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Resilience of women-led agro-based small businesses to the COVID-19 in Nepal

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Key highlights

1. The vulnerability of women entrepreneurs facing multiple risks was exacerbated during the COVID-19 pandemic.
2. During the pandemic, livelihood needs, family well-being and securing income kept the women entrepreneurs motivated to sustain their businesses.
3. The social status of women entrepreneurs, business size, access to loan facilities, and digital technology affected their entrepreneurial orientation, helping them navigate the challenges.
4. The resilience of women-led small businesses during the pandemic was also contingent upon access to social capital, the strength of social networks, and connections with local government.

Abstract

The economic empowerment of women through entrepreneurship is essential for enhancing resilience, particularly in Nepal, where the government and development partners are promoting such initiatives. However, mere participation in entrepreneurial activities does not guarantee resilience, as entrepreneurs face multiple risks including natural disasters, climate change, and market volatility; for women, these are exacerbated by social inequalities. These obstacles can increase their vulnerability, especially during a crisis like the COVID-19 pandemic. The effects of such a crisis vary among women-led businesses: some capitalised on this crisis as an opportunity, while others struggled to survive. In this context, this study examines how entrepreneurial motivation, entrepreneurial orientation, and bonding, bridging, and linking social capital improved the resilience of women-led small businesses during the pandemic. A qualitative case study was conducted with nine women entrepreneurs to explore the resilience of women-led, small, agro-based businesses during the pandemic across the Lalitpur, Kavrepalanchok, and Dhading districts of Nepal. The study found that two enterprises with relatively large business turnovers maintained resilience during the pandemic, while others faced decreased vegetable production and suffered from financial loss. The social status of women entrepreneurs, business size, motivation and

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entrepreneurial orientation, and social capital determined the ability of small businesses to be sustained during the pandemic. Consequently, women entrepreneurs with a weaker social status and limited social networks had to rely on family resources, resulting in persistent vulnerability.

Keywords: COVID-19, enterprises, pandemic, resilience, social capital

1. Introduction

Entrepreneurship has gained traction as a way to empower women economically and to foster resilience (Tambunan, 2009; Bruton, Ketchen Jr and Ireland, 2013; UNDP, 2020). In Nepal, the government and development partners are promoting entrepreneurial activities to strengthen women's economic resilience (Rahman, 2024). The participation of women in small businesses has increased in recent years, with over 29% of the 922,356 establishments being women-owned and a similar percentage of establishments are managed by women (GoN, 2018; Rahman, 2024). This indicates that women are progressively moving beyond conventional roles and contributing substantially to generating employment and supporting the domestic economy (Tambunan, 2009; McMillan, 2017; Hillman and Radel, 2022).

However, women are still perceived as homemakers rather than as innovators or change-makers; thus their entrepreneurial qualities are undervalued (Panda, 2018; Franzke et al., 2022; Hillman and Radel, 2022). Social, cultural, and economic inequalities, hinder women's access to education, business training, infrastructure, technology, and digital literacy (Bushell, 2008; Ozawa and Bushell, 2013; McMillan, 2017; Panda, 2018), making it difficult for them to start, grow, and manage businesses effectively (Franzke et al., 2022).

Furthermore, socio-cultural norms constrain women's freedom to make entrepreneurial choices and access household resources, thereby limiting their entrepreneurial skills and excluding them from productive work and financial resources (Panda, 2018; Hillman and Radel, 2022). As the data shows, the majority of those working in the informal sector in Nepal are women (almost 90.5% of the 37% employed) (GoN, 2018), which can partly be attributed to socio-cultural norms (Panda, 2018; Torres et al., 2023). Informal entrepreneurship often offer flexibility for managing family and business (Powell and Eddleston, 2013; Welsh et al., 2018; Xheneti, Karki and Madden, 2019), but it has limited legal recognition. Consequently, it involves more risk than formal entrepreneurship (Xheneti, Karki and Madden, 2019) and is likely to miss government subsidies and other support that they deserve (Banjade et al., forthcoming). Women entrepreneurs engaged in informal entrepreneurship cannot access finance from formal institutions like banks (Kumar and Singh, 2021), as access to finance from these institutions depends on collateral, audit reports, tax clearance, credit history, business turnover and profits, which informal business owners do not maintain. Consequently, they have to rely on informal sources of funding such as family, friends/ relatives, and cooperatives (Kumar and Singh, 2021; Thapa Karki, Xheneti and Madden, 2021). Complex regulation, burdensome registration procedures, high tax rates, and unsupportive government policies and programmes are the major challenges faced by small businesses (Franzke et al., 2022; Torres et al., 2023), particularly for women-led businesses.

Moreover, climate change and associated events such as drought, cold spells, heat waves, excessive precipitation, and increased plant diseases and pests are threatening the survival of agro-based

businesses, exacerbating the existing vulnerabilities of women entrepreneurs (Joshi et al., 2021; Phuyal et al., 2025). This challenging environment made women even more vulnerable to the COVID-19 pandemic, leading to increased care work, domestic violence, and loss of income (Poudel and Subedi, 2020; UNDP, 2020). COVID-19 affected all businesses due to mobility restrictions, declining sales, financial crises, employment adjustments, and business closure, with 15% of women-owned businesses collapsing (GoN, 2018). However, the impact varied: some women turned this crisis into an opportunity, while others struggled to survive (Kumar and Singh, 2021; Matharu and Juneja, 2021; Ozanne et al., 2022). This study examines the factors that enabled resilience among women-led small enterprises during the pandemic in Nepal. This paper is structured as follows: following the introduction, Section Two describes a conceptual framework and Section Three elaborates the methodology, sampling process, sample participants, and data collection, and analysis as well as the study's limitations. Section Four presents the findings of the research, while Section Five discusses the findings, followed by the conclusion in Section Six.

2. Conceptual framework

This section presents a conceptual framework for small enterprise resilience, specifically women entrepreneurs' resilience to COVID-19. While developing this approach, an overarching perspective on disaster resilience is considered, which further builds on enterprise resilience. Before, delving into the factors influencing the resilience of women entrepreneurs, the concept of resilience is introduced.

The term 'resilience' refers to the capacity of individuals, households, communities, organisations, and systems to anticipate, cope with, adjust to, and transform in response to complex and unpredictable situations like the COVID-19 pandemic (Berkes and Ross, 2013; Cutter, 2016; Paton and Johnston, 2017). It is a dynamic process of successfully adapting to a difficult situation by utilising capabilities that can be developed through experience and learning (Paton and Johnston, 2006; Cutter and Derakhshan, 2020). Resilience entails using both internal and external resources to navigate hardship and bounce forward from the adverse situation (Norris and Stevens, 2007; Bahadur, Ibrahim and Tanner, 2010; Parker, 2020).

Existing research on small enterprises and resilience has typically focused on the personal traits of entrepreneurs and their social capital in both developed and developing countries (Ozanne et al., 2022; Sahi, Modi and Mantok, 2023; Odoch, Namono and Wofuma, 2024). Investigations into the motivation and entrepreneurial orientation of individual entrepreneurs in Nepal remain limited (Bhandari and Amponstira, 2020). There is a paucity of empirical research that investigates how the personal characteristics of entrepreneurs and distinct forms of social capital contribute to their resilience in a pandemic (Tiwari and Shastri, 2023).

This research seeks to fill this gap by investigating the influence of personal characteristics (motivation and entrepreneurial orientation) and three forms of social capital (bonding, bridging, and linking) on the resilience of women-led small agro-based businesses in Nepal.

Examining resilience requires a clear definition and comprehensive variables. For this research, resilience is defined as: "SME's adaptability to disruptions, growth and their ability to seize business opportunities amid a challenging business environment'' (Saad et al., 2021). In this definition, the

core capabilities include adaptability, growth, and the ability to seize business opportunities, which can be classified into coping and adaptive capacities. Coping or absorptive capacity is defined as the ability of a firm or entrepreneur to absorb, buffer, and survive shocks without losing its essential functionalities (Bahadur, Ibrahim and Tanner, 2010). However, the coping capacity may exceed its threshold when entrepreneurs and firms with limited capacity face extreme events such as earthquakes, pandemics and economic crises, in which case they undergo adaptation (Paton and Johnston, 2017). Adaptation is a dynamic process of learning and adjustment at individual, firm, and macro-economic systemic levels (Cutter, 2016; Paton and Johnston, 2017), which enables them to proactively prepare for future challenges and crises. This study assumes that motivation, the entrepreneurial orientation of entrepreneurs, and social capital (family support, social networks, and relationships with formal institutions) contribute to the resilience of entrepreneurs (Figure 1).

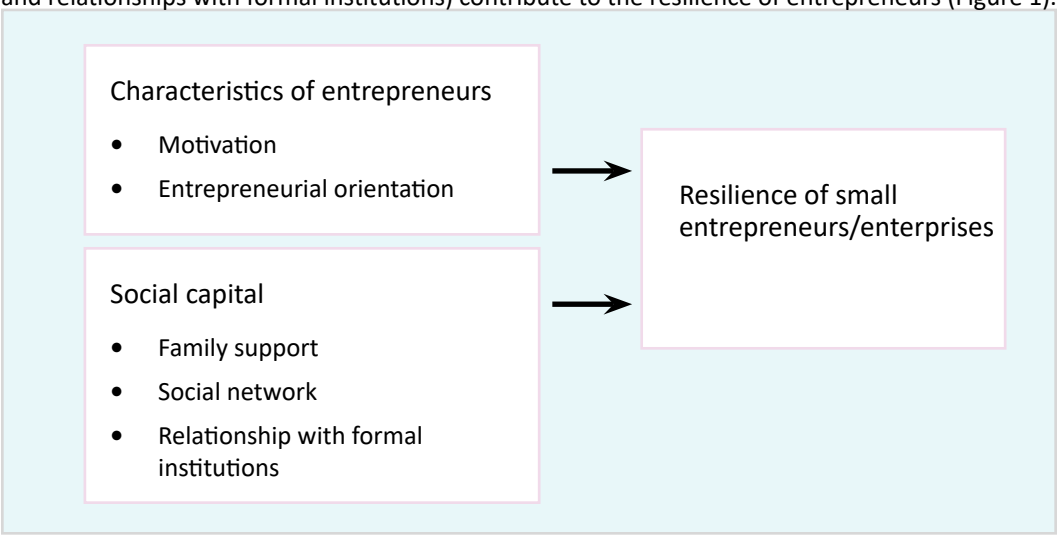


Figure 1: Conceptual framework of factors influencing women entrepreneurs' resilience to the COVID-19 pandemic.

The resilience of an entrepreneur or an enterprise depends on many factors, including the individual characteristics of entrepreneurs and their vision (Bhandari et al., 2022), motivation (Castro et al., 2022), entrepreneurial orientation (defined as an organisation's focus on new growth and value creation) (Saad et al., 2021), and social capital.

Motivation is the internal urge that encourages an individual to start and operate a business creatively and innovatively (Carsrud and Brännback, 2011; Kerr, Kerr and Xu, 2018). Many factors, including personal goals and aspirations, intrinsic and extrinsic rewards, independence/autonomy, family security, lack of financial control, unemployment, and limited work opportunities, influence the motivation for setting up an enterprise, which can be classified into need-based and opportunity-based motivation (Carsrud and Brännback, 2011; Kerr, Kerr and Xu, 2018; Castro et al., 2022; Franzke et al., 2022).

Entrepreneurial orientation refers to the business choices and moves that individuals make to advance and thrive in times of crisis (Verbano, Crema and Scuotto, 2020). Three components make up this multifaceted concept: risk-taking, proactiveness, and innovativeness.

Proactiveness involves launching new brands and products, optimising operations and outpacing competitors, innovativeness focuses on introducing original concepts and methods to create new goods, and technologies, while risk-taking reflects the willingness of managers or owners to accept risk for business growth (Puumalainen et al., 2023).

Social capital refers to the networks, resources, and connections between individuals, groups, communities, societies, and institutions that are formed based on shared norms, reciprocity, and trustworthiness for leveraging assets and resources, thereby enhancing their resilience against shocks (Lin, 2002; Siisiainen, 2003; Paton and Johnston, 2017; Bagheri et al., 2024). The extent to which entrepreneurs and firms build and use social assets, resources, and networks determines their resilience to a crisis (Martinelli et al., 2021). Social capital is key for entrepreneurs to access information, opportunities, and resources (Ozanne et al., 2022).

Social capital includes three types of networks:

i) ''Close ties networks'' or bonding social capital, such as immediate and extended families, that support small businesses in recovering during a crisis (Hawkins and Maurer, 2010; Aldrich, 2012).

ii) ''Network with weak ties'' or bridging social capital, such as women's groups, farmers' groups, vegetable brokers and cooperatives, that facilitate new information and resources that lead to new opportunities for recovery and long-term adaptation (Lin, 2002; Aldrich, 2012).

iii) Relationship with stakeholders or 'linking social capital', such as government authorities, banks, and other institutions that do not have direct relationships with the small businesses but are critical for creating a favourable business environment (Aldrich, 2012; Adam and Alarifi, 2021; Pongtanalert and Assarut, 2022).

3. Methodology

This study adopts a qualitative method to examine the resilience of women-led enterprises during the pandemic in Nepal. Qualitative research is suitable for understanding complex issues through the individual experiences and perceptions of women entrepreneurs in the post-pandemic situation (Guba and Lincoln, 1994).

3.1. Sampling and participants

A women-only sample, similar to other studies focusing on women's experiences and perceptions, was considered. The cases were selected purposively through the snowball sampling method from four commercial fresh vegetable farming hubs in Nepal: Mahalaxmi Municipality and Ward 23 of Lalitpur Metropolitan City (Lalitpur District); Benighat Rorang Rural Municipality (Dhading District); and Banepa (Kavrepalanchok District).

The key features of the cases are summarised in Table 1.

Table 1: Key features of cases

Case number	Location	Age	Education	Marital Status	Ethnicity	Farming Type	Average annual transaction (NPR)	Business Status during COVID-19
Case 1	Lamatar, Lalitpur	Middle aged	Master of Arts	Unmarried	Dalit	Vegetable / Livestock	4 million	Profit
Case 2	Lubhu, Lalitpur	Middle aged	I.A.	Married	Newar	Vegetable	1.5-2 million	Profit
Case 3	Benighat, Dhading	Middle aged	Literate	Married	Dalit	Vegetable	0.3-0.4 million	Loss
Case 4	Benighat, Dhading	38	I.A.	Married	Chhetri	Vegetable	0.4-0.5 million	Loss
Case 5	Benighat, Dhading	42	Secondary	Married / abandoned*	Brahmin	Vegetable	0.3-0.4 million	Loss
Case 6	Bahuntar, Dhading	44	Secondary	Widow	Brahmin	Vegetable / Livestock	0.8-1 million	Loss
Case 7	Dhapakhel-23, Lalitpur	55	Literate	Married	Janajati	Vegetable	0.3-0.5 million	Loss
Case 8	Dhapakhel-23, Lalitpur	36	Literate	Married	Janajati	Vegetables / plants	0.5-0.6 million	Loss
Case 9	Banepa, . Kavre	42	Illiterate	Married/ abandoned	Janajati	Vegetable	0.3-0.4 million	Loss

**Abandoned by spouse*

Although the samples were drawn from agricultural hubs, the sampling criteria prioritised participants from disadvantaged backgrounds based on caste/ethnicity, social status (e.g., widows and women abandoned by their spouses), and poor economic conditions (e.g., joblessness or struggling to sustain livelihoods at the onset of their business ventures). All participants owned agro-based small businesses before the pandemic and continued or ceased operation due to its impacts. This enabled us to collect data from entrepreneurs who had experience running a business both before and during the pandemic.

The sample size was determined based on the principle of data saturation (Bryman, 2016). Twelve interviews are recommended as a guide for reaching the data saturation point (Denzin and Lincoln, 2011). Considering the study's narrow scope and time and resources constraints, a smaller sample size was deemed appropriate.

3.2. Data collection

Semi-structured, face-to-face interviews lasting between 60-90 minutes were conducted in Nepali by the author and researchers, and were recorded with prior permission from January to April 2023. Informed consent was obtained from each participant, and where desired, anonymity was assured. Researchers approached participants to schedule interview times. In the interview, open-ended questions were asked to allow for flexibility and rich, emerging narratives. The interviews, transcriptions, notes and early data analysis were conducted in the Nepali to achieve accurate, credible and reliable findings. The author, a bilingual Nepali-English speaker, translated data into English, to allow for the use of quotations.

Additionally, researchers conducted twelve consultations with local government representatives, women's saving and credit groups involving entrepreneurs, landowners, and development partner representatives to cross-verify the data collected from the interviews.

3.3. Data analysis

The data analysis was based on a systematic inductive approach to concept development. Firstly, interviews were recorded and transcribed verbatim to allow for qualitative analysis. Secondly, open coding was done to reveal the thoughts and meanings of the information that the interviewees shared about the impacts of the pandemic, post-pandemic response and recovery strategies, and challenges and opportunities. Researchers conducted an initial coding that led to the development of first-order codes reflecting participants' terminologies and generating numerous categories. The author consulted with field researchers and agreed upon the first-order codes. From these, the subsequent second-order codes/themes were generated. These codes formed the basis for second-order themes aiming to search for similarities and differences, grounded in interviewees' original language and meanings.

Lastly, observations and emerging themes and concepts were compared against the conceptual framework on women's entrepreneurial resilience to enhance theme identification and improve the qualitative rigour of the exploratory study through an inductive approach.

3.4. Limitations of the study

This study was conducted on a small sample of women-led small agro-based businesses in Nepal; hence, the findings are not generalisable to the broader context of Nepali entrepreneurship, although the limited sample size is supported by previous studies (Hennink and Kaiser, 2022). The participants are from disadvantaged groups working in Nepal's agrarian economy and have family care responsibilities. Therefore, the findings can be contextualised in the broader context of women's entrepreneurship in Nepal.

4. Findings

This study revealed that across nine cases, the two enterprises with higher annual turnovers remained resilient during the pandemic, while others experienced financial losses. Only one (case 7) closed after the pandemic, while eight survived. The analysis shows that business size, social status, and individual traits like motivation, entrepreneurial orientation, and social capital

(including family support, social networking, and connections with local governments) affected the resilience of women-led small agro-based businesses in Nepal.

4.1. Motivation is a prerequisite for business survival during the pandemic

Motivation is essential for business success, especially during tough times like a pandemic. The motivation of women entrepreneurs played a crucial role in business survival during the pandemic, driven by necessity and opportunity factors. Necessity-driven factors encompassed earning a decent income, job scarcity, low income, lack of education, limited livelihood alternatives, work-life conflicts, and unemployment. For instance, Case 2 clarified:

> *As a Newar married woman, managing household responsibilities and working as a clerk in a cooperative, I faced significant challenges, while my spouse was in Korea, the income from my job being the sole financial support for our family, I struggled to balance work with household chores. Consequently, I made a decision to leave my job and transitioned to a small agro-based enterprise for income to better sustain household costs. During the pandemic, I focused on maintaining this business, which became our only source of livelihood.*

This implies that household dynamics, including spouse migration and increased responsibilities, compelled Case 2 to leave her low-paid job for a time-flexible vegetable enterprise. Business continuity during the pandemic was essential for sustaining family livelihoods.

Abandoned and widowed entrepreneurs with limited education and skills, who are the de facto household heads with the sole responsibility for earning a living, viewed agro-based entrepreneurship as a viable income source and a means to support their families amid job scarcity.

However, single parents particularly those abandoned (Cases 5 and 9) and widowed (Case 6) faced significant challenges in securing family livelihood due to a lack of education and skills. They viewed entrepreneurship as a means to provide a livelihood and financial resources for their families and ensure a food supply. While they pursue a decent lifestyle, their socio-economic status largely shaped their engagement in commercial vegetable farming. Some participants highlighted opportunity factors, including the desire for independence, gaining social status, and business ownership, as motivations for entrepreneurial engagement.

Engagement in business considerably improved a woman's status in their households, allowing them to buy property in Dang and support family education in Kathmandu (Case 1). Additionally, the ability to earn independently empowered these women to confront and challenge the negative attitude of the community, such as questioning the notion that ''*a migrant Dalit woman cannot do business*'' (Case 1). Women's entrepreneurship was closely tied to a sense of dignity, particularly for Dalit women (Cases 1 and 3), as they achieve independence and financial autonomy. This shift in resource management has positively affected household dynamics, allowing women to allocate resources for personal use. Support from development agencies and the Agriculture Knowledge Centre (AKC) has further fostered women's entrepreneurial activities, contributing to their economic empowerment.

During the pandemic, motivation alone proved insufficient; businesses had to undergo reshuffling. Entrepreneurial orientation (EO) facilitated the resilience of small agro-based businesses by fostering proactivity, innovation, and a readiness to embrace risks.

4.2. Entrepreneurial orientation enhanced business sustenance during the pandemic

The analysis indicated that navigating the pandemic successfully necessitated proactive strategies and innovative solutions to address the challenges posed by the COVID-19 and adapt to the new circumstances. The participants in the study emphasised that EO is crucial for the resilience of small businesses. During the early stage of the COVID-19 lockdown, women entrepreneurs with larger business were proactive in buying chemical fertilisers and pesticides in anticipation of shortages. Those with annual turnovers between NPR 1.5 - 4 million utilised available cash for these acquisitions (Cases 1 and 2), while smaller farms (annual turnovers around NPR 0.3 -0.4 million) opted for bank loans. As restrictions continued, these entrepreneurs resorted to using locally available manure and organic alternatives to mitigate supply shortages. This shift resulted in reduced crop production and increased production costs. Subsequently, one small business entrepreneur (Case 3) incurred a loss of around NPR 0.7 million.

In contrast to larger enterprises (Cases 1, 2 and 3), smaller businesses with limited annual turnover relied on locally available manure and fertiliser instead of chemical alternatives. This was evident particularly, in the cases of small enterprises operated by abandoned (Cases 5 and 9) and widowed (Case 6) individuals, who faced financial constraints that prevented them from purchasing and stockpiling chemical fertiliser and pesticides. Consequently, they were unable to mitigate production risks, leading to decreased outputs and subsequent drops in both production costs and sales, at the onset of the pandemic.

As the pandemic progressed, local vegetable supply chains were disrupted by blockades, significantly affecting market dynamics. Small enterprises adapted their sales strategies; those with higher annual turnovers coordinated with dealers in Kalimati (Nepal's central vegetable market) to maximise profits. In contrast, smaller businesses faced challenges; notably, a widowed entrepreneur (Case 6) who struggled with transportation limitations, resulting in a reliance on the local market and subsequent financial loss. Abandoned entrepreneurs (Cases 5 and 9) dealt with brokers, experiencing reduced prices and delayed payment, which severely hampered their ability to purchase staple foods, forcing many to subsist on one meal a day.

The extended COVID-19 pandemic led to an increased demand for vegetables in the Kathmandu valley, as Indian products were unable to reach the Nepali market. This situation provided a new opportunity for Nepali entrepreneurs. Three entrepreneurs adapted their businesses to meet the rising market demands by transitioning to integrated pest and fertiliser management and embracing digital marketing. One entrepreneur (Case 1) highlighted the benefits of switching to pesticide-free farming, noting the resulting crops were of higher quality and led to increased sales. Another entrepreneur (Case 8) pivoted her vegetable business into a flower plant nursery.

These transformations were beneficial for larger business that could capitalise on the demand for vegetables amid supply restrictions caused by COVID-19 pandemic. However, small businesses (cases 3, 4, 5, and 6) struggled, often relying on local markets and brokers. Factors such as business size, access to financial resources and digital technology, and the social status of the entrepreneur played key role in their ability to navigate challenges during the pandemic. Widowed (Case 6), abandoned (Cases 5 and 9), and entrepreneurs with poor economic status (Cases 4 and 8) also relied on local markets and brokers.

During the pandemic, while the individual characteristics of entrepreneurs were significant for business sustainability, they predominantly relied on their families for information, the interpretation of the evolving pandemic situation, and the identification of coping strategies.

4.3. Access to family support was key to sustaining business during the pandemic

Prior to the pandemic, women entrepreneurs functioned within a family-business nexus, wherein family power hierarchies, typically male household heads, controlled access to household resources. Throughout the pandemic, women adopted various strategies to secure emotional, physical and financial resources from their families to navigate the challenges and maintain their entrepreneurial efforts. Nonetheless, the extent of this access varied based on their social status (unmarried, married, abandoned, and widowed) and business size.

Access to emotional support: Women entrepreneurs faced significant challenges, prioritising personal safety and family well-being amidst uncertainty. An interviewee (Case 6, a widow) highlighted the isolation experienced as a widow and underscored the importance of her family's health, particularly after losing her father-in-law and her children's battles with COVID. Another interviewee (Case 5, abandoned) noted that COVID-related restrictions severely affected her business, resulting in financial loss due to the inability to transport her produce to markets such as Pokhara and Kathmandu. Consequently, women entrepreneurs felt economically vulnerable during this difficult period. Case 6 (widowed) quoted:

> *The vegetables were ready for sale in the first wave of COVID, but the government declared a lockdown. The local trader was unable to collect and transport the produce to adjacent markets such as Pokhara and Kathmandu. The absence of a cold storage facility led to significant loss, as the vegetables rotted on the farm, resulting in an economic loss of around NPR 0.35 million for me in that season. I recall that it was a painful situation for me with no money to feed my children. My relatives consoled me at that time.*

The uncertainty and significant business losses experienced during the pandemic led to heightened stress and anxiety among entrepreneurs. In such situations, their families, relatives, and friends played a crucial role in helping them to cope with anxiety and despair and the fear of potential business failure.

Access to physical/ labour support: Following the pandemic, women entrepreneurs undertook numerous responsibilities, balancing household chores, caregiving, and business operations. Their strategies for managing this workload varied based on their social status. Married women often sought approval from their spouses and in-laws, leveraging their support to regulate family finances and secure loans for business recovery. By delegating chores and caregiving responsibilities and partnering with their spouses, they alleviated their burdens and gained financial access. Case 7 (a married woman) explained: "We both work on the farm together. My husband is retired from his job, so he helps me to operate this business."

Widowed and abandoned women faced significant challenges, often working 16-20 hours a day without extensive support, resulting in detrimental health effects. Interviewees highlighted the crucial support they receive from their extended or maternal families in managing agricultural

tasks. Case 9 noted the division of responsibilities, with a sibling handling the procurement of pesticides, seeds, and other inputs while they focused on the sale of vegetables. Case 6 (a widow) stated:

> *Once the COVID restrictions eased, vegetable sales in the Pokhara and Kathmandu markets resumed, leading to an increased workload. As a widow, I had to balance taking care of the children and managing business which required working extensively, often getting 2-3 hours of rest per day. My children helped in collecting and transporting vegetables to the collection center, though their help was limited to after-school hours making the situation tough.*

Interviewees also highlighted that there was a lack of mutual support due to many of the neighbours being involved in commercial vegetable farming. The analysis reveals that family assistance, like labour and financial assistance, was provided without any financial obligations. The degree of responsibility sharing varies according to social status. Married women with supportive families benefitted from reduced workload, while widowed and abandoned women faced limitations in sharing responsibilities, primarily relying on their children, which did little to alleviate their overall burden.

Access to financial resources: Access to financial capital is essential for the success of business start-up and sustainability during the pandemic. Women entrepreneurs revealed that they obtained emotional and physical support, and financial resources from their families, and friends, though a minority secured finances from formal sources like cooperatives and banks for business recovery (access to financial resources from social networks/women's groups and formal institutions is discussed in Sections 4.4 and 4.5). Family support facilitated access to financial resources, like savings, and served as a guarantor for women lacking collaterals for loan application.

In response to losses, one entrepreneur transformed her business, and sought financial assistance from family and friends, which allowed easier access to funding albeit often at high-interest rates. Case 8 (a married woman) stated:

> *During the pandemic, I converted my vegetable farm into a flower nursery and borrowed money from my extended family members, though on a high interest rate. It was easier to access loans in the absence of collaterals for bank loans. We could not get a business loan either. Landlords prefer informal negotiations. They don't have to pay tax.*

Access to finances for women varies significantly based on their marital status. Widowed and abandoned women borrowed a small amount from their friends and relatives, whereas women entrepreneurs often depend on family support to access banks loans. Married women entrepreneurs, with the backing of their husbands, are able to arrange the necessary collateral to obtain loans, allowing for a broader range of financial opportunities. This system prevents the need for formal contracts and the extensive paperwork associated with formal institutions. Case 3 explained:

> *My spouse supported me in registering the business and seeking a loan for business recovery after the COVID pandemic. Banks need collateral and guarantors. Usually, property is the main thing for collateral and is owned by my spouse. So, he stood as a guarantor for the loan that I*

sought from the bank.

However, married women often lack property rights to both their maternal and marital homes in practice, despite legal provisions aimed at improving access to property. Consequently, their ability to access property is largely dependent on the spouse and brother. Furthermore, women entrepreneurs face challenges when accessing bank loans, as approval typically requires consent from their spouse or in-laws or brothers to use their property as collateral.

An unmarried single woman (Case 1) and an abandoned entrepreneur (Case 9) faced challenges in obtaining a loan from a bank due to their lack of ownership of property to use as collateral; thus they sought assistance from their brothers to mortgage family property. Although legal frameworks grant property rights to women, societal customs often hinder their ability to exercise these rights. Case 1 explained: "I am an unmarried woman, so I have a property right from my family, but customary rights prevent me from doing so. I took approval from my siblings for mortgaging the land."

As case 1 noted, despite having familial entitlements to property, customary practices necessitated her siblings' approval for mortgaging land. This situation illustrates how entrenched social norms obstruct the use of land and property as collateral for loans.

A supportive family environment is essential for women entrepreneurs, particularly in contexts where access to formal resources is limited. In Nepal, many families tend to restrict women to traditional household roles, undermining their entrepreneurial ambitions. Despite these societal challenges, women in Nepal continue to pursue entrepreneurship, successfully contributing to family's vital needs including education for their children.

4.4. Social networking contributed emotionally and financially to sustaining small businesses through the pandemic

Social networks such as women's groups, women's cooperatives, and farmers' associations were examined, revealing that seven out of nine interviewed women entrepreneurs formed women farmers' groups. The Food and Nutrition Security Enhancement Project (FANSEP) collaborated with the local government and NGOs to provide technical support for establishment and strengthening of these groups in the Benighat Rorang Rural Municipality. In the Mahalaxmi Municipality of Lalitpur district and Kavre, women's groups formed collectives to access resources from the AKC at the municipal level. Membership in these groups offered substantial benefits, serving as a crucial platform for sharing concerns during the pandemic and fostering a sense of community among women entrepreneurs. Additionally, voluntary support for women from migrant entrepreneurs facilitated integration within the local community, enhancing the overall entrepreneurial environment. An interviewee quoted:

> *I encouraged and supported women involved in farming or purchasing vegetables to pursue entrepreneurship. I volunteered to establish the farms of women members, work on their farms and train them to plant, prepare pesticides, harvest products, etc. It helped me to intermingle with the local community.* (Case 1, unmarried, Dalit woman, migrant from Dang).

On-farm training and coaching facilitated building trust among women farmers in Lubhu, Lalitpur,

leading to the formation and leadership of a women farmers' group.

Women farmers' groups in Mahalaxmi Municipality and Benighat Rorang Rural Municipality are collaborating with local authorities to promote regulatory measures aimed at reducing broker influence. Women entrepreneurs have faced significant challenges in vegetable marketing, leading to increased dependency on local brokers for sales in Kathmandu and Pokhara. This reliance has allowed brokers to gain considerable control over the market, resulting in decreased prices for the products. An interviewee cited: "We met the Ward Chair and discussed the vegetable market pricing situation and the need for regulating brokers and the vegetable market pricing to ensure that women entrepreneurs benefit from fair market practices." (Case 6) However, vegetable brokering is very complex, and the local authorities are reluctant to regulate it.

Women farmers' groups have established a mutual fund by contributing a small amount, such as NPR 50 per member. This fund allows for the distribution of soft loan among the member women entrepreneurs in times of need. The loans have been crucial for supporting business operations and household expenses, particularly, highlighted by women entrepreneurs:

> *We deposit a small amount of money, e.g. NPR 50 per person, every month in our farmers' group which offers soft loans to the women farmers in exchange for a fixed sum that is collected from all the members of the farmers' group. We received soft loans for planting and other household necessities and during the pandemic to sustain the business and run the household.* (Cases 5 and 6)

Creating a source of finance proved useful for women entrepreneurs in hard times. During the pandemic, five women faced difficulties in receiving payments from vegetable brokers, leading to cash flow shortages that impacted both their business and family. To address this financial constraint, women turned to supportive networks for funding. These financial resources facilitated the expansion of their businesses in the aftermath of the pandemic.

Women farmers' groups organised social events such as picnics, observation tours, and workshops aimed at familiarising women members with agro-based technologies. However, activities like picnics had significant impact on Dalit women, who reported feeling excluded. A Dalit woman entrepreneur noted that she was not informed about these events, highlighting potential social barriers that limit participation and inclusivity among different groups within the farming community. Social events play a crucial role for fostering a sense of community. However, caste and ethnic divisions have split women entrepreneurs into Dalit and non-Dalit groups. Despite the legal abolition of caste-related social norms, these practices persist, potentially impacting the collective dynamics in Nepal. Further research is required to fully comprehend the broader implications in Nepal.

Women's groups provided a vital platform for members to voice their anxieties and discuss business challenges during crisis, fostering a sense of community through shared experience and learning. These networks served as a collective entity to advocate for regulating the vegetable market and pricing with municipal government. However, their collective initiatives highlighted persistent caste-ethnic barriers in society, despite their legal abolition.

4.5. Relationships with formal institutions influenced women entrepreneurs' ability to access services during the pandemic

Women's groups and cooperatives played a crucial role in supporting women entrepreneurs during and after the pandemic. By leveraging existing connections with local governments and development partners, these entrepreneurs accessed essential technical assistance such as information, resources, and training. Their collective efforts established prior to COVID-19, allowed them to maintain connections with entities like the National Agriculture Research Centre (NARC), Agriculture Knowledge Centre (AKC) and market players, facilitating access to financial and technical resources crucial for sustaining their enterprises throughout the crisis.

Access to finances: Access to loans from cooperatives proved essential for women entrepreneurs to start and sustain businesses during the pandemic. Many women opted for cooperatives over banks due to latter's stringent mortgage requirements and lengthy documentation, despite higher interest rates with cooperatives. One of them mentioned: "I obtained a loan from a cooperative instead of a bank due to mortgage requirements and a lengthy documentation process to establish and recover business losses though relying on cooperative funding incurred an unaffordable interest rate." (Case 6).

Women's groups formed local cooperatives to provide financial support, often with lower loan thresholds. However, the process still involved legal formalities and the requirement of family consent also added to the burden. According to Case 5: "The small cooperatives have legal formalities to complete: they ask for citizenship, we have to do a loan contract, take consent from family members who are, of course, men. They are also expensive: we have to pay a high interest rate and an additional service charge."

Almost half of these women entrepreneurs operated informally, as the complicated registration process and unaffordable financial requirements discouraged them from formalising their businesses, resulting in a reliance on cooperatives and informal sources.

The migrant entrepreneur (Cases 1) who established her enterprise on leased land benefitted significantly from strong social networks with municipal governments, allowing her to secure land lease contracts prior to commencing the business. Those with formal contracts could access local government subsidies and benefits from organisations like the AKC, NARC and bank loans. Conversely, enterprises lacking formal land lease agreements (Cases 7 and 8), were unable to obtain such support as landlords preferred informal arrangements to evade government tax, thereby limiting access to essential financial resources.

Access to capacity building: The local cooperative alongside the local government and development partner (FANSEP), has facilitated the capacity building for farmers in Benighat Rorang Rural Municipality, which provided essential training in commercial vegetable farming, aiding in business management and planning. Case 5 highlighted:

> *I was involved in an agricultural group under the Food and Nutrition Security Enhancement Project (FANSEP) two years ago. FANSEP in coordination with Municipality and cooperative organised training on commercial agriculture, including support in business incubation, enterprise management, and business planning which helped us to manage our business properly.*

In Lamatar, Lalitpur, the women entrepreneurs' group representing in the Mahalaxmi Municipal Agriculture Committee, has enhanced access to technical support and provide necessary resources such as seeds, seedlings, training for commercial vegetable farming, and subsidies for marginalised farmers, thereby streamlining support requests from the Municipal Agriculture Service Centre. Case 1 stated:

> *I am representing our group as one of the members of the Mahalaxmi Municipal Agriculture Committee, which looks at agricultural issues in the Municipality. It also supports farmers to solve problems and provides seeds, seedlings, and training for commercial vegetable farming and subsidies to marginalised farmers. It is easier for us to seek support from the Municipal Agriculture Service Centre.*

Women entrepreneurs in Lamatar enhanced their skills through capacity-building activities organised by NARC, focusing on integrated pest management and organic farming. This program also fostered women's leadership and community services, facilitated by local volunteer training. An interviewee (Case 1) noted that after receiving training, she actively supported fellow farmers in establishing commercial vegetable farms, later becoming a leader in promoting pesticide-free farming in NARC's support. This initiative not only continued as an ongoing campaign against pesticide use but was further reinforced by COVID-19, which limited access to imported chemical fertilisers. The awareness of health impacts from pesticides and growing consumer demand for chemical-free products, and the personal commitment of women entrepreneurs all contributed to the sustained push for pesticide-free farming in the post-COVID environment.

Following the pandemic, some entrepreneurs (Cases 2 and 3) resumed the use of pesticides along with organic manure and chemical fertilisers to manage production costs and improve yield. Six out of nine entrepreneurs utilised chemical fertilisers, contributing to soil degradation, as relying solely on organic manure proved difficult due to declining livestock domestication. A combination of chemical fertilisers and organic manure was suggested as a solution for enhancing soil quality, increase output, and managing the costs. However, access to necessary capacity-building resources was limited to those who were not part of women's or farmers' groups leaving them in a state of vulnerability (Cases 7 and 8).

Furthermore, women's groups significantly benefitted from opportunities to engage with fellow entrepreneurs, local leaders, municipal authorities, agriculture experts, and national research institutions like NARC. This interaction facilitated skill development and business expansion, which in turn generated seasonal employment within their enterprises.

Access to technical support and technologies: In Benighat Rorang Rural Municipality, local cooperatives with support of FANSEP and the local government, provided agricultural technologies and protective gear, such as boots, gloves, masks, and glasses to enhance women entrepreneurship. Hand tractors were introduced to alleviate ploughing workload, particularly, benefitting women whose male counterparts have migrated for work. These women operated in a group of seven to eight, significantly reducing ploughing compared to manual methods. Case 4 explained:

> *Social networking activities have supported farmers in pursuing entrepreneurship and self-employment. I became the president of an agricultural group through the FANSEP. FANSEP*

trained our group in commercial agriculture, offering help in business incubation, enterprise management, and business planning and provided modern technologies like hand tractors.

The provision of technologies and training in business management significantly bolstered women's entrepreneurship, aiding their resilience to the pandemic.

The AKC at Mahalaxmi Municipality and NARC provided women entrepreneurs Integrated Pest Management (IPM) and advanced water management techniques including drip irrigation and tunnels for seasonal and off-season vegetable production in Lamatar. These initiatives promoted pesticide-free farming and improved vegetable quality and yield. The use of drip irrigation improved water efficiency and crop yields. Tunnel technology created a controlled growing environment, improved pest management, and increased overall productivity. In contrast, canal irrigation was the primary source of water for vegetable farms in Benighat Rorang RM.

The technical supports and technologies implemented for commercial vegetable farming proved invaluable during the pandemic. NARC facilitated the transportation and distribution of seedlings, ensuring that farmers had access to essential agricultural resources in Lamatar of Mahalaxmi Municipality. The combination of seed availability, previous training in practices like IPM and drip irrigation alongside the local demand for vegetables, empowered women entrepreneurs to maintain their farming activities. Additionally, the scarcity of chemical fertilisers led to a heightened interest in IPM and pesticide-free farming methods.

Access to digital technology: During the prolonged COVID-related mobility restrictions, women entrepreneurs turned towards digital marketing platforms to connect with commercial vegetable entrepreneurs agro-vets, vegetable dealers, and brokers. However, only a few women entrepreneurs utilised these platforms to enhance their sales. Notably, those with higher annual turnovers (Cases 1 and 2) capitalised on the pandemic, increasing online sales and leveraging social networks to mitigate the business impact. They shifted to online product marketing, branding their products as pesticide-free, and establishing direct links to vegetable markets like Kalimati and Pokhara. Additionally, some entrepreneurs accessed market and pricing information via digital means, allowing them to sell at retail price rather than lower broker rates. However, with the easing of pandemic and the influx of Indian vegetables, prices fell, forcing them to revert to relying on brokers for products sales.

Women entrepreneurs from poor economic backgrounds, abandoned and widowed entrepreneurs operating informal enterprises (Cases 4, 5, 6, 7, and 8) faced vegetable sales challenges during the pandemic. Despite having access to information and digital technology, they relied on local brokers for sales, which often resulted in inadequate pricing and, instances of no payment. To prevent such issues, it is essential for small businesses to register and secure Permanent Account Number (PAN) according to E-commerce Act 2025. However, this process requires tax payment and completion of paperwork for tax exemption.

Access to insurance: Nepal Government subsidises crop and livestock insurance policies to assist farmers and entrepreneurs in managing risk from natural disasters and pests (Subedi and Rijal, 2024). However, the adoption of these policies has been limited, with only two higher turnover entrepreneurs acquiring insurance. During the pandemic, the adverse weather events caused

significant damage to their crops and infrastructure, leading them to file claims. But they faced difficulties in receiving compensation, which was granted only after extensive bureaucratic process. An interviewee remarked on the difficulties of reimbursement process, eventually receiving NPR 300,000 after considerable efforts.

Women farmers are reluctant to purchase insurance due to uncertainty regarding compensation for losses. Marginalised groups including widowed and abandoned women entrepreneurs lack awareness of available livestock insurance policies. Those with some knowledge hesitate to buy due to financial constraints and informal businesses are ineligible for insurance coverage.

5. Discussion

Small enterprises, particularly those led by women, face several daily challenges such as financial constraints, restricted market access, and fluctuating prices, prompting them to adapt their business strategies (Ozawa and Bushell, 2013; Goodrich et al., 2018; Agrawal et al., 2023). The COVID-19 pandemic has intensified these difficulties, introducing emotional and operational hurdles (Poudel and Subedi, 2020; Erdiaw-Kwasie et al., 2023; Torres et al., 2023). Despite these adversities, women-led small businesses have shown remarkable resilience through internal restructuring and strategic adaptations (Matharu and Juneja, 2021; Zutshi et al., 2021). Factors such as personal traits like motivation and entrepreneurial orientation and social capital aligning family ties, social networks, and links with formal institutions have significantly contributed to their ability to navigate this challenging period effectively.

During the pandemic, women entrepreneurs took action to protect themselves and their businesses, as they could neither avoid the COVID-19 risk nor operate as usual; thus, they had to adjust to new circumstances. While adjusting to the new pandemic circumstance, their efforts primarily stem from the necessity for, income, family wellbeing, and resource security, a trend evident in various Asian countries that highlights how adversity often spurs women entrepreneurship (Panda, 2018; Franzke et al., 2022). In Asian countries like Nepal, women's workforce participation is limited with only 28% in formal employment, largely due to socio-cultural barriers that confined to unpaid domestic chores (Alaref et al., 2024). Consequently, many women resort to small businesses as a means of addressing household demands, highlighting entrepreneurship as a vital avenue for generating income, and enhancing family wellbeing and illustrating the significant role of entrepreneurship in their economic empowerment within the context of family run businesses (Katare, Marshall and Valdivia, 2021; Anggadwita et al., 2023).

The COVID-19 pandemic significantly impacted women entrepreneurs and women-led small businesses, affecting both their personal lives and professional endeavors, despite their determination to sustain their businesses during this challenging period. Women entrepreneurs faced several personal challenges, including altruistic pressure, emotional exhaustion, uncertainty and fear of failure, pessimistic attitudes, mental health concerns, fear of infection, and concerns over family health and work-life conflict (Liu, Wei and Xu, 2021; Bagheri et al., 2024).

Professionally, they grappled with employee and customer retention, product marketing and competition, financial loss, a shortage of finance, decreased sales, supply chain disruption, difficulty in meeting credit obligations and business closure (Manolova et al., 2020; Afshan, Shahid

and Tunio, 2021; Anggadwita et al., 2023; Rahayu, Masduki and Ellyanawati, 2023).

Throughout the pandemic, small business owners exhibited entrepreneurial orientation (EO), which includes being proactive, innovative, and risk taking, ultimately strengthened their resilience through business diversification. Women entrepreneurs adeptly assessed the evolving business landscape and implemented strategies to mitigate disruptions caused by COVID-19. Despite relying on government guidance, their proactive approach facilitated the integration of new business practices that challenged conventional routines. This observation supports the findings of Khan et al. (2021), Zighan et al. (2022)and Susanto et al. (2023) by utilising EO to understand small business resilience in crisis.

Further, risk taking strategies enabled small enterprises to adapt their operations, optimise resource use, and respond efficiently to market dynamics, ultimately fulfilling customer needs. Some businesses identified new entrepreneurial opportunities that contributed to increased value within their business ecosystems. However, the social status of women entrepreneurs and their access to financial resources impacted EO. Women entrepreneurs with higher annual turnovers and better financial resources stockpiled chemical fertilisers and resources anticipating the forthcoming crisis and transformed their businesses into flower nurseries and pesticide-free vegetable production. In contrast, socio-economically disadvantaged women particularly widows and those abandoned with limited resources focused on production and sales, which prevented them from risk-taking and innovating, despite their proactive assessment of the business environment to implement changes in their enterprises. The COVID-19 associated disruptions brought forward a research area that was lagging, specifically the resilience of women-led small businesses in the face of major shock compared to the established studies on SME in a stable environment or minor shocks (Puumalainen et al., 2023). The pandemic created an ideal situation for exploring how women-led enterprises might react to major shocks such as COVID-19 (Puumalainen et al., 2023).

The pandemic presented a unique opportunity to explore the response of women-led enterprises to major shocks. Key personal characteristics such as motivation and entrepreneurial orientation were instrumental for navigating the challenges faced by women-owned small businesses. However, these traits and generalised resilience strategies alone were insufficient to tackle the complex challenges encountered (Odoch, Namono and Wofuma, 2024).

Family support played a crucial role, providing financial, moral and physical support during the crisis, with various strategies, employed by women entrepreneurs to seek this assistance (Xheneti, Karki and Madden, 2019; Matharu and Juneja, 2021). They implemented strategies such as balancing business and family roles, and tasks delegation influenced by their social positioning (less powerful and caregiving responsibilities) within households. Married women entrepreneurs shared business responsibilities e.g., dealing with brokers with spouse and domestic chores with families, but widowed and abandoned women faced increased burdens due to lack of support, often relying on children to help. This heightened workload negatively affected their health, compelling them to juggle roles in securing livelihoods, and managing household tasks. The work delegation pattern reinforces traditional gender roles portraying external business activities with masculinity and domestic tasks with femininity (Fonchingong, 2005). This dynamic perpetuates gender hierarchies and justify subordination of women (Ahl and Nelson, 2010), even if small enterprise development

is perceived as a means to challenge entrenched socio-cultural biases (Franzke et al., 2022; Hillman and Radel, 2023).

Women entrepreneurs effectively utilised "bridging capital" by engaging their existing networks to navigate and recover from the impact of the crisis (Matharu and Juneja, 2021; Zutshi et al., 2021; Odoch, Namono and Wofuma, 2024). By leveraging social connections such as women's groups, and farmers' groups, they implemented innovative changes to reduce impact of pandemic and safeguard their families' well-being. These networks facilitated soft loans, created platform for concern sharing, encouraged mutual support and fostered community cohesion, especially in areas like vegetable farming, thereby aligning with earlier research indicating that social networks act as buffers in crisis (Gunasekaran, Rai and Griffin, 2011; Pitas and Ehmer, 2020; Pongtanalert and Assarut, 2022). Despite business closures, women entrepreneurs maintained their business operations remotely by relying on established customer and supply networks, which echoes earlier findings of (Wosiek, 2016; Odoch, Namono and Wofuma, 2024) regarding the importance of social networks for service continuity amidst government-imposed restrictions. This analysis underscores the role of bridging social capital in granting women entrepreneurs access to diverse resources during the pandemic, promoting a culture of reciprocity and resource sharing that further enhanced sense of community and shared learning (Pongtanalert and Assarut, 2022).

During the COVID-19 pandemic, small businesses faced significant challenges due to prolonged closures and restrictions, which adversely affected their survival in pandemic particularly for women entrepreneurs (Torres et al., 2023). In their study, Torres et al. (2023) examined the effects of COVID-19 on women-led businesses, analysing a sample of 40,000 enterprises in 49 countries in 2020. The findings confirmed that women-managed businesses experienced severe impact compared to those run by men due to lack of external support and limited financial reserves. Further, traditional support system such as family and social networks proved inadequate in navigating the pandemic (Adam, 2021), highlighting the importance of external support, or "linking social capital", in reducing the adverse effects of pandemic (Bhowmick and Dwivedi, 2023; Bagheri et al., 2024). Linking social capital is the lose connections and trust developed by individual or groups or community or organisation based on the previous work with formal institutions such as the government (Paton and Johnston, 2006). During crisis, entrepreneurs resort to external institutions such as government and other institutions including insurance companies, and banks to navigate and adapt to the impact of the pandemic (Adam and Alarifi, 2021; Pongtanalert and Assarut, 2022). The findings indicate that over half of the small enterprises relied on informal funding sources due to their unregistered status, which rendered them ineligible for formal financing options. Thus, only a few women entrepreneurs have been able to secure financing from banks and cooperatives, aligning with the findings of Rahayu, Masduki, and Ellyanawati (2023), who note that women entrepreneurs frequently rely on informal funding sources due to lack formal institutional support. They face several challenges when accessing formal institutional assistance, including limited knowledge, lack of collateral, insufficient experience and discriminatory legislations (Chowdhury, Yeasmin and Ahmed, 2018).

The Nepal Government offers subsidies for crop and livestock insurance to aid farmers in mitigating risk of disasters and pests. However, the adoption rate remains low, with only two entrepreneurs securing insurance. Women entrepreneurs exhibit significant reluctance to purchase insurance,

largely due to uncertainties regarding compensation for losses. Furthermore, marginalised groups, particularly, widowed and abandoned women entrepreneurs, lack awareness of available livestock insurance options. Even those who are informed may avoid purchasing insurance due to financial limitations, and informal enterprises are typically excluded from coverage.

The findings reveal that women entrepreneurs who are part of entrepreneurial groups and have connections with government and other institutions benefitted from government-sponsored services and facilities including technologies like drip irrigation and hand tractors, digital tools for online marketing, and technical assistance and capacity-building activities during and after the pandemic, facilitated collaboratively by local government, NARC and development partners. In contrast, those who were outside of these networks faced exclusion from collective processes and struggled to engage with formal institutions. This underscores that entrepreneurs leveraging their linking social capital and connections to external institutions had significantly improved access to financial and non-financial resources (Gunasekaran, Rai and Griffin, 2011; Ozanne et al., 2022; Odoch, Namono and Wofuma, 2024). These findings indicate that women entrepreneurs with access to bonding, bridging and linking social capital are more likely to sustain their businesses compared to those with weaker social networks. This study enhances our understanding of how these forms of social capital improve the resilience of women entrepreneurs during challenging times such as the COVID-19 pandemic.

6. Conclusion

This paper contributes to the understanding of women-led small entrepreneurship and resilience during COVID-19, through case studies in Nepal. It identifies factors contributing to the resilience of agro-based small enterprises focusing on motivation, entrepreneurial orientation, and social capital including bonding, bridging and linking networks. The study suggests that the social status of women entrepreneurs, the strength of their social networks, significantly influenced their ability to sustain businesses during the pandemic. Those with weaker social status and limited social networks relied heavily on informal funding sources, leading to increased vulnerability.

Future research in Nepal should consider utilising a larger sample size, mixed methods, and longitudinal studies to better understand the intricacies and interrelationships of personal characteristics and social capital in relation to women's entrepreneurship during crises such as the pandemic. Additionally, exploring the interplay between individual attributes, social capital, and macro business environment could provide valuable insights into these factors collectively impacting women entrepreneurship in challenging times.

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