that fattening of cattle is considered to be a great tool to change the quality of life of the farmers. This activity helps them a lot to become self-reliant. Among them, 45% of farmers changed their condition very much while 30% of farmers changed their condition more, 22.5% of farmers changed moderately, and 2.5% of farmers changed low level of status. Analyzing the data, it can be said that the fattening of cattle played a major role in making the farmers self-reliant in the study area. Moreover, it can be seen that it takes a minimum of 3 months to fatten cattle. But most of the farmers keep it for 6 months or 1 year and sell it. The study found that 75% of the respondents opined that it took 6 months to fatten, 17.5% opined 1 year to fatten their cattle. And least 7.5% of farmers opined it took 3 months to fatten their cattle.

The study found that farmers purchased different categories of breeds of cattle for fattening such as domestic, foreign and crossbred cattle are mentionable. About 40% of the farmers fatten foreign breed cattle, 30% of farmers fatten domestic breed cattle, 30% farmers fatten hybrid cattle respectively. Farmers preferred foreign breed cattle for rearing and fattening because foreign breed seemed more profitable if sold after fattening. Furthermore, the data obtained from the study showed that most of the farmers did their own farm work. No one left. Out of all surveyed farmers, 97.5% were self-employed and 2.5% farmers were employed. Most of the farm owners rear their farm by themselves due to financial gain.

Economic Status Change

The study found that 97.5% of the farmers took loans for fattening cattle. On the other hand, only 2.5% farmer did not take loan because they were financially solvent. It observed that major portion of the farmer taken loan due to their poor financial condition. Moreover, it seen that among loan receivers, 30% farmers taken loan of 41,000 to 50,000 bdt, 25% of farmers took loan of 51,000 to 1,00,000 bdt, 25% farmers taken loans above 1 lakh bdt, 10% farmers taken loan 21,000 to 30,000 bdt, 5% of farmers taken less than two thousand bdt 2.5% farmers taken loan of 31,000 to 40,000 bdt respectively. It can be seen that the farmer borrowers taken loans according to their needs for cattle rearing and meeting family necessities. By using loan, they benefited by fattening their cattle through ensuring feeds for their domestic animals like cattle and bull. Moreover, the study found that 87.5% farmers had bank accounts while 12.5% farmers did not have bank account. It seen that most of the farmers

opened bank accounts to facilitate financial transactions. The study seen that the financial condition of 100% farmers was not good. At present, about 97.5% of the farmers changed their financial status by doing cattle fattening and 2.5% of the farmers slightly changed their financial status who are now living better than before. Precisely, cattle fattening played a vital role in improving the financial condition of the cattle fatteners in the study area. Moreover, it seen that the current condition of every farmer was changed a lot compared to before by cattle fattening. Out of all surveyed farmers, 100% of farmers changed their daily diet than before.

Social Status Changes through Fattening

According to the findings, it can be seen that the social status of most of the farmers was changed while a few farmers' condition was not changed. The study explored that 72.5% of the farmers' social status was changed while 27.5% of the farmers opined that their social status was not changed after starting cattle fattening. Analyzing the data, it can be said that the social status of many of the surveyed farmers has been changed due to involving in cattle farming and fattening in the study area. It also seen that they are now getting a lot of respect and dignity in the society due to improving their financial condition than before.

Nature of Changes

Analysis shows that the farmers who have taken loans have taken loans according to their needs. They improve or start farms with loans. As a result, farmers are benefiting like this. Based on the data, it can understand that most of the farmers have opened bank accounts to facilitate financial transactions. By analyzing the data, it can see that the diet of all the farmers has changed by fattening the cattle. Moreover, analyzing the data, it can see that the social status of some number of farmers has not changed by fattening cattle. The social status of many of my farmers has been changed. Due to the change in their social status, they are now getting a lot of respect and dignity in the society.

Key Insights

The study found that 50% of the farmers were managing the farm well by purchasing cattle above 50,000 thousand takas. From the data, it seen that most (21-25) months old cattle were purchased by 57.5% farmers. From the data, it understood that the farmers got ideas of cattle fattening from ESDO and RDRS and through these initiatives, farmers become interested in cattle fattening. It also seen that most of the farmers given vaccines to their cattle after 3 months. And few farmers given vaccination every 4/6 months. According to the collected data, farmers spend monthly more than 3000 thousand for the treatment of cattle. It can be seen that some number of farmers started the fattening work by taking 2 days and some farmers 3 days training. By analyzing the data, it sees that cattle fattening has played a major role in making farmers self-sufficient. Analysis shows that most of the farmers are fattening cattle for 6-8 years. From the data, it sees that most of the farmers collect grass from the field and feed their cattle and rest of the farmers buy grass from the market and feed their cattle. From data, it can understand that all farmers need different time to fatten cattle. Some farmers fatten cattle for a long time and some farmers fatten cattle for a short time. It also understands that farmers have bought more foreign breeds of cattle. Because, foreign breed cattle can be more profitable if sold after fattening. As can be seen from the data, most of the farmers are faced with various problems in fattening the cattle. Because, if cattle are sick, a lot of money has to be spent on its treatment. Many times, cattle do not recover properly. The farmers have to get into trouble. However, data also means that 97.5% of the farmers did not need to hire people because of they do farm work themselves. According to analysis, most of the farmers took loans due to their poor financial condition.

CONCLUSION

In this study, farmers were selected as samples using the purposive sampling method. Data was collected from each farmer by visiting their farm. Their data was analyzed following percentage method. It can be seen from the data that every farmer takes loan from ESDO organization and starts cattle fattening after receiving training. This study found that the participation of female farmers is comparatively higher than that of male farmers. Analyzing the data, it is also seen that most of the farmers have become socially and financially prosperous by fattening cattle. Their participation in the society is much higher than before and the farmers are living a financially prosperous life by fattening cattle.

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