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From Collectivism to Sustainability via Social Capital: Case Studies of Three Social Enterprises from India

Shahidur Rashid Talukdar,[1] and Iftekhar Alam[2]

[1]Center for Engineering Excellence and Discovery, Virginia Tech, 220 Gilbert Street, Blacksburg, VA, 24061, USA
[2]Department of Social Work, Pondicherry University, R Venkat Raman Nagar, Kalapet Pondicherry - 605 014, India

shahidur@vt.edu, iftemsw@pondiuni.ac.in. Contributed equally..

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Abstract

The sustainability of socio-ecological systems surrounding us is crucial for our collective future. To achieve sustainability, it is essential to harness various forms of capital, including natural, physical, human, and social capital. This paper posits that developing countries can leverage their abundant social capital—rooted in collectivist traditions—to enhance social, economic, and environmental sustainability. This argument is supported by case studies of three notable social enterprises in India. The watershed development initiatives and natural resource management efforts led by Professional Assistance for Development Action (PRADAN) demonstrate that social capital can significantly improve livelihoods, promote gender equity, preserve natural resources, and encourage ecologically balanced development. The success of Shri Mahila Griha Udyog Lijjat Papad (LIJJAT)—a social enterprise that employs over 45,000 owner-workers—illustrates how harnessing social capital can empower women and promote sustainable livelihoods. Similarly, the achievements of Anand Milk Union Limited (AMUL) showcase the transformative power of social capital in creating a thriving cooperative model that not only serves its 3.6 million members but also supports the livelihoods of its more than 1,000 employees. By helping millions of rural farmers, AMUL is crucial in alleviating poverty and reducing inequality. These examples underscore the significant potential of social capital in driving sustainable development across various sectors in India. Given these organisations' impact, scale, and enduring success, such initiatives can be replicated in many other developing countries.

Keywords: Collectivism, Social Capital, Social Enterprise, Cooperativism, Sustainability, Development

Introduction

Influenced by the United Nations initiatives and various environmental and social advocacy groups, sustainability concerns have received widespread attention from scholars and policymakers since the 1970s. Although scholars have been interested in environmental and ecological sustainability for a long time, interest in the modern notion of sustainability—that includes social and economic dimensions—is relatively new. The initiatives of the United Nations inspired research on energy, ecosystem, and the environment, leading to works such as the Limits to Growth (Meadows et al., 1972)[1], the Stockholm Declaration (Sohn, 1973)[2], Building a Sustainable Society (Brown, 1981)[3]; and Our Common Future (Brundtland, 1987). Sustainability attracts heightened attention from scholars and practitioners because of the challenges posed by climate change and global warming, persistent poverty and increasing inequality, and economic growth concerns.

Following the release of the UN's Agenda 21, policymakers, practitioners, and scholars have proposed numerous strategies for ensuring the sustainability of the socioeconomic system around us. Strategies for sustainable development include top-down approaches—led by international agencies such as the UN and national and state governments—and bottom-up approaches led by communities, towns, cities, and (subnational) regions (Happaerts, 2012; Bruyninckx et al., 2014; Jörgensen et al., 2015)[4, 5, 6]. Several scholars have argued for a meso-level approach to sustainability appropriate at the metropolitan regional level, often including multiple cities, towns, and nearby areas (Talukdar, 2026; Talukdar, 2023; Keeney, 2015; Happaerts, 2012; Dobson, 1999)[7, 5, 8, 9, 10]. Some strategies also emphasize the role of non-governmental actors—private sector firms (Scheyvens et al., 2016; Rashed et

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al., 2021), nonprofit organizations, and other social enterprises (Rousseau, 2019; Pinkse, 2012)[11, 12, 13, 14].

The concept of sustainability includes natural, physical, human, and social capital as the foundational pillars that make sustainability and sustainable development attainable (Serageldin, 1996; Quental, 2009; Talukdar, 2018)[15, 16, 17]. While several scholars have studied the role of social enterprises in advancing sustainability (Rahdari et al., 2016; Jayawardhana & Fernando, 2022; Harsanto et al., 2022)[18, 19], fewer have analyzed the mechanisms through which they leverage social capital to promote sustainability, particularly from a bottom-up or meso-level perspective. We address this gap by focusing on how social enterprises advance sustainable development. Drawing on the premise that collectivist cultures foster social capital (Allik & Realo, 2004)[20], and that social capital, in turn, enables cooperation (Ostrom & Ahn, 2003; Doh, 2014)[21, 22], we argue that social enterprises can act as institutional vehicles that both depend on and cultivate community-based social capital to facilitate sustainability. Through case studies of three prominent Indian social enterprises—AMUL, Lijjat Papad, and PRADAN—we demonstrate how existing social capital can catalyze the formation and operational success of social enterprises, yielding tangible contributions to sustainable development. This research contributes to ongoing debates in sustainability and social capital scholarship, especially in the context of the Global South, where social and human capital are often abundant. Furthermore, we offer actionable insights for policymakers and practitioners seeking to harness community-level resources to nurture social enterprises and promote inclusive, sustainable development.

The rest of the article is organized as follows. In section 2, we review the existing literature and briefly discuss a few concepts germane to this study, which is followed by a discussion of how social capital can contribute to sustainability (in section 3). Section 4 briefly discusses research design. This is followed by three case studies (in section 5) that allow us to demonstrate how social enterprises/nonprofits can utilize social capital to promote sustainability. Finally, in section 6, we summarize our findings and discuss the relevance of these findings to the scholarship and the pursuit of sustainability. We conclude the study by outlining the future considerations and potential opportunities for this type of research.

Literature Review and Conceptual Background

Sustainability and Sustainable Development

Sustainability is complex and multi-faceted, combining ecological sustainability with an emphasis on social justice and quality of life (Talukdar, 2018)[17]. It is often framed as continuity in utility or welfare across generations, with environmental and social justice as key goals (Howarth, 1995; Barry, 1997; Dobson, 1999)[23, 7, 24]. The aim is to ensure a better quality of life for all, now and in the future, while respecting ecological limits (Agyeman & Evans, 2003)[25]. Scholars highlight the balancing act between economic development, environmental protection, and social equity (Campbell, 1996; Wheeler, 2000)[26, 27]. Quental et al. identified five key sustainability goals: sustaining natural capital and minimizing human impacts (Quental, 2000). Although sustainable development encompasses social, economic, and environmental dimensions (WCED, 2021)[28], policymakers have often overlooked social aspects. However, later efforts have attempted to integrate social dimensions into development initiatives (Griessler & Littig, 2005; Bostrom, 2012)[29]. The UN's sustainable development goals now encompass peace, poverty, inequality, justice, health, economy, environment, and ecology, with this study examining how social capital can support sustainability goals, particularly in terms of social development and gender equity.

The concept of social capital

Social capital, long rooted in communal living and mutual support, gained prominence through the works of Bourdieu and Putnam. Bourdieu defined it as the collective resources tied to stable networks of relationships, while Putnam highlighted features of social organizations, such as networks and trust, that enable cooperation for mutual benefit. Community participation is also key (Campbell, 2001; Dempsey et al., 2011)[30]. The OECD describes social capital as shared norms and values facilitating group cooperation (OECD, 2001)[31]. The UK's DFID regards social capital as a crucial livelihood asset, emphasizing its role in providing resources and opportunities. DFID outlines development strategies through (a) networks that enhance trust, (b) formal group membership that promotes shared norms, and (c) relationships fostering community cooperation (DFID, 2021)[32]. Social capital is essential for enhancing livelihood opportunities, natural assets, and community empowerment (Putnam, 1995; Jeevamani et al., 2021)[33, 34]. It serves three functions: bonding, bridging, and linking. Bonding social capital creates close-knit support; bridging social capital connects similar groups for mutual interests; and linking social capital fosters relationships across different social strata (Kay & Pearce, 2003; Woolcock, 2001)[35, 36]. Linking social capital can be viewed as a subset of bridging social capital, which forms linkages or bridges between individuals and groups along a vertical hierarchy (OECD, 2013)[37].

Components of social capital

Social capital is an abstract concept, which is difficult to define. Consequently, scholars have come up with numerous definitions and identified various elements or components of social capital. Table 1 lists components of social capital frequently discussed in the literature. Each column records a set of components of social capital described in a particular study.

Analyzing several definitions of social capital, we identify the most relevant components for our study. Among the many dimensions, elements, and components of social capital discussed in the literature, we consider trust, culture, norms, and engagement essential to conceptualizing social capital. Figure 1 shows four crucial elements of social capital as conceptualized for this paper.

Figure 1. Elements of social capital

Trust is a fundamental aspect of social capital, encompassing generalized, institutional, and interpersonal trust. Culture includes the customs, traditions, and family structures of a society. Norms

Table 1. Components of social capital

Saukani and Ismail (2018)	Portela et al. (2013)	Kay and Pearce (2003)	Harper (2002)
Spirituality/Culture	Institutional trust	Trust	Networks (social participation)
Social networks (informal)	Social trust	Reciprocity and mutuality	Reciprocity and trust (shared norms and values)
Trust	Civic-social engagement	Social networks	Civic participation (co-operation)
Norms	Political networks	Shared norms	Shared norms and values
Social networks (formal)	Social networks	Commitment and belongingness	

involve shared values, reciprocity, and community rules that guide behavior. Engagement in formal and informal networks is essential, as these connections empower community members and foster collaboration. Social capital, comprising trust, culture, norms, and engagement, is vital for societal development. It enhances economic performance by promoting collaboration, as noted by Putnam (1993)[38], who observed that communities with high social capital are more productive. In natural resource management, Ostrom (1990) highlighted that strong community ties facilitate effective collective action. Furthermore, social capital supports empowerment by creating networks for better resource access (Mosedale, 2005). It enhances livelihoods by improving access to information and financial resources (Pretty & Ward, 2001)[39]. It also encourages community engagement in sustainability efforts, addressing challenges like climate change (Bourdieu, 1986)[40]. In social enterprises, the bonding aspect of social capital fosters cohesiveness, while the bridging element enhances access to other types of capital and external linkages (OECD, 2013)[37]. While social capital cannot replace other capitals, it can complement human capital (OECD, 2013) and reduce transaction costs between individuals and organizations (Fukuyama, 2001)[41].

Social capital and natural resources

The International Institute for Sustainable Development defines natural capital as "land, air, water, living organisms, and all formations of the Earth's biosphere that provide essential ecosystem goods and services" (UNSD, 2014). Natural capital encompasses nature's elements that can be utilized directly or indirectly. Rural and tribal communities maintain stronger connections with the natural environment, relying on natural resources, forest reserves, and agriculture for their livelihoods. These communities often engage in conservation efforts, supported by traditional values and strong social capital components like trust, cooperation, and collective action (Panda, 1999; Behera & Nath, 2005; Islam et al., 2013). Additionally, their indigenous knowledge promotes sustainable resource usage (Eckman, 1994).

Social capital and empowerment

Empowerment involves giving individuals the ability to make strategic life choices, particularly those previously denied this opportunity (Ibrahim & Alkire, 2007; Kabeer, 1999). Social capital is crucial in community empowerment and sustainable development by fostering collective goals and collaboration among community members (Griessler & Littig, 2005)[29]. Strong ethnic relationships often support small entrepreneurial ventures, leading to community economic empowerment (Turner, 2007). In recent decades, social enterprises have used social capital to empower women through self-help groups, market linkages, and vocational training (Dempsey et al., 2007). Trust within these networks enhances educational access and resource availability for women (Purnamawati & Sudibia, 2019). By building social capital and encouraging collective action, communities can remove barriers to higher education and vocational skills (Machio et al., 2020). Social enterprises strengthen community self-reliance and empower marginalized individuals to shape their futures (Alam, 2020).

Social capital and livelihoods

Social capital in a community can generate income and wages, and enhance health and well-being (Godoy, 2007). Trust and network relationships improve livelihood opportunities (Alam, 2020) and support efforts to eradicate poverty (Abenakyo et al., 2007; Minamoto, 2010). Social enterprises leverage social capital to empower marginalized groups, enabling them to access resources and shape their futures (Portney & Jeffrey, 2010). Social capital also connects to employment through labor market participation and self-employment (Valenzuela & Gonzales, 2000; Bosma et al., 2004). Additionally, shared norms and values facilitate information exchange, fostering the creation of organizations to achieve collective goals.

Social capital, sustainability, and development

Scholars argue that social and human capital are essential for improving natural capital and that collectives effectively manage and protect the environment (Kilpatrick, 2007; Pretty & Ward, 2001; Rydin & Holman, 2004)[39]. Social capital plays a key role in poverty alleviation and sustainable community development by providing support systems (Dale & Newman, 2010; Asadi et al., 2008). Investment in social capital enhances well-being (Isham et al., 2002). Bhuiyan and Evers (2005) highlight its influence on behavior and participation in developmental activities. Balasubramanian (2024) heights how social capital contributes to resource management, resilience to crises, and social equity. Achieving sustainability requires a transdisciplinary approach and the involvement of various actors, which depends on social capital (Mumuni et al., 2019). Social capital is crucial for sustainability, often conceptualized through its dimensions alongside economic and natural capital (Quental et al., 2009; Serageldin, 1999)[15]. Whereas many scholars view social capital as a means to attain sustainability, taking a broad view of social capital—including relations of trust, reciprocity, common rules, norms and sanctions, and connectedness in institutions—one can argue that the pursuit of sustainability can, in turn, strengthen the level of social capital in a community. For example, Sreedevi et al. (2007) note that participation in natural resource management allows community members to come together, work in collectives or groups, and helps improve mutual trust and social capital. Accepting participation from different communities is vital for sustainability (Portney & Jeffrey, 2010). Social capital is also a key determinant of human capital, influencing the social and economic aspects of sustainability (Coleman, 1988)[42].

Social capital in developing countries

Social capital plays a pivotal role in people's social life and economic status in the community, further influencing the development process. Most developing countries have abundant social capital (Isham et al., 2002; Fukuyama, 2002; Kay & Pearce, 2003)[35]. Arguably, developing countries with high population density, large percentages of rural population, frequent social interactions, strong family ties, deeply rooted religious and spiritual traditions, and culture of community living are rich in social capital (Narayan, 2002). Social capital is also inevitable in developing countries to function as working democracies, as the latter requires civic and political engagements. This characteristic of developing countries can be employed to advance initiatives aimed at eradicating poverty and reducing vulnerability (Moser, 1996; Narayan, 1997), facilitating conflict resolution (Schafft, 2000), and creating opportunities for social and economic empowerment (Isham, 2000). Social capital can help accomplish various public policy objectives and livelihood promotion (Jeevamani et al., 2021)[33].

Collectivism and Social Capital

According to Cheng et al. (2020), collectivism involves individuals closely interconnected in groups, emphasizing group interests over individual ones, which fosters social capital (Hofstede, 2011). This integration leads to strong social networks and shared norms, essential components of social capital. Collectivist societies promote group harmony and interdependence, encouraging communal activities that build trust and cooperation (Putnam, 2000; Lin, 2001)[43]. Social capital enhances cooperation by creating environments of trust and mutual support. Coleman (1988) noted that it facilitates coordinated actions among individuals. A study by Allik and Realo (2004) found a positive correlation between collectivism and social capital across 42 countries, further supporting the link between collectivist values and social capital development. Social enterprises can strengthen community social capital. Kay and Pearce (OECD, 2013) noted that social enterprise development in an area can lead to the emergence of additional enterprises, fostering increased social interactions. Trusted social enterprises promote their values within the community, creating a foundation for cooperative behavior as individuals work toward common goals, especially in collectivist societies where social capital is robust.

Social capital and cooperative behavior

Social capital creates an environment conducive to cooperation. According to Coleman (1988), it enables specific actions within a structure, allowing for achievements that would not be possible otherwise. It is vital for addressing collective action problems by institutionalizing social norms and reducing friction (Ostrom & Ahn, 2003). Doh's (2014)[21, 22] meta-analysis of 30 studies shows that social capital consistently predicts cooperative behavior across various contexts. Cooperativism, which emphasizes collective ownership and democratic control (Rothschild & Whitt, 1986), often flourishes in collectivist societies (Marcus & Le, 2013). Research indicates a strong link between collectivism, social capital, and cooperativism (Realo & Allik, 2009; Gatawa, 2024). Collectivist societies generally exhibit higher social capital, fostering the trust and networks needed for cooperatives to succeed (Gómez-Limón et al., 2020; Majee & Hoyt, 2011). Thus, cooperativism is more likely to thrive in collectivist cultural contexts.

India as a collectivist society

India, with its rich cultural heritage and diverse population, emphasizes collective values over individualism (Chadda & Deb, 2013; Verma & Triandis, 2020). Central to this is the interdependent self-construal, where individuals define themselves in relation to others, prioritizing group harmony (Markus & Kitayama, 1991). This orientation is rooted in ancient philosophy and religious traditions and highlights duty to family and community (Sinha, 2014). Extended family structures are common, with decision-making often guided by elders (Chadda & Deb, 2013). Collectivism in India is evident in agricultural cooperatives like AMUL, self-help groups, and crowdfunding initiatives (Singh & Singh, 2013; Swain & Wallentin, 2009; Chandra, 2013). This study examines three organizations that exemplify the Indian collectivist mindset and cooperativism.

Social Capital in India

India is a developing country and embodies several characteristics of high social capital (Krishna, 2007). For instance, India is among the countries with the highest population density in the world; it has a high rural population, and nearly 64% of the population lives in rural areas (Statista, 2020). Indians have strong religious traditions (Kramer, 2021) and adhere to family values and traditions (Khare, 2011). Thus, the country has the potential for a high level of social capital. In addition, Indian tribal communities have traditions different from those of mainlanders, with an even stronger sense of unity, shared norms, and trust among community members (Ramya et al., 2017). Social capital, perceived as a resource for development, has a strong presence in rural and tribal communities where co-dependency and trust remain strong (Ashifa, 2021). Karimzadeh and Karimzadeh (2013) found a positive correlation between social capital and quality of life in India. Scholars also argued the relevance and significance of social capital in achieving the full potential of development strategies (Hans, 2014). This implies that India can leverage its social capital for development.

Section 2 discusses how social capital and sustainability are related and how the former can be employed to attain the latter. In sum, the main thesis of this article can be stated as follows: Collectivist societies are characterised by high levels of social capital, which catalyses the formation and development of social enterprises that can contribute to sustainable development. This is depicted in figure 2. India's rich collectivist culture fosters substantial social capital—trust, shared norms, and community engagement—making it ideal for cooperativism. This social capital promotes cooperative behavior through trust-based collaboration, particularly in tightly knit communities with joint family systems and cultural networks. It has historically supported local governance and resource sharing, linking social capital to sustainable development. In rural areas and among marginalized groups, social capital empowers participatory development and cooperative structures. Evidence from developing countries shows its role in driving inclusive growth and resilience. Thus, India's vibrant civic landscape highlights the potential for expanding cooperative enterprises for equitable and sustainable development.

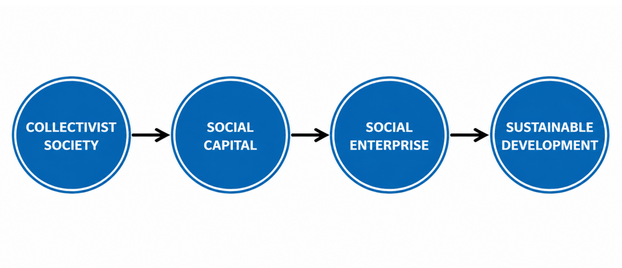

Figure 2. Collectivism to Sustainability via Social Capital

Research design

As noted in Section 2, very few scholars have explored the role of social capital in social enterprises and their potential for promoting sustainability in developing countries. To fill this literature gap, we conduct an exploratory study with three case studies, each targeting a specific sustainability dimension and how social capital can help achieve related goals. Case studies offer several advantages, including developing analytical frameworks, testing hypotheses, and more efficient use of time and resources. They enable researchers to gain insights into complex situations not captured by larger studies. Willis (2014) emphasizes that case studies provide detailed, context-rich narratives contributing to theory development and evaluation. This study utilizes qualitative data from scholarly literature, organizational documents, websites, and media coverage (Ashifa, 2021).

This paper presents case studies of three prominent Indian social enterprises: Anand Milk Union Limited (AMUL), Shri Mahila Griha Udyog Lijjat Papad (LIJJAT), and Professional Assistance for Development Action (PRADAN).

Case Study 1: Anand Milk Union Limited (AMUL)

AMUL: India's Dairy Cooperative Giant

Introduction: AMUL, an acronym for Anand Milk Union Limited, is India's largest food product marketing organization, renowned for its cooperative model in the dairy industry that has transformed rural livelihoods and revolutionized milk production in the country.

Historical Context: AMUL originated in the late 1940s as a response to the exploitation of milk producers in Anand, Gujarat. In 1946, milk producers, led by Sardar Vallabhbhai Patel and guided by Mr. Tribhuvandas Patel, went on strike against the monopoly Polson Dairy. This resulted in the formation of the Kaira District Co-operative Milk Producers' Union Limited, later renamed AMUL. A key moment in its history was the arrival of Dr Verghese Kurien in 1949, who is now regarded as the Father of the White Revolution in India. Under his leadership, AMUL implemented innovative practices that laid the groundwork for India's dairy cooperative movement.

AMUL's Present Profile: AMUL is a successful example of the cooperative movement in India, evolving into the country's largest food product marketing organization and one of the largest milk procurement systems globally (Gujarat Co-operative Milk Marketing Federation Ltd. (GCMMF, 2022). It offers a wide range of dairy products, including raw milk, butter, cheese, ice cream, milk powders, and chocolates, and is well known for its high-quality products. AMUL competes effectively with multinational corporations and, in 2024-25, its revenue surpassed Rs. 90,000 crores (about $10.8 billion).

The AMUL Model: The AMUL Model, or Anand Pattern, is a transformative cooperative framework that has changed India's dairy sector by empowering rural farmers and fostering inclusive growth (Ghosh & Chakrabarti, 2025). It operates on a three-tier system: village-level cooperatives, district-level unions for milk processing, and a state-level federation, exemplified by GCMMF, which handles marketing and oversight. While GCMMF remains farmer-owned, it is professionally managed, ensuring efficiency and innovation (Pallathadka et al., 2025; Kurien, 2005)[44]. A key feature of AMUL is its direct milk procurement system, which removes intermediaries and guarantees fair pricing for farmers (Sharma & Dixit, 2017). AMUL also adds value through diverse dairy products, enhancing profitability and consistent market supply (Bhatt, 2019). Rooted in empowerment and equity, the model supports farmers in governance and provides financial services. Infrastructure like chilling centres ensures quality, while AMUL promotes sustainability and community welfare through eco-friendly practices and initiatives for health, education, and women's empowerment (Shimokado, 2024; Dave & Sajja, 2025). This model showcases how cooperatives can drive rural development by blending economic success with social responsibility, serving as a replicable model for community enterprises globally.

AMUL's Impact and Outreach: As of 2022, AMUL collected raw milk from 18,600 villages and is owned by 3.6 million milk producers in Gujarat (GCMMF, 2022). Its model has been replicated across several Indian states through the National Dairy Development Board's Operation Flood program (Dalaya, 2017). AMUL creates thousands of direct and indirect jobs in transportation, distribution, and retail (Sharma & Dixit, 2017). Many of AMUL's members are women, contributing to rural women's economic empowerment (Bhatt, 2019). AMUL has transformed India's dairy industry and offers a model for cooperative movements worldwide, demonstrating how a structured cooperative can empower small producers and promote rural development (Kurien, 2005; Singh & Singh, 2012)[44].

Drawbacks of the AMUL model: While dominant in India, AMUL has a limited international presence compared to global dairy giants (Thakur, 2021). Its cooperative model relies heavily on milk producers, making the supply chain vulnerable to droughts or diseases (Singh & Singh, 2012). Ensuring consistent quality across its extensive network is also challenging (Theuvsen et al., 2007). With India's economic liberalization, AMUL faces growing competition from domestic and international dairy companies and plant-based milk manufacturers (Rakshit & Rao, 2020). Additionally, the dairy industry confronts environmental sustainability challenges, particularly concerning greenhouse gas emissions from cattle (Food and Agriculture Organization of the United Nations, 2019).

AMUL's efforts and initiatives as a defense against criticisms: In recent years, AMUL has undertaken various initiatives aimed at addressing environmental concerns. The organization promotes biogas plants among its farmers, converting cattle dung into biogas for clean cooking fuel and using the slurry as organic fertilizer (GCMMF, 2022). To save energy, AMUL has introduced energy-efficient equipment, heat recovery systems, and LED lighting in its plants, along with solar power systems to reduce reliance on traditional electricity sources (National Dairy Development Board, 2020). Water conservation measures, including water recycling and rainwater harvesting, have also been implemented in processing plants, alongside efficient irrigation practices for farmers (GCMMF, 2022). AMUL has developed biodegradable packaging solutions to minimize plastic use (The Dairy Reporter, 2019) and promotes sustainable animal husbandry practices to reduce methane emissions (FAO, 2019). The organization participates in tree plantation drives to increase green cover and offset carbon emissions (GCMMF, 2022) and collaborates with research institutions to develop environmentally friendly dairy practices (National Dairy Development Board, 2020). Since 2021, AMUL has released annual sustainability reports detailing its initiatives and long-term plans. While these efforts reflect AMUL's commitment to environmental sustainability, the dairy industry continues to face significant challenges, necessitating ongoing innovation and improvement.

Case Study 2: Shri Mahila Griha Udyog Lijjat Papad (LIJJAT)

Lijjat Papad: A Women's Cooperative Success Story

Introduction: Shri Mahila Griha Udyog Lijjat Papad (Lijjat Papad) is a women's cooperative in India that has empowered thousands of women through its business model of producing and selling papad (Datta & Gailey, 2012)[45]. Papad is a crispy Indian flatbread-like-wafer made from lentils. The organization is owned, managed, and run by women.

Historical Context: Lijjat Papad's journey began in 1959 in Mumbai, India, when women's economic empowerment was rare. Seven women from lower-middle-class backgrounds in Girgaum started the venture with a loan of upee80 (under $17 then) to create sustainable livelihoods (Ramanathan, 2004). Registered in 1966 under the Societies Registration Act and the Bombay Public Trust Act (Sapovadia & Patel, 2013), what began as a small group making papads on a terrace evolved into a large cooperative. The social capital invested in the organization helped it overcome challenges like gender discrimination, sustaining an all-women workforce, and access to finance (Seemon, 2024).

Lijjat Papad's Present Profile: Lijjat Papad is a symbol of women's empowerment and entrepreneurship in India, with an annual turnover exceeding Rs. 1600 crore (about $200 million) as of 2024. Employing over 45,000 women, known as Lijjat-sisters, the organization has expanded beyond its main product, papad, into wheat flour, spices, detergents, and bakery items (Datta & Gailey, 2012)[45]. Lijjat exports globally to countries like the USA, UK, and Singapore. It has received several awards, including the Best Village Industries Co-operative Society from the Government of India in 1998 and Businesswoman of the Year from The Economic Times in 2002 (Ramanathan, 2004).

The Lijjat Papad Model: The Lijjat Papad model is a prominent example of a women-run cooperative in India, founded in 1959. Known as the Shri Mahila Griha Udyog Lijjat Papad, it empowers women, referred to as sisters, to produce papads directly from home. Any woman who upholds the organization's values can become a co-owner, participating in decision-making processes, which enhances their confidence and economic independence (Datta & Gailey, 2012; Seemon, 2024; Roy, 2022)cite10. The cooperative's decentralized production system allows for work-life balance while reducing infrastructure costs (Ramanathan, 2004). It maintains high product standards through rigorous quality control and ongoing training (World Intellectual Property Organization, 2013). Lijjat operates as a for-profit organization with social goals, sharing profits equitably among members and employing democratic governance for transparency. Adhering to the principle of self-reliance, it avoids taking external donations and emphasizes community welfare in line with Gandhian ideals of Sarvodaya—welfare for all. The Lijjat model exemplifies scalable, grassroots, women-led entrepreneurship.

Outreach and Impact: As of 2023, Lijjat Papad has over 45,000 women members across 82 branches in 17 states of India (Financial Express, 2023). This extensive network significantly impacts local economies by creating job opportunities in both urban and rural production centers, reducing the need for migration and serving as a crucial source of income for families in disadvantaged areas. Lijjat sources its raw materials—primarily urad dal (black gram) and spices—from local farmers and suppliers, indirectly supporting over 300,000 people, including their families (Datta & Gailey, 2012)[45]. Lijjat's success has inspired similar women's cooperatives throughout India (Sharma, 2014; Krishna, 2024) and contributes to the broader movement for women's economic empowerment. The organization also undertakes social initiatives, such as literacy programs, health awareness camps, and scholarships for members' children, and plays a vital role in disaster relief efforts (Ramanathan, 2004). Beyond economic benefits, Lijjat Papad has transformed societal perceptions about women's roles and capabilities, empowering women to earn a respectable income from home and challenging traditional gender norms in their families and communities.

Weaknesses and criticisms: Although Lijjat Papad is recognized for its role in women's empowerment and cooperative business but faces several criticisms, critics argue that its structure, while providing jobs, offers limited career advancement or skill development beyond papad-making (Datta & Gailey, 2012)[45]. By focusing on home-based work associated with women, it can reinforce gender stereotypes (Torri & Martinez, 2014). Additionally, income levels of workers may not always meet living wage standards, particularly in urban areas (Bhatt, 2006), and many workers reportedly earn low wages, resulting in dissatisfaction (Tippanna & Shashidhar, 2019). There are concerns over unhygienic working conditions and health issues (Roy & Dasgupta, 2008), as well as environmental impacts related to water usage and waste management. Critics also note that co-ownership is not fully democratic, with power concentrated among a few members (Rani, 2016; Chaudhary, 2005). Despite its success as a women's cooperative, Lijjat could improve by diversifying its narrow product range and considering automation to enhance efficiency (Das Gupta, 2014). Its operations, mostly concentrated in western India, could expand further as it faces growing competition from local and multinational companies (Rani, 2016). Maintaining its cooperative spirit and efficient decision-making across branches may become increasingly challenging (Chavan, 2019; Bende, 2016; Ramanathan, 2004). Modernizing its practices and management structure is essential to navigate these challenges effectively.

Lijjat Papad's efforts and initiatives as a defense against criticisms: In response to various challenges, Lijjat Papad's management has implemented initiatives to address some of the concerns and enhance the lives of its women members. To improve opportunities for upward mobility, Lijjat has introduced skill development programs that cover areas like computer literacy, financial management, and leadership training. Although papad is its core product, Lijjat has diversified its offerings to include khakhra, masala, detergent powder, and bakery items, reducing dependence on a single product (Economic Times, 2019). The organization has also adopted advanced technology in packaging and distribution to blend traditional methods with modern efficiency, helping to maintain competitiveness without compromising jobs (Datta & Gailey, 2012)[45]. To address wage-related issues, Lijjat regularly adjusts its profit-sharing model and provides benefits such as provident funds and medical insurance. Additionally, it offers educational scholarships for members' children, conducts health camps, and assists with housing needs. Lijjat has strengthened its democratic decision-making processes and trains branch managers in cooperative principles and conflict resolution (Datta & Gailey, 2012)[45]. The organization collaborates with NGOs and government initiatives to support literacy and health awareness (Ramanathan, 2004). These measures reflect Lijjat's commitment to continuous improvement, demonstrating resilience and dedication to women's empowerment through economic self-reliance.

Case Study 3: Professional Assistance for Development Action (PRADAN)

PRADAN: Empowering Rural India

Introduction: Professional Assistance for Development Action (PRADAN) is a leading NGO in India focused on alleviating poverty and promoting sustainable development in rural areas. The name PRADAN, which means to return in Hindi, embodies the founders' vision of giving back to the society. For over four decades, PRADAN has worked tirelessly to empower rural communities, believing that even the poorest can lead dignified lives.

Historical Context: PRADAN was founded in 1983 by Deep Joshi and Vijay Mahajan, along with a group of young professionals, who aimed to address rural development through financial resources, expertise, and dedication (Joshi, 2014). They sought to connect skilled professionals with rural communities—where poverty persisted despite government efforts—to drive sustainable change (Mahajan, 2005). PRADAN focuses on improving household income, food security, women's empowerment, gender equality, and ecological sustainability (PRADAN, Annual Report 2023-24).

PRADAN's Present Profile: PRADAN is one of India's leading rural development organizations, operating in economically disadvantaged regions across states like Jharkhand, West Bengal, Odisha, and more (Walmart Foundation, 2022). Its core focus areas include livelihood promotion, women's empowerment, natural resource management, microfinance, and skill development (Ghose, 2016; Mohanty & Samal, 2023). With a team of 971 staff members, PRADAN executes 140 grassroots initiatives and partners with over 70 organizations for funding. In FY 2023-24, it raised over Rs. 156 crores ($18.8 million) and has an asset base of nearly Rs. 560 crores (over $67.3 million), allowing it to spend over $28.2 million during the same period (PRADAN, Annual Report 2023-24, pp. 133-135).

The PRADAN Model: PRADAN's operational model focuses on long-term engagement with rural communities, emphasizing professional management, self-help group formation, and linkages with formal institutions. The organization recruits and trains young professionals as development practitioners, starting as apprentices and evolving into professionals (Mohanty & Samal, 2023). A core initiative is the creation of women's self-help groups, consisting of 15 to 25 women, which facilitate savings, credit, and collective action (Nair, 2005). PRADAN works with communities to develop sustainable livelihoods based on local resources and market opportunities (Mohanty & Samal, 2023). They also help form agricultural cooperatives and link them with financial institutions (Ghosh, 2023). Collaboration is essential to PRADAN's model, as it partners with government agencies, NGOs, and private entities to maximize resources and scale successful initiatives (PRADAN, 2020).

Impact and Outreach: PRADAN has made a significant impact on rural India, reaching over 2.48 million households in nearly 10,000 villages across 140 districts in 8 states during FY 2023-24. The organization has facilitated the establishment of 86,711 women's self-help groups, 5,500 village organizations, 149 cluster federations, and 49 block federations. Through improved agricultural practices and better market linkages, PRADAN has helped increase incomes for many rural households. Its emphasis on sustainable livelihoods has led to long-term income improvements (Dutta & Sarkar, 2018). Additionally, PRADAN has supported sustainable management of natural resources, rejuvenated 1.15 million acres and implemented regenerative agriculture across 200,000 acres. Its grassroots work has also shaped national rural development policies, aligning with several UN sustainable development goals (Narayan, 2024).

Weaknesses and Criticism: PRADAN is praised for its grassroots work in rural development, but faces criticism for operating in a limited geography, leaving many impoverished areas untouched. Critics suggest that long-term nonprofit involvement may foster dependency, hindering self-sufficiency (Rajasekhar, 2002). While PRADAN's model of highly educated professionals is effective, it is resource-intensive and challenging to scale quickly (Kilby, 2011; Kudva, 2005). Additionally, some argue that PRADAN could advocate more for systemic changes to address rural poverty at the national level (Banks et al., 2015). While these criticisms are valid, they often apply to many organizations, and PRADAN's work can defend itself.

PRADAN's efforts as a defense against criticisms: PRADAN operates in eight states, allowing for deep engagement and meaningful interventions that lead to lasting change in communities (PRADAN, Annual Report, 2018-19). Their model has been replicated by other organizations, extending their impact (Nair et al., 2013). PRADAN focuses on building self-reliance, empowering communities with the skills to sustain initiatives independently (Joshi, 2015). The Self-Help Group (SHG) model enhances financial independence and collective problem-solving among rural women (Pandey & Sharma, 2017). By investing in skilled professionals, PRADAN creates a multiplier effect that yields significant long-term benefits for sustainable development (Mahajan & Ramola, 2003). Committed to a just society, PRADAN empowers India's rural poor through professional engagement and innovative strategies.

Analysis and results

The main features of the social enterprises AMUL, LIJJAT, and PRADAN are summarized in Table 2. All three organizations share a commitment to improving socio-economic conditions through cooperative models and emphasize empowerment—AMUL focuses on dairy farmers, LIJJAT on women's self-employment, and PRADAN on the rural poor. They engage in community development, promoting social justice and sustainability. However, they differ significantly in scale and focus. AMUL supports around 3.6 million dairy farmers with annual revenues of about $9.6 billion, showcasing its dominance in the sector. In contrast, LIJJAT employs over 45,000 women in a decentralized model, primarily generating just over $200 million in revenue.

PRADAN, while smaller in size and budget, employs young professionals to implement rural development projects focused on poverty alleviation and natural resource management, covering various dimensions of sustainability. It does not directly produce or market products but facilitates these activities to foster community development. Research linking social capital to sustainability suggests that elements like trust and shared norms create environments for social enterprises. Once formed, these enterprises benefit from bonding and bridging social capital—bonding helps them stay cohesive, while bridging enables progress (Portela et al., 2013)[46]. As they engage with communities, they enhance livelihoods, promote empowerment, and improve physical environments, collectively advancing development and sustainability.

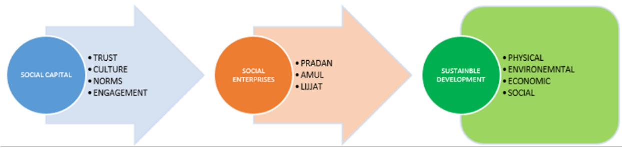

Figure 3. Social capital to sustainability

Social capital plays a key role in social enterprises and sustainability. These enterprises contribute to sustainable development based on their mission and environment. The illustration (Figure 3) needs clarification on how specific social capital components connect to sustainability dimensions. Future research can enhance this understanding. The case studies of PRADAN, AMUL, and LIJJAT demonstrate that these organizations contribute to economic and social sustainability by providing livelihoods, generating income, and empowering marginalized groups like women and rural farmers. We now explore how their programs and activities impact sustainability.

AMUL's Contribution to Sustainability

AMUL supports economic sustainability by generating income for 3.6 million dairy farmers and over 1000 employees. In addition, AMUL offers continual training to its members on sustainable agricultural practices—including efficient irrigation, organic fertilizers, animal husbandry, and climate-resilient farming—which improve both productivity and environmental stewardship among members (Agriculture Institute, 2023). AMUL's contribution to social sustainability includes community welfare and educational activities such as scholarship programs for university students from underprivileged background, medical assistance programs in partnership with different healthcare agencies, and disaster relief efforts (Patil & Farooqui, 2025). AMUL has undertaken several initiatives to reduce its impact on the environment and promote sustainability including renewable energy and biogas initiatives, water conservation and wastewater management, circular economy and waste reduction, and reforestation and carbon sequestration. , To reduce its carbon footprint, AMUL uses a combination of natural gas, wind, and solar power in its plants.5 These initiatives demonstrate that AMUL not only contributes to the economic empowerment of its members (farmer-owners), it also promotes social and environmental sustainability. Furthermore, AMUL has adopted a Materiality Matrix, which includes 32 indicators, to set strategic direction for the organizations. The Materiality Matrix includes socioeconomic priorities such as generating employment, ensuring conducive and ethical work culture, and promoting women's empowerment.4 The environmental priorities include minimizing greenhouse gas emissions, maximising plastic waste recycling, minimizing groundwater

Table 2. A comparative analysis of the three social enterprises

Social Enterprise	AMUL	LIJJAT	PRADAN
Year of Establishment	1946	1959	1983
Mission	To provide fair prices to milk producers and quality products to consumers	To empower women through self-employment and cooperative ownership	To alleviate rural poverty and empower the poor
Core values	Cooperative model, collective action, empowering farmers, farmer welfare, self-sufficiency, social justice, quality, and innovation	Cooperation, women's empowerment, gender equality, and quality of production	Grassroots development using professional expertise, inculcating self-reliance, local resource development, community empowerment, and sustainable livelihood
Organization size	Employs over 1,000 staff members directly but supports millions of dairy farmers through its cooperative network.	Directly engages over 45,000 women, but supports a lot more indirectly.	Employs over 970 professionals, but supports over a million people directly or indirectly.
Annual revenue	Rs. 80,000 crores ($9.6 billion).	Rs. 1,600 crores ($200 million)	Rs. 234 crores ($28 million, in expenditure)
Mode of operation	Three-tiered cooperative structure (village, district, state levels)	Women work from home, follow a cooperative structure, and have a large-scale impact through decentralized production	Professionals living in rural areas, implementing development projects, training farm workers, and creating local change agents
Community engagement	Engages over 3.6 million dairy farmers; involved in various social development programs, including education, healthcare, and rural development	Directly employs over 45,000 women, impacts their families, and is involved in various social development programs, including education and healthcare.	Over 2.8 million households in nearly 10,000 villages.
Development focus	Dairy development, rural economic growth, nutrition	Women's economic empowerment, food production	Poverty alleviation, rural development, and sustainable livelihoods; Rural livelihoods, agriculture, water resources, and women's empowerment.
Strengths	Dairy production, marketing, product innovation, strong farmer base, extensive distribution network, brand recognition, and backward integration.	Promoting and facilitating women's cooperative, quality control, work-from-home model, and preservation of traditional food culture	Extensive experience in rural development, strong partnerships with government agencies, and focus on sustainable livelihoods, Rural development, capacity building, and innovative agricultural techniques.
Weakness	Domestic focus, dependence on individual farmers, competition from traditional and non-traditional players, environmental concerns.	Narrow product range, labour-intensive and inefficient production, poor working conditions, lack of career growth and opportunities for workers	Limited geographic focus, challenges in employee recruitment and retention, and limited attention to advocacy.

withdrawal, and expanding the use of renewable energy.

LIJJAT's Contribution to Sustainability

Lijjat papad's single largest contribution to economic sustainability is through its various products and initiatives that provide self-employment to over 45,000 women, which, in turn, facilitates women's empowerment, LIJJAT invests not only in skill training for papad making but also provides scholarships for education, IT literacy programs, and practical skill classes in areas like typing, sewing, and cooking (Rani, 2016; Kapoor, 2015). These initiatives are extended to members' families, particularly their daughters, promoting intergenerational social upliftment. In addition, LIJJAT offers developmental programs for women and children. Lijjat member-sisters contribute to social sustainability by distributing food to low-income children, donating money for conducting community marriages, establishing prize money for promoting primary education, organising blood drives and health camps, and providing disaster reliefs. , Besides these, LIJJAT's mode of operation—characterised by labor-intensive, low-technology dependence, and work from home culture—allows it to maintain a minimal carbon footprint, given its size.8,9 Occasional plantation drives by Lijjat sisters also contribute to environmental sustainability (Rani, 2016; Kapoor, 2015).

PRADAN's Contribution to Sustainability

PRADAN's programs and activities are closely aligned with several of the United Nations' sustainable development goals. Its programs and activities include income generation and livelihoods promotion, providing food security to rural and tribal population, and managing natural resources. One of the several livelihoods projects, LEAP, which stands for livelihoods enhancement through market access and women empowerment, aims to improve lives and livelihoods of 45,000 women farmers. Another project—Assured Income Enhancement Model—aims to improve livelihoods by facilitating goat and poultry farming among rural and tribal women. In addition, PRADAN, through its myriad watershed development programs, natural resource management initiatives, and alternative energy-related projects, directly contributes to the physical and environmental aspects of sustainability. Since 2005, the organization has been implementing integrated natural resource management projects under the Government of India's National Rural Employment Guarantee Act. For instance, the high impact mega watershed project in Chhattisgarh, being carried out in partnership with the Government of Chhattisgarh, Bharat Rural Livelihoods Foundation, and Axis Bank Foundation, aims to enhance 100,000 small and marginal farmers' income and livelihood, through land-treatment, water-resources management, and improved agriculture. , Through small and large-scale watershed

Table 3. Social enterprises contributing to sustainability

Dimensions of sustainability	PHYSICAL	ENVIRONMENTAL	ECONOMIC	SOCIAL
AMUL	Indirect	Indirect	Direct	Direct
LIJJAT	Indirect	Indirect	Direct	Direct
PRADAN	Direct	Direct	Direct	Direct

development programs, PRADAN contributes to economic, social, environmental, and physical aspects of sustainability (Sharma et al., 2019).

This, however, does not imply that the other organizations—AMUL and LIJJAT—do not contribute to the physical or environmental dimensions of sustainability. As noted earlier, both AMUL and LIJJAT contribute primarily to economic sustainability by generating income for its members; however, they contribute to environmental sustainability rather indirectly—by attempting to reduce their carbon footprints and afforestation or reforestation programs. Table 3 shows how these social enterprises contribute to sustainability. All three organizations work with low-income, rural, and marginalized groups, so one can argue that they contribute to social sustainability directly. For instance, AMUL contributes to sustainability by adhering to the principles of reduce, reuse, and recycle; it also makes sure to minimize the use of power, thereby conserving energy and by using renewable energy whenever possible. AMUL also participates in large-scale tree plantation projects, contributing to environmental sustainability. Like AMUL, Lijjat Papad also engages in sustainable production practices, minimising the use of water and energy.

Conclusion

Based on a focused narrative review of the existing literature, this article makes a case for social capital as an essential ingredient for developing and sustaining social enterprises. Three case studies of well-known social enterprises from India show that the creation and functioning of these organizations depend—to a large extent—on social capital. While all three organizations contribute to sustainability, their focus areas differ due to their varying organizational missions. The findings of this study resonate with the existing scholarly literature on related topics. Social capital is engaged by social enterprises to harness the tangible or intangible resources in the community (Portney et al., 2010), and the bridging aspects of social capital allow these enterprises to acquire other types of capital (OECD, 2013)[37].

For countries in the global south, utilizing social capital and social enterprises to achieve sustainability can provide a way forward. Considering the resource constraints and varying governmental priorities, not all countries show an unwavering commitment or consistent efforts toward sustainable development. For example, in a recent status report on the progress toward achieving sustainable development goals (SDG), the government of India highlighted its progress on seven SDGs, out of seventeen goals. These cover progress on poverty alleviation, health and wellbeing, gender equality, economy, and marine life. The fact that the report does not particularly highlight the country's commitment to, or accomplishments in, environmental protection and climate change shows a lack of focus.

The report shows a lack of focus on social issues, not addressing government efforts to tackle social and economic inequality, promote peace, and ensure justice. In this context, social enterprises can leverage existing social capital to support sustainability goals. Due to time and space constraints, many important questions remain unanswered: Is social capital the sole factor in fostering social enterprises? Under what conditions can it promote their development? Is there a direct link between elements of social capital and sustainability dimensions? Additionally, how might pursuing sustainable development enhance social capital? Future research can explore these questions.

Author's Note

Shahidur Rashid Talukdar, Ph.D.
Center for Engineering Excellence and Discovery, Virginia Tech, 220 Gilbert Street, Blacksburg, VA, 24061, USA
Email: **shahidur@vt.edu**

Iftekhar Alam, Ph.D.
Department of Social Work, Pondicherry University, R Venkat Raman Nagar, Kalapet Pondicherry - 605 014, India
Email: **iftemsw@pondiuni.ac.in**

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