

Impact of Small-Scale Dairy Business on Economic Empowerment : A Study of Birendranagar Municipality, Surkhet

Received 28 July 2026

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Acceptance 13 September 2026

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Published October 2026

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Abstract

The study focuses on the role of small dairy business for economic empowerment of household in Birendranagar Municipality Surkhet of Nepal, particularly in terms of income, economic status, employment and financial self-reliability. The article relies on the evidence from the questionnaire of the study, descriptive results, the theoretical discussion of the study, and the empirical literature 85 respondents have been used as an analytical basis in this presentation; the percentages of responses are not changed and the frequencies are proportionately re-constructed to add up to 85 in the tables. The results shows that dairy business is not a marginal business and it is playing a significant role in the livelihood of the households. The evidence reported indicates that 88.2% of entrepreneurs derive 30-70% of household income from the dairy activities and 65.7% view dairy as a stable source of income and a reduction of dependency on a single source of income. Saving capacity is also improved with 64.7% saving regularly and 64.7% having a surplus of income they could save. Enhanced purchasing power and economic security has a positive effect on economic well-being and 69.4% make a connection between the improvement in liquidity and economic security with dairy activity. Employment impacts are also considered to be significant: 70.6% recognize the importance of self-employment as well as wage work, and 69.4% affirm that both women and youth are involved in dairy activities. Women's economic autonomy is especially apparent, with 65.9% linking dairy to both autonomous income and enhanced control over financial decisions in the household. The study suggests that small-scale dairy entrepreneurship is a viable means of economic empowerment provided there are assured markets, low-cost inputs, veterinary services, financing, skills development and effective cooperatives.

Keywords: Small dairy farming enterprises; Economic empowerment; Household income; job creation; financial independence

Introduction

Economic empowerment is equipping people to make more money, build assets, take economic decisions and engage in economic processes more confidently and independently. The concept is multidimensional as income is not the sole measure of empowerment, it is also about resources and agency that enhance household welfare in the form of achievements, as well (Kabeer, 2021; UNDP, 2023). Developing countries have particular relevance of self-employment with agriculture or livestock because they allow having an entrepreneurial activity that coexists with home production, savings, and with the participation of household members in the local markets. Within this context, it is important to emphasize the role of dairy small-scale enterprise as milk can be sold regularly and often and therefore offers a more regular income stream than many seasonal farm enterprises.

Agriculture is a key sector of livelihoods in Nepal and livestock a key sector of household livelihood activities. This study is in Birendranagar Municipality in Surkhet District, Karnali Province where the growth of dairy activities is encouraged by development of markets and improvement in road connectivity with the growing urban demand. The study presents a municipality where over 300 small-scale dairy farmers were registered, most of which have two to twenty farm animals with many selling milk to households and restaurants, to sweet shops or collection centres, and to local dairy cooperatives. In addition to farm production, dairy activity also includes marketing, transportation, input support to cows, animal health services and processing, among other things.

The economics of small-scale dairy enterprises is associated with regularity of income. The regular sale or even daily sale of milk can enhance liquidity and support households to cover recurrent expenses. Reliable cash flow can also help with saving, reinvesting, a child's education and building assets. Its concept, however, bridges the linkages between dairy operations and the economic or financial wellbeing of households and employment generation and economic independence. They involve regular earnings, earning diversification, savings, building assets, financial services, as well as family labour engagement, autonomy over women's income, youth inclusion and cooperative benefits.

In addition, according to the literature, the empowerment effect of dairy is influenced by market access, technical skills, access to credit, institutional support, gender relations, and other factors. Dairy co-ops may boost their bargaining power, collect cooperatives, build greater access to services and provide for savings and credit. Meanwhile, women can have economic influence as milk sellers and as dairymen, and empowerment is more powerful if they have an influence on their earnings and when they can have a say in the management of the money than when they are simply providing labour. The knowledge to feed, breed, improve the health of animals, process them properly and learn to manage their businesses is also of concern as it results in higher productivity and profitability.

Although it has potential, problems such as seasonality in production, unreliable prices, limited veterinary support, feed-cost concerns, as well as the lack of cooling and storage, and finance, pose a challenge for entrepreneurship in this sector. Due to these limitations, the benefits and challenges must be evaluated. The aim is not only to generate income for the dairy business, it is to improve the economic security, income, savings, assets, employment and financial autonomy of the household. This article tries to combine these sectors, and thereby reach an understanding on the role of small-scale dairy business as a tool of economic empowerment in Birendranagar Municipality.

Objective

To exam the effect of Small & Cottage Industries Dairy on the economic empowerment of entrepreneurs in Birendranagar Municipality, Surkhet.

Review of Literature

The theoretical context is the institution of economic empowerment, the need of which is the central lens for understanding the relation between participation in enterprises and improvements to welfare of households. Kabeer (2021) defines empowerment as a process with three aspects: empowerment as resources, empowerment as agency, and empowerment as achievements. In a dairy context, resources include income, dairy assets, saving, and financial services; agency relates to their production, sales, investment, and financial decisions at the household level; and achievements are

better nutrition, better asset accumulation, better economic security, and less vulnerability. This approach is relevant as an advocate for dairy enterprise has an opportunity to impact all three aspects of the problem.

The Sustainable Livelihoods Framework can also provide some context to this, as to why livestock-based entrepreneurship can have a wider economic impact. According to Scoones 2022, the livelihood assets that interact are human, social, natural, physical, and financial assets. The human capital knowledge and skills, natural capital (land and water resources for forage), physical capital (livestock buildings and farm machinery), social capital (cooperatives, markets and social networks), and financial capital (savings and income from enterprises) are all essential components of dairy production. Strong positive "reinforcing" relationships may then be developed within the successful dairy business, which increase productivity leading to increased income, increased income leading to increased saving and investment, and increased saving and investment leading to increased asset building and increased resilience.

The theory of entrepreneurship introduces an innovation perspective and an Economic-development dimension. Schumpeterian thinking has been translated to the literature of today's entrepreneurship, with entrepreneurs being described as individuals who put elements together, innovate, and bring opportunities to the marketplace. This can happen in small-scale dairy operations by means of better breeds, better feeding, new feed out, value addition, processing, and efficient utilisation of family labour. Naudé (2022) points out that entrepreneurship has the potential to generate linkages, employment and income on a broader economic platform. Given the demand for feed, vet care, transportation, equipment, processing and retailing, dairy can have impacts on the household, as well as beyond.

According to gender and empowerment theory, "buy into" the economy is not the same as empowerment. Women can be involved in the production labor force without owning their own enterprises. Women can be actively engaged in production labor force but without the control on income. Kabeer (2021), Cornwall and Edwards (2020) and Njuki and Sanginga (2021) argue that economic resources and decision-making are essential to empowerment. In the dairy industry, the separation of women from various farming activities is especially relevant given that they are often involved in milking, feeding, processing and marketing. When women own milk sales or have authority over decision-making related to milk investments, dairy can enhance the bargaining power and financial independence of intra-household decision-makers.

Another relevant factor is the accessibility of markets. According to the Structure-Conduct-Performance approach, the structure of the market seems to determine the conduct of producers and the performance of the economy. The findings of Poole et.al. (2021) and the conceptual framework developed in the study highlight the importance of access to organized buyers and cooperative groups to mitigate transaction issues and enhance producers' negotiating power. Dairy co-operatives can consolidate milk, harness logistics in collection of milk, strengthen milk price negotiation and link producers to thrive of credit and savings. In the same way, Dangol and Karki (2023) also documented Nepalese cooperative members as having better milk prices and credit facilities and technical support.

Financial inclusion theory is yet another avenue used to explain the link between regular income from the dairy and empowerment. According to Demirgüç-Kunt et al. (2022), finance provides financial intermediation services such as saving, credit, and insurance to help people handle risk and undertake productive activities. Dairy can contribute to this objective also because of regular sales, which generates predictable cash flows, the livestock can be an asset base and cooperative membership can help link dairy producers with financial services. Greater financial independence and involvement in household decision-making were associated with dairy income and institutional access by dairy entrepreneurs in Chitwan, Nepal, studied by Sharma et al. (2021).

A cornerstone of human capital theory is the value of investing in knowledge and skills. Schultz's human-capital theory and later its use in rural enterprise seem to indicate that education and training boost productivity and earning potential. Technical training on feeding, breeding, disease control, herd management, record-keeping, and production and marketing can improve enterprise productiveness in dairy. Skill development and access to technical services are also highlighted as critical pillars to sustainable employment and income access in the study.

Empirical studies give more general evidence of the role of dairy in the economy. Herd size, education and market access affected the small-scale farmers' dairy income, as reported by Ahmad et al. (2020) where dairy provided a significant portion of the income in Punjab. According to Rahman and Hossain (2021) the operation of the small-scale dairy enterprise was a significant contributor to household income, with high feed costs but showed good economic viability of the farm due to fluctuations in feed prices. In Ethiopia, cooperative members produced greater dairy income (along with better dairy prices and reduced input costs and training), based on the findings of Getachew et al. (2021).

Dairy does also contribute to the employment and resilience impacts. Kiiza and Walimbwa (2022) noted that they identified roles in production, collection, processing and marketing in the dairy value chains while engaging in employment. Omondi et al. (2023) Correlated youth employment with dairy value-chains and found credit, land, and skills as the most significant constraints. To conclude the conclusion by Tripathi and Singh (2022) suggested that, on-going dairy development can push for successful and long lasting asset buildup. Dairy adoption was correlated to reductions in poverty probability and increases in food consumption by the household (Mumba et al., 2022), and to lower income volatility among dairy households during drought (Kumar et al., 2024).

More recently, there are emerging links between the dairy enterprise, digital market access, food security, financial inclusion and climate resilience. Results suggest positive contributions of dairy income on nutritional status, food spending, food diversity scores in Nepal (Adhikari et al., 2024). The financial inclusion of dairy farmers in rural areas was found to be higher than that of the rural dairy entrepreneurs by Hassan and Mohammed (2025).

Overall, the literature suggests a multi-dimensional view of empowerment through dairy. Income is the first step; deeper impacts are on savings, asset building, financial inclusion, employment, women's decision-making, youth involvement, and resilience. Concurrently, market risk, feed cost, technical constraints, infrastructure shortages, and income inequality can dilute these advantages. This

evidence thus justifies examining the dairy business as a system of livelihood and enterprise, and not just milk production.

Methodology

The dairy entrepreneurship survey of Birendranagar Municipality has been analyzed using a quantitative, descriptive and cross-sectional approach. The structured questionnaire data were summarized by using the frequency and percentage method and was supported by secondary sources. In this article, 85 persons make up the analytical basis and the percentages of sources are retained as is, while the frequencies are calculated to total 85. The design of the study area and variables is retained to the original research design.

Results and Discussion

The results show a strong association between small-scale dairy activity and economic empowerment. The key patterns relate to income contribution, savings, economic well-being and financial inclusion, employment, women's economic participation and asset building over time. The tables below are based on the percentages of the source and an 85-respondent presentation basis.

Respondent and Business Profile

Table 1

Age composition of entrepreneurs

Response option	Frequency	Percent
20-30 years	15	17.6
31-40 years	35	41.2
41-50 years	24	28.2
Above 50 years	11	12.9
Total	85	100.0

Source: Field survey, 2026

As can be seen in the table, the majority of dairy entrepreneurs are in economically active age groups. The largest proportion, 41.2%, falls within 31–40 years, followed by 28.2% aged 41–50 years. Similarly, 17.6% are aged 20–30 years, while 12.9% are above 50 years. Overall, it was found that dairy entrepreneurship is an important livelihood activity of adults who have good physical ability, hands-on experience, and household responsibilities.

Table 2

Monthly income from dairy business

Response option	Frequency	Percent
Less than Rs. 20,000	14	16.5
Rs. 20,000-40,000	33	38.8
Rs. 40,000-60,000	26	30.6
More than Rs. 60,000	12	14.1
Total	85	100.0

Source: Field survey, 2026

The majority of business women and entrepreneurs in the dairy sector are moderate in income, as shown in the table below. About 38.8% earn Rs. 20,000–40,000, while 30.6% earn Rs. 40,000–

60,000. At the same time, 14.1% of these make more than Rs. 60,000, and 16.5% earn below Rs. 20,000. In general, dairy enterprises help farmers' households to sustain their livelihoods and incomes, ensuring their financial sustainability and empowerment.

Household Income and Economic Well-being

Table 3: Dairy income contribution to total household income

Response option	Frequency	Percent
Less than 10%	3	3.5
30-50%	42	49.4
50-70%	33	38.8
None of the above	7	8.2
Total	85	100.0

Source: Field survey, 2026

The table indicates that dairy farming makes a significant contribution to household income. Almost half the respondents 49.4% said that dairy accounts for 30-50% of total household income, while 38.8 % said it accounts for 50-70% of total household income. So, 88.2% rely on dairy for a significant portion of their income. Only 3.5% get less than 10%, and 8.2% reported other income contributions. Dairy is a significant contributor to household income and takes care of their regular expenditure, investment, financial independence, and economic welfare as a whole. However, reliance on income from dairy products can be an obstacle due to market price fluctuations and production risks.

Table 4

Relationship between dairy business and household savings

Response option	Frequency	Percent
Consistent monthly savings	14	16.5
Savings depleted by investment costs	5	5.9
Surplus income for savings	11	12.9
Both consistent savings and surplus	55	64.7
Total	85	100.0

Source: Field survey, 2026

According to the table, dairy business has a positive influence on family savings. Approximately 64.7% of the respondents said they saved regularly during the month and the remaining 16.5% of the respondents indicated they also saved regularly during the month but also had excess income each month, and 12.9% of the respondents indicated they had excess income each month but did not save regularly during the month. 5.9% said costs of investments have used up savings. Dairy earns the household some sense of financial security, which allows them to save for other household investment needs, such as the growth of the herd, education, health care, and other needs.

Table 5

Impact on overall economic well-being

Response option	Frequency	Percent
Improved purchasing power	13	15.3
Economic security/reduced vulnerability	11	12.9
Decreased income due to operating costs	3	3.5
Both purchasing power and security	58	68.2
Total	85	100.0

Source: Field survey, 2026

The overall household economic well-being is positive when dairy businesses are present, as expressed in the table. For the majority, 68.2% reported an improvement in purchasing power; in an economic sense, 15.3% had improved purchasing power, and 12.9% in an economic sense. Rising operating costs had only a small negative impact on the income of the 3.5% that felt its impact. In sum, the milk industry's impact on household welfare includes better consumption opportunities, increased financial security, and better opportunities to cover education, health, housing, and other critical expenses.

Table 6

Economic indicators most directly improved by dairy business

Response option	Frequency	Percent
Cash flow/liquidity	14	16.5
Access to credit/loans	11	12.9
Import-export balance	1	1.2
Both cash flow and credit	59	69.4
Total	85	100.0

Source: Field survey, 2026

Dairy businesses generate better cash flow and access to credit, the table shows. Slightly over half of the respondents 69.4% noted that their cash flow improved and access to credit/loans 12.9% did as well. Better access to cash flow/liquidity 16.5% and improved cash flow 69.4% were noted by a majority of respondents. There was only interest in the import-export balance of foreign trade at 1.2%. Overall, if milk is sold regularly, incomes improve, liquidity is increased, and it can help to improve entrepreneurs' footing in requesting loans and financial services to expand business or for household use.

Employment and Financial Independence

Table 7

Contribution of dairy enterprises to employment generation

Response option	Frequency	Percent
Self-employment	15	17.6
Wage employment	9	10.6
Reduced agricultural employment	1	1.2
Both self- and wage employment	60	70.6
Total	85	100.0

Source: Field survey, 2026

From the table, it can be seen that the dairy sector has a major contribution to job creation. Most respondents 70.6% indicated that dairy offers both self-employment and job opportunities. Likewise, 17.6% mentioned self-employment, and 10.6% said they are wage employees. Only 1.2% reported a decline in farm jobs. On the whole, dairy companies offer job opportunities for family members, entrepreneurs and employees. It boosts the income of the household, local labour input, and livelihoods in the local economy.

Table 8

Family members typically employed in dairy business

Response option	Frequency	Percent
Women in milking/processing	14	16.5
Youth in animal care/marketing	10	11.8
Only male household heads	2	2.4
Both women and youth	59	69.4
Total	85	100.0

Source: Field survey, 2026

Table shows high level of family involvement in dairy businesses. Of the respondents, about 69.4% reported engagement of both women and youth. Women are chiefly involved in milking and processing activities while youth are involved in caring of animals and marketing. Further, 16.5% indicated women involvement and 11.8% youth involvement. The male heads of households accounted for just 2.4% of the cases. Dairy farming fosters family employment and participation in various age and gender groups, generally.

Table 9

Achievement of financial independence

Response option	Frequency	Percent
Personal income without employer dependence	15	17.6
Savings/investment capacity	11	12.9
Increased welfare dependency	1	1.2
Both income generation and savings	58	68.2
Total	85	100.0

Source: Field survey, 2026

The results presented in the table reveal that dairy enterprises can be important in ensuring financial independence of the respondents. Around 68.2% stated this regarding their personal income generation and their savings and investment capacity. Likewise, 12.9 percent considered savings and investment capacity to be the biggest benefit, and 17.6 percent said they had personal income that is not dependent on the employer. 1.2% reported higher dependence on welfare. Overall, dairy entrepreneurship is contributing to economic independence by creating income, increasing the household's savings capability, and enabling them to manage their own investments alongside other livelihood activities.

Table 10

Employment opportunities across the dairy value chain

Response option	Frequency	Percent
Collection/transport	14	16.5
Processing/marketing	13	15.3
Farm-level only	2	2.3
Collection + processing/marketing	56	65.9
Total	85	100.0

Source: Field survey, 2026

As can be seen in the table, not only do dairy enterprises generate employment through output on the farm, but also outside the farm. Most respondents 65.9% mentioned opportunities for both collection and processing/marketing. Likewise, collection and transportation and processing and marketing ranked second at 16.5% and 15.3%, respectively, 2.3 % reported that only farm activities are on employment. In general, dairying has a larger value chain which includes collectors, transportation, processors, marketers, retailers, and some other service providers.

Table 11

Promotion of women's financial independence

Response option	Frequency	Percent
Women control milk-sale income	15	17.6
Independent investment decisions	11	12.9
Dependent on male relatives	2	2.3
Both income control and independent decisions	57	67.1
Total	85	100.0

Source: Field survey, 2026

The table shows that dairy enterprises play a role in women's financial independence. Around 67.1% of the respondents indicated that women also influence milk-sale income and handle their investment themselves. Likewise, 17.6% considered milk income as a form of control, and 12.9% indicated that they made investment decisions independently. The 2.3% reported being dependent on males. Overall, the presence of dairy creates greater women's bargaining power and their participation in making financial decisions and economic decisions in households and businesses.

Table 12

Indirect employment created by dairy enterprises

Response option	Frequency	Percent
Veterinary/animal health	14	16.5
Feed/equipment suppliers	13	15.3
Government agricultural officers	1	1.2
Animal health + input supply	57	67.1
Total	85	100.0

Source: Field survey, 2026

The table below indicates the indirect employment created due to dairy-related activities. Approximately 67.1% indicated they had employment opportunities in animal health services and/or input supply. Furthermore, 16.5% reported veterinary and animal health services, and 15.3% came up with feed and equipment suppliers. The identification of government agricultural officers was done by only a small portion 1.2%. Dairy enterprises create demand for other veterinary services, feed providers, equipment manufacturers, and other components of the local economic network overall, creating a positive benefit.

Investment, Resilience, and Sustainability of Empowerment

Table 13

Effect of dairy income on household investment capacity

Response option	Frequency	Percent
Children's education	15	17.6
Dairy business reinvestment	11	12.9
No household investment	1	1.2
Both education and reinvestment	58	68.2
Total	85	100.0

Source: Field survey, 2026

From the table, it is seen that with the dairy income, the household would be able to save for future use, thus improving their welfare. Most 68.2% reported using income generated from dairy operations for their children's education and to reinvest in their dairy operation. Likewise, 12.9% speculated on business reinvestment, and 17.6% said they had invested in education. Only 1.2% said that they invested nothing in households. Dairy income benefits families to invest in human capital, as well as assets for their businesses, which will help in their future income generation and livelihood improvement.

Table 14

Direct economic benefits of dairy farming

Response option	Frequency	Percent
Income diversification	14	16.5
Food-expense reduction through self-consumption	13	15.3
Complete poverty elimination	2	2.3
Both diversification and food-expense reduction	56	65.9
Total	85	100.0

Source: Field survey, 2026

The table shows that dairy farming offers not only a source of income diversification but also enables producers to save on their household food expenditures. Approximately 65.9% of respondents indicated that they experienced both benefits, with 16.5% citing income diversification, and 15.3% citing reduced food expenses for food self-consumption. Just 2.3 per cent were connected with "total eradication of poverty" and dairy. Overall, dairy contributes to economic security by adding to income sources and reducing costs to households, while not necessarily wiping out poverty in the household.

Table 15

Impact on women's economic contribution

Response option	Frequency	Percent
Independent income through milk sales	15	17.6
Workload without recognition	3	3.5
Control over household financial decisions	11	12.9
Both income and decision control	56	65.9
Total	85	100.0

Source: Field survey, 2026

As evident from the table, 65.9% of the women have an independent source of income and increased control over home financial matters due to dairy activities. At the same time, 17.6% have earned some independent income and 12.9% say they have more decision-making control. Women's economic empowerment is reflected in only 3.5% experiencing workload without recognition, which is indicative of dairy's contribution.

Table 16

Key challenges affecting income stability

Response option	Frequency	Percent
Seasonal production	13	15.3
Price fluctuations	10	11.8
Guaranteed subsidies	1	1.2
Both seasonality and price fluctuation	61	71.8
Total	85	100.0

Source: Field survey, 2026

The table shows that income stability among dairy entrepreneurs is mainly affected by seasonal production and fluctuations in milk prices. A large majority, 71.8%, reported both seasonality and price fluctuations as major challenges. Similarly, 15.3% identified seasonal production alone, while 11.8% highlighted price fluctuations. Only 1.2% considered guaranteed subsidies as a key issue.

These findings indicate that both production and market-related risks significantly influence the stability and profitability of dairy enterprises. Seasonal changes can affect milk availability, while unstable prices may reduce farmers' income and discourage business expansion. Improving access to quality feed, veterinary services, cooling facilities, market information, cooperative marketing, and reliable pricing mechanisms can help reduce these risks. Strengthening financial access, bargaining power, technical skills, herd management, and value addition may further improve productivity, profitability, and employment opportunities.

Conclusion

The present study focused on the small-scale dairy business as a mechanism of economic empowerment in Birendranagar Municipality. The factors analysed were dairy contribution to household income and economic marketing and livelihoods; job creation and financial independence. The theoretical basis of the study is based on the concepts of economic empowerment, sustainable livelihoods, entrepreneurship, gender empowerment, financial inclusion, market access, and human

capital. Integrated theories provide perspectives that offer an explanation of how a seemingly small family business can impact income, assets, savings, employment, bargaining power, and resilience.

The results show that the dairy business is economically significant for most participating households. Income distribution is reported as: 38.8% earn Rs. 20,000–40,000 per month from dairy, while 30.6% earn Rs. 40,000–60,000. In addition, 88.2% earn 30–70% of their total household earnings from dairy. This makes dairy a substantial source of income. It also generates a steady stream of income, enhances liquidity, and diversifies the sources of cash flow.

The savings results corroborate the results of the income analysis 64.7% say they invest in monthly savings and have extra funds after paying their basic needs. Economically prosperous people are those who have economic security and purchase power; 68.2% said they had both. For financial inclusion, 69.4% also link the dairy with better cash flow, and better credit and loan access.

There are wide-ranging employment impacts. Dairy contributes both through self-employment and wage employment 70.6%. Women and youth are active farmers, with 69.4% reporting both groups making use of the dairy enterprise. Work is not limited to the farm, but also includes collection, transportation, processing, marketing, veterinary services and input supply. This is an example of a local multiplier effect. Another outcome is financial independence. Around 68.2% possess autonomous income generation and savings/investment capacity. Women's economic empowerment is also high, with 67.1% reporting greater control over dairy income, and 65.7% reporting that women are more autonomous in making decisions about household finance. The results reflect a shift from just participating to stepping into economic agency.

Concurrently, there are significant limitations uncovered. 71.8% of respondents identify both seasonal milk production and price fluctuation. This is dependent on improved feed, better production management and veterinary support, organized markets, value addition, finance, and cooperative services for empowerment to be sustainable.

First, small-scale dairy business is a major household income source: 88.2% of respondent report dairy contributing 30–70% of total household income. Second, dairy increases savings, 64.7% say they do save and have surplus income after basic consumption. Third, 68.2% link dairy to increased purchasing power and greater economic security. Fourth, 69.4% point to simultaneous liquidity and access to credit improvements. Fifth, 70.6% report creating jobs through both self-employment and wage jobs. Sixth, women and youth are strongly integrated into dairy operations, with 69.4% reporting participation of both. Seventh, 68.2% state that their financial independence comes from autonomous work income and financial reserves from savings/investments. Eighth, 67.1% agree that dairy encourages women's financial independence by giving women some control over their income and their choices about investing. Ninth, dairy employment is not limited to milk production but also includes supportive value chain employment, thus proving the broad economic impact of dairy. Seasonal production fluctuations and input prices are the most critical risks to stable income. Tenth. In general, this is evidence of the contribution of dairy entrepreneurship to economic empowerment, including other income, savings, employment, financial inclusion, agency, and resilience pathways.

The study findings suggest that small scale dairy business serves as a viable option to strengthen economic empowerment in the context of Birendranagar Municipality as it is a means of generating

income, creation of employment, accumulation of saving, financial inclusion, formation of assets and enhanced economic autonomy. What makes it special is that it contributes to recurrent household expenditure through frequent cash flow from milk sales, as well as from saving and investment. The increased proportion of household income coming from dairy also reflects the fact that it is not just a sideline enterprise but one that represents a core livelihood source of some households. Empowerment effect is more expansive than income. Dairy enterprises tap into family labour resources, foster self-employment, provide wage employment, and increase demand for collection, transport, processing, veterinary, feed and equipment services. Women and youth participation reflects the potential of dairy to create intra-household and community-based economic opportunities. These depict economic agency, not simply a contribution of labour, and for that reason women's control of income and their role in decisions about investments are particularly relevant. The benefits are not automatic or guaranteed, however, the benefits are not risk-free. Problems with seasonal production, feed availability, veterinary management, price volatility and infrastructure can lead to loss of profit and income security. Improvement of enterprise quality and market functioning is thus the most appropriate development strategy in addition to increased dairy numbers. The value chain strengths of small-scale dairy farmers can be improved with the support of better breeds, scientific feeding, animal health, underpinning infrastructure for cold chain, technical trainings, digital market information, accessible credit, cooperative development and value added processing. As per the results, it has been concluded that small-scale dairy business can be considered to be an integrated livelihood and economic empowerment plan for the Nepal upland semi-urban area. Its greatest promise is in transforming a family's milk supply to serve as a consistent source of income, savings, productive investment, jobs, and economic agency. Hence, policy and development efforts must concentrate on the whole dairy chain, not just on production. When producers receive fair prices, exercise more power through the value chain, have access to finance and knowledge, and share equitably in decisions and assets in their households and enterprises.

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