

Socioeconomic research on coffee growers in Nepal's Gulmi district

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Abstract

Coffee is a major plantation cash crop of hills of Nepal. Gulmi is one of the popular districts for coffee production and export in Nepal. This research is an attempt to assess the production potentiality and profitability of coffee in Gulmi district. This study was carried out in four rural municipalities of Gulmi district namely Ruru rural municipality, Dhurkot rural municipality, Satyawoti rural municipality and Musikot municipality. A total of 100 samples (25 from each rural municipality) were selected using simple random sampling technique. Face to face The pretested semi-structured questionnaire was utilised in conjunction with the FtF) interview approach to gather primary data. The benefit-cost ratio (BCR), profitability index (PI), gross revenue, gross margin, and other economic indicators of coffee production were computed. The results showed that BCR and PI were 2.84 0.59 and 2.50 1.25, respectively. The calculated gross margin per ropani was NRs. 15675.29 7189.72. Coffee comprised 12% of the total household income in Gulmi, making it one of the key influencing commodities. The principal production issue in the area were discovered to be the insect attacks, but the low market price was the main marketing issue. According to the research's findings, coffee has the ability to increase rural Gulmi's income, but at the same time, there are inadequate extension services for coffee growers, which has led to farmers' unhappiness with the coffee industry. The Nepali government should thus implement an efficient package of production and value chain monitoring in order to address the production and marketing challenges faced by coffee growers.

Introduction

Coffee is a plantation crop grown in Nepal's middle hills (Tuladhar and Khanal, 2018). It is a member of the Rubiaceae family. The only type of coffee grown in Nepal is the arabica

variety (NTCDB, 2021). The first person to introduce coffee to Nepal was a hermit named Mr. Hira Giri in 1938 AD. He had imported some coffee seeds from Myanmar and planted them at Aapchaur in the Nepalese Gulmi district. However, it went undiscovered for about 40 years before spreading from one farmer to another in the late 1970s. The government of Nepal purchased coffee seedlings from India in the late 1970s and distributed them to farmers for their commercial production. In the middle of the 1980s, the Manigram, Rupandehi district, location of Nepal Coffee Company was founded. having its The coffee producers were able to market their product thanks to the establishment. Nepali coffee has become more popular on both the domestic and global markets since 2002. Currently, coffee is planted in 40 districts of Nepal's mid hills, with 21 districts having commercial cultivation (NTCDB, 2021). For the arabica variety, the ideal conditions are 20–240°C, 1200–1500 mm/year, and > 1000 masl, respectively (FAO, 2005). Tanahu, Palpa, Gulmi, Parbat, Lalitpur, Kaski, Baglung, Gorkha, Sindhupal-chowk, Kavre, Syangja, Argakhanchi, and Lamjung are the principal coffee-growing districts of Nepal (DoA, 2017). The entire area used for coffee production is 2761 hectares, and the total amount of green beans produced is 530 MT in the 2019–20 season (MoALD, 2021). This is roughly 1.87 percent of the original research article. Nepal's total land area. A little over 65% of the coffee produced in Nepal is exported, with the remaining 35% being prepared, packaged, and sold on the domestic market (Tiwari, 2010). Every year, Nepal buys coffee from countries including Italy, Korea, Brazil, Thailand, Myanmar, and India. The sole source of 99% of all coffee imports is India. Due to its favourable temperature and geography, Nepal has a significant potential for producing coffee, particularly in the mid-hill region. Because it is grown at a higher altitude and has a unique flavour, aroma, and body, Nepali coffee is regarded as a specialty coffee (NTCDB, 2021). The combined action is what gives Nepali coffee its distinct flavour and aroma. of the soil in which it is grown and the chilly autumns of the mid-hilly region. Nepalese coffee, according to a National Tea and Coffee Board assessment, is the seventh-tastiest coffee in the world (Shrestha, 2014). Nepalese highland and organic coffee are well-known in overseas markets due to their superior cupping quality and enticing aroma (Poudel et al.,2009). Compared to other cash crops, coffee is nearly three times more profitable, and grain crops are nearly five times more profitable (Dhakal, 2004). In Nepal's mid-hills, the coffee industry may be a suitable and financially viable company (Acharya et al.,2015). Cash crops are crucial in raising the standard of living in underdeveloped nations like Nepal. standard of the farmers in rural Nepal. Among the various cash crops grown in Nepal, coffee is a low

volume, high value product with enormous potential for the country's trade surplus. The GDP contribution of coffee is only 0.04 percent (PSS, 2004). There are 1790 agricultural houses spread across the 160 ha of the total coffee production area in Gulmi. This region produces 35 MT of green beans annually at a yield of 219 kg/ha (DoA, 2017). This information demonstrates the importance of coffee in the Gulmi district's farming system. Coffee farmed in rural Nepal is commonly thought of as being "organic by default" because it is difficult for farmers to obtain fertilisers, insecticides, (2018). Nepalese coffee frequently costs 3.5 times as much as Indian coffee on the international market due to its superior quality (Bastola, 2007). Despite playing a significant part in improving Nepal's rural economy, coffee production is currently experiencing a serious setback in terms of marketing and certification. Along with this, there are other issues like low input supply and late input availability, insect pest attacks, irrigation issues, a lack of technical expertise, and weak government backing. There is a mismatch between what policies have indicated and what has been implemented in the actual locations for the promotion of coffee because there are no established marketing channels (Tiwari, 2010). The paucity of coffee research is keeping it from developing into a profitable sector for producers, processors, and retailers (Shrestha, 2004). The prominent coffee-growing region of Gulmi District in Nepal still lacks an economic analysis of coffee production. Therefore, there is a disconnect between research, extension, and coffee growers. The results of this study can help coffee farmers. ers as well as for those who operate in the development sector. The interested parties can build plans and policies to make coffee production a successful business with the aid of this study. There haven't been many studies undertaken in the past. In light of this, this research was created to examine not just the issues facing the coffee industry, but also how they have affected the economics of coffee production and marketing. It is appropriate to do a quick analysis of the current production economics, income activities, production and marketing constraints, marketing structure, and value in Gulmi because it is a significant coffee-producing district in Nepal. addition. The main goal of this study was to determine the economic return from the coffee business and any associated obstacles in Nepal's Gulmi district.

MATERIALS AND METHODS

Area of study In Nepal's Gulmi district, where coffee was originally cultivated, a survey was carried out. Gulmi has a total size of 1149 km² with Tamghas as its administrative centre. At coordinates 28.08890 N and 83.29340 E, you may find Gulmi. There are 268,597 people living in Gulmi (CBS, 2017). This research was done in the four rural municipalities of the Gulmi district: Ruru rural municipality, Dhurkot rural municipality, Satyawoti rural municipality, and Musikot municipality. The biggest concentration of coffee growers in Gulmi is found in Musikot municipality, which has more coffee growers than the other municipalities (P. Gautam, personal-

communication, August 12, 2022). A significant majority of Nepal's coffee exports originate from the Gulmi area, which is well known for its coffee production. Coffee is produced. tion is approximately 24 tonnes in Gulmi (Chaudhary and Bastakoti, 2021). 12 tonnes of coffee were exported from Gulmi alone, and both internal and export demand are increasing there (Nyaupane, 2018). Sample size, sampling method, gathering and analysing data Using a basic random sampling procedure, a total of 100 samples (25 from each rural municipality) were chosen. Primary data were gathered utilising the face-to-face interview (FtF) approach using a pretested semi-structured questionnaire. During the survey, information on socio-economic factors, variable production costs, gross margin, benefit-cost ratio, and coffee profitability index was gathered. To verify the information gathered from respondents, two Focus Group Discussions (FGDs), each on one VDC, and key informant interviews (KII) were completed. Secondary data were gathered from a variety of published articles, government documents, books, websites, and other sources. The gathered information was entered into Microsoft Excel 2013. MS Excel 2013 was used to compute the descriptive statistics like mean and standard deviation. MS Excel 2013 was used to illustrate the data using tables and bar diagrams.

models for analysis utilised in the study Analysis of gross revenue Gross revenue (GR) is the sum of all sales made by a company over a specific time period. No deductions are made from it. It displays a company's potential for sales. Gross sales is another name for gross income. Gross income is calculated as follows: quantity sold (kg) x average price per kg Gross margin evaluation The difference between total variable costs and gross revenue is known as the gross margin (GM) (TVC). It serves as a planning tool for farms when dealing with small agricultural businesses where fixed capital is typically little. Benefit-cost ratio (BCR) analysis compares the present value of all benefits received from the firm to the present value of all costs incurred during the manufacturing process. BCR is a profitability measure.

Analysis of the profitability index: The profitability index compares the total up-front costs and the discounted cash flow to determine how economically feasible the proposed project or production process is. It is the proportion of the initial investment to the present value of the expected future cash flows.

CONCLUSION AND RESULTS

the traits of coffee farmers Male members (51.16%) outnumbered female members (48.84%) by a significant margin (Table 1). In the district, there were more male respondents than female respondents (Table 1). 5.59 families were discovered to make up the research area. In the research area, a considerable difference was identified between the proportion of economically active and non-economically

active people. The population between the ages of 15 and 59 is one that is economically active. In Gulmi, 42.93% of the population was found to be economically active (Table 1). Brahmins made up the majority of household heads in the district, followed by Chhetris (Table 2). Hindus made up the majority of families, followed by Buddhists and Christians (Table 2). The majority of the family members were discovered to be enrolled in elementary school.

education. After completing secondary school, around half of the members enrolled in the district's higher education (Table 2). The level of education had a big impact on Gulmi's decision about coffee processing processes (Paudel and Parajuli, 2020). The bulk of the household members were discovered to be involved in farm production (Table 2). In Gulmi, coffee was found to have an area, production, and productivity of 7.033 ropani, 1.87 t, and 0.3 t/ropani, respectively (Table 2). In the Gulmi district, there were more male respondents as a percentage than female respondents (Table 1). This outcome is comparable to the research by Karki et al (2018). Khanal et al. (2019) discovered that the household head's gender had no appreciable effect on the productivity of coffee. However, the choice of coffee processing methods was significantly influenced by the gender of the household head (Paudel and Parajuli, 2020). examination of the economics of producing coffee The previous season, an average of 1660 kg of coffee was sold in Gulmi at a price of NRs. 81.50/2.33. Consequently, it was determined that Gulmi's average gross income was NRs. 13532525035.94. (Table 3). Similar to this, it was discovered that the average gross margin was NRs. 9722526627.42 and the gross margin per ropani was NRs. 15675.297189.72. The average BCR of Gulmi was found to be greater than 1 at 2.840.59 (Table 3). The average profitability index for Gulmi was 2.50 1.25, indicating that the business of growing coffee in Gulmi had been successful (Table 3). Coffee was determined to account for 12% of annual household income in Gulmi. limitations in coffee production in terms of production and marketing The severity index was used to compare and rank the district's issues. The district's most pervasive production issue was attack by insects and diseases.

Conclusion

Coffee is a lucrative business in Gulmi, as demonstrated by the B/C ratio and profitability index. In Gulmi, net profits and gross margins are also above average. However, due to insect pest invasion and lack of fertiliser, coffee production and productivity were determined to be lower than their potential. There is a lot of room for growth in the coffee industry in Gulmi, with higher gross and net margins. Due to the fact that the coffee produced in Gulmi is organic and processed mostly using wet processing techniques, the region has a significant export potential for the commodity. However, coffee is grown. Customers are quite dissatisfied with the present market price, thus it is important to monitor the coffee value chain to ensure that growers are paid fairly for their goods. Cooperation is required amongst all parties engaged in the

value chain of coffee. with one another. Additionally, the white borer has raised the risk of losing coffee in Gulmi. Gulmi needs to adopt an innovative production system that includes high-quality seedlings, orchard maintenance, coffee processing, and marketing.

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