Collective Resilience in Constrained Environments: Entrepreneurship in a Sub-Himalayan Community and the COVID-19 Pandemic

Key terms: Entrepreneurial resilience, constrained environment entrepreneurship, entrepreneurial pivoting, COVID-19 pandemic, Uttarakhand India.

Abstract

The COVID-19 pandemic that started in early 2020 has exposed the thin line between the resilience and vulnerability of businesses. Two-and-a-half years on, this is evident not only for businesses but also for individual and collective health and survival. As is the case for countries around the world, the COVID-19 pandemic severely impacted the Indian economy which contracted 6.6% in 2020 and lost much of the poverty reduction gains made over recent decades. The impact on rural regions already operating in constrained environments was particularly instructive in socio-economic terms. This chapter explores the livelihood generating entrepreneurial activities in a poor village community in the sub-Himalayan region of India. Qualitative data findings show that the community's income generation was normally planned around sharing work between men and women with the men in daily wage labour and the women running micro businesses. They organized themselves in a women's Self Help Group which was the vehicle they used to engage with external agencies, i.e government departments for income generation schemes, resources and selling their produce. Importantly, they also engaged closely with a civil society non-governmental organization to access training, resources and the market. In their entrepreneurial journey, they often displayed an ability to pivot across activities with agility to survive routinely constrained environments. Notably, they also avoided loan funding. They continued this practice during the pandemic, using pivoting to stay afloat by picking up opportunities wherever possible – even if these were short-term. They juggled several initiatives and sometimes kept their original ones barely alive. They innovatively resourced their diverse activities with finances from various sources that avoided debt; they used bootstrapping and pooled resources for some of the functions while pursuing other business functions individually. The community, operating under the constrained environment of a continuous series of crises, used such techniques routinely to keep precarity at bay. These business techniques of survival under a constrained environment gave these entrepreneurs a crisis-preparedness to face the COVID-19 pandemic more as an additional constraint in their lives. This is also an important cue to understanding constrained environment community entrepreneurship generally.

INTRODUCTION

The health impact of the SARS-CoV-2 coronavirus (COVID-19) pandemic that started at the end of 2019 and that continues today through new variants is now considered among the worst health crises the world has seen with half a billion COVID-19 infections and six-and-a-half million deaths reported globally[1]. Since the establishment of the World Health Organization (WHO) in 1948, the previous impact of earlier pandemics was concentrated in Africa and in some countries in Asia.[2] The COVID-19 pandemic since 2020 has severely impacted health systems globally, including the developed world that witnessed deaths per million population that were considerably higher than Asian and African countries. The effects of the pandemic have caused COVID-19 to dominate the global discourse since many business sectors and industries (e.g. airlines, hospitality etc) severely contracted during the pandemic. The higher differential impact on poorer communities within countries is now well known, with the virus being called the inequality virus (Oxfam International, 2021), heightened by a vaccine apartheid practised by the governments of rich countries that monopolized the vaccines before they were market-ready and thus crowding out poorer countries (Bajaj et al., 2022; Gonsalves & Yamey, 2021; Hassan et al., 2021). While income inequality increased in developed countries at a faster rate in the earlier half of the pandemic (Darvas, 2021), various analyses in poor countries, including India, show that the poverty reduction gains achieved so far were potentially set back by up to a decade [see (Alkire et al., 2021) based on World Food Programme (WFP) and United Nations Economic, Scientific and Cultural Organization (UNESCO) data analysis of 70 countries accounting for 89% of the global poor. In 2020, the economies of every region of the world and every major economy except for China contracted; global real gross domestic product (GDP) contracted by 3.1%, and India's, like Western Europe's, by more than twice as much (IMF, 2022). Even with the economic recovery commencing in 2021, there are still high levels of uncertainties in global supply chains and a lingering blind spot in global health about coronavirus in the near term (Durrheim, 2022).

With the largest number of people in business engaged in small and medium-sized businesses globally, the effect of the pandemic on the SME sector has been much in the news and in popular reporting, including relief measures introduced by governments to the sector. While this economic uncertainty is exacerbated by the Russo-Ukraine conflict, and related food and energy insecurity and inflationary price rises in large parts of the world, what is yet under-researched is the impact on the smallest of livelihood generating micro-businesses in remote and rural regions. These subaltern communities, even without a crisis such as the pandemic, routinely face deprivation and work under traditionally constrained environments. Entrepreneurship in constrained environments has been attracting research interest to explore small individual private initiatives in regions of poverty, fragility, institutional constraints and resilience in crisis (Eggers, 2020; Khoury & Prasad, 2016; Renko et al., 2021). In rural, resource-poor communities, such micro businesses are the main livelihood support for the poor families making the wellbeing of whole families and, indeed, communities precarious. The Indian rural poor are no exception – with single-person businesses in rural India forming

[1] as reported on the World Health Organisation dashboard (5th September 2022).

[2] Asian flu (1957, 1968, Singapore, China, Hong Kong to United States of America (USA), United Kingdom (UK)), cholera (1961 Middle east, Africa, South America, Zimbabwe), smallpox (1977-1980, Somalia), Human Immunodeficiency Virus (HIV) / Acquired Immunodeficiency Syndrome (AIDS) (1981-present, most cases now Sub-Saharan Africa), Severe Acute Respiratory Syndrome (SARS) (2002-2003 Southern China to four continents but mainly China), Influenza A virus subtype H1N1 (Swine Flu) (2009-2010 Mexico and USA to 70 countries), Middle East Respiratory Syndrome (MERS) (2012-2016 Saudi Arabia and South Korea), the rise in Polio (2014-present, Africa and Asia), and Ebola (2014 West Africa, also to Europe/USA, 2018-2020 Congo).

over 84% of all micro, small and medium-sized businesses across India as detailed later. The COVID-19 pandemic has been but an addition to the persistent constraints such businesses operate under.

The impact of the pandemic on the populations in India that were already at risk can be seen, such that in in 2020, the pandemic reversed the thirty-year trend of poverty reduction in India. Pew Research found that India has gone recently from being the highest poverty reducing country in the world to having 60% of the global 'new poor' slipping into poverty, with incomes of US$2 or less per day (Kochhar, 2021), evidencing the precarity of lives that are normally above the poverty line. With no universal safety net, livelihood generating entrepreneurship among the Indian poor becomes an important research question and is likely to remain important in the backdrop of the recent trend of reducing consumption expenditure and stagnant public spending on development and on agriculture (Shagun, 2022).

This chapter, therefore, explores how micro businesses fared in a small resource-poor village community in the sub-Himalayan district of India's northern Uttarakhand state. It outlines the challenges that the villagers, already in a constrained resource-poor environment, have faced in livelihood generation during the COVID-19 pandemic and whether and how they might be prepared for a future crisis. Resource poverty is an underlying characteristic of poor populations globally, and the study has relevance for entrepreneurship in similarly constrained environments in other poor regions of India and the world. The fact that this community has kept the coronavirus-related health risk at bay and has continued to generate livelihood incomes in various ways through the pandemic period also has relevance for small rural communities elsewhere.

ENTREPRENEURSHIP IN CONSTRAINED ENVIRONMENTS

Entrepreneurship research has hitherto mainly given primacy to the strength of individual entrepreneurial agency in explicating the entrepreneurial process (Bhowmick, 2015; Sarasvathy, 2001; Shane & Venkataraman, 2000; Stevenson & Jarillo, 1990; Venkataraman, 1997). The role of the environment or structure, ie, of institutional settings, in entrepreneurial action and outcomes proposes a more socialized conceptualization of the entrepreneurial process. Scholars thus posit contextualizing entrepreneurship in historical and institutional milieu, deeply embedded in social context, economic structures and spatial bounds (Anderson & Gaddefors, 2016; Chlosta (2016)Fortunato & Alter, 2015; Muller & Korsgaard, 2018; Welter, 2011), and as a Bourdieusian power-laden field where the actors comply with – as well as challenge – existing institutional fields (Clercq & Honig, 2011). Taking this further, community-based enterprise (CBE) has been studied, drawing from community-interaction theory in commercial and social enterprises, in addition to social development research (Adhikari et al., 2018; Korsching & Allen, 2004; Peredo & Chrisman, 2006; Somerville & McElwee, 2011) and, according to Pew Research, as the next frontier in entrepreneurship research (Lyons et al., 2012). These concepts will be valuable in understanding entrepreneurial action in the constrained environments of this study's selected poor sub-Himalayan village community.

Commented [JS1]: Perhaps update. Please see refs in attached.

Constraints in Rural India and COVID-19 impact

Rural India, as is the case in many rural communities elsewhere, lacks a supporting ecosystem – of infrastructure, transport, adequate power, finance and a market for products and services Entrepreneurship is extremely challenging in such constrained environments and villagers barely eke out a living. The large rural-urban gap in life opportunities is indicated in important indicators, such as average per capita wages per day of salaried employees (Indian

rupees (INR) 150-230, US$3.3-5.1), literacy (65-80%) and years of education reflecting access to education (4.68-7.79 years), hospital beds per thousand population (0.41-0.19), or overall consumption.[3] This gap is wider in most of north India. Poor job opportunities force villagers either to emigrate to urban centres to earn a living and provide better education to their children or make the best of a poor prevailing situation earning whatever is possible with marginal farming, animal husbandry or micro cottage industry initiatives, often in a barter system for lack of cash paying customers. In such constrained environments, entrepreneurship occurs at the margins of the market process. Often entire families are involved in earning a living in many such poor communities. Numerous national programmes of the Indian government exist, with many new schemes launched for the poor in income generation, education, civic amenities, etc. The uptake of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)[4], which guaranteed 100 days of employment per year to the poorest workers who are hired for manual labour in state projects, has been so high due to its comparatively efficient payment administration following a large government initiative in electronic payments rolled out to hitherto unbanked villagers. Recently, however, the MGNREGS scheme has been slowing because of payment arrears that have mounted in several states over the pandemic period (Nandy, 2019) which was affected at least partially by the Indian economy that was estimated to have been losing US$4.6 billion in a single day in the national lockdown (Acuité Ratings, 2020).

The study setting: Bharwa Katal village, Uttarakhand state, India

Within the broad constraints of most rural areas and due to the ensuing out-migration to urban centres, the regions of India are diverse in their demographic parameters such as population density, education, healthcare, land availability and ownership, and market opportunities. Rural Uttarakhand compares favourably with the average rural Indian demographic statistics. The table below gives leading demographic data for rural India, and rural Uttarakhand state averages alongside Bharwa Katal (BK) village statistics as they compare with the statistics of the nearest State capital of Dehradun city.

[3] Data taken from India's National Sample Survey (various rounds) and Census and largely pertaining to 2011-2014; these indicators do not change rapidly for a large population and hence are still indicative of the gap. Moreover, while these have all been improving, income and wealth inequality has also been increasing in the recent past (as mentioned in the Discussion section)

[4] Under the Mahatma Gandhi National Rural Employment Guarantee Act (2005)

	Rural India average	Rural Uttarakhand average	Bharwa Katal village (BK)
Percentage population rural	68.7%	69.5%	100%
Population per village	1327 /village	439 / village	193 in BK
Average household members	4.45 (all India)	4.9	5.1
Literacy rate: Total/male/female	66.8%/77.2%/57.9%	77.1%/87.6%/66.8%	Most are educated to primary level, a majority to secondary level.
Child sex ratio (female/male)	919/1000	1000/1000	11/11
Women's work participation rate per 1000 women	248	206	549 (extrapolated from 50 out of 91 women)
Per capita income	US$4.2 per day- at Current US$(all India, rural and urban)	INR100,305 = USD 6.11 per day	Not available; families with small landholding but low income
Household with highest earning member income < INR 5000 (US$2.1) per day (2019)	74.5%	63.4%	70.9% (Tehri district
Electricity coverage	68 % in 2011 (99% in 2019)	87% in 2011 (100% in 2019)	97% in 2011 (100% in 2019)

All figures are sourced directly or are derived from the 2011 census data. unless otherwise stated. India's decadal census in 2021 was not held and has been postponed due to the pandemic. Figures are rural, except where indicated for all-India or all-state.

The urban-rural disparity can be observed in the indicators, particularly in infrastructure and access to opportunity for people to grow and for their wellbeing. Bharwa Katal (BK), a small village of 38 households (Census 2011) in 48 hectares in north India's sub-Himalayan district of Tehri Garhwal in Uttarakhand State has a literacy level similar to that of the Uttarakhand average, although with much lower female literacy. Yet, a child sex ratio higher than the Uttarakhand average, albeit within the small village population, is indicative of the progressive – perhaps unspoilt – outlook of this village community compared to northern India that has an even lower ratio than that of Uttarakhand state, with a serious female infanticide and sex selective abortion problem. Urban migration, despite 60% of the village being owners/co-owners of land with very few agricultural labourers, shows the poor economic prospects which characterizes rural India in terms of infrastructure to support job creating economic activity. This economic malaise is also accompanied by poor medical and post-secondary educational infrastructure.

BK is a poor village within a state (Uttarakhand) that has a higher rural per capita income and literacy rate than the national rural average. BK reflects the usual rural situation of lack of opportunity and resultant out-migration. BK household numbers have also declined in the last

decade to eighteen; these families have stayed and tried to improve their lot and that of the community. BK is located on a highway and this single characteristic makes for better access to markets, banking facilities and better government agency engagement from the district headquarter town and state capital of Dehradun 11 km away. Its location also meant that amenities such as the grid electricity connection have been established ahead of many other villages. This infrastructure also helped villagers to find work in Dehradun without losing contact with the community. Working in daily wage labour for government schemes in an urban project was also possible. However, compared to many resource-constrained villages, a section of the community has stayed back and apparently worked to improve their lot. This could well have been driven by a high level of women's participation in the workforce, as seen in the table above. It may be mentioned that women's participation in work has been seen to decline with rising household income and education levels for various reasons, such as status considerations of a patriarchal system and also for lack of suitable employment opportunities (Das & Desai, 2003; Desai & Joshi, 2019). However, the rural women folk in BK overcome the cultural restriction by doing their own business as has been found in other emerging economies (Atarah et al., 2021).

METHOD

The small village of BK was contacted through Himalayan Environmental Studies and Conservation Organization (HESCO), a non-governmental organization (NGO), which has been working in the region and has been in close contact with the BK community since 2014. It was clear during early engagement with HESCO and the community that the villagers worked on the basis of a common household pot of finance and mostly took joint decisions among the adults in the household, usually the adult couple. The household was thus taken as the unit of analysis. All households in BK had engaged with HESCO over time. Eighteen of the BK households had organized themselves into, and had been operating, an all-women's Self-help Group (SHG)[5]. The families had been working on a household income design where the menfolk would go out to earn daily wages, mostly in MGNREGS projects while the women ran the household and engaged in the micro-business activities around their SHG to generate income. All eleven who volunteered to participate in the study were SHG members.

Since a small subject population of rural households lent particularly well to a qualitative rather than quantitative exploration, it was decided to take a qualitative approach to data collection and analysis. With the small respondent group of rural women with a maximum of secondary level education, semi-structured interviews were considered most appropriate for data collection. A Conversation Analysis method was adopted in the data gathering and

[5] A Self-Help Group (SHG) is a self-selected group of 10 to 20 persons who collectively take decisions for their wellbeing – mainly financial – and is registered with India's ministry of Micro, Small and Medium Enterprises (MSME) and is authorized to raise bank credit and operate a formal business. The first SHG was started by a now leading civil society non-governmental organization (NGO) called SEWA (Self Employed Women's Association) helping informal sector women get work, income, food security and financial discipline advocating small savings. Encouraged by the government and provided with the legal scope to constitute formal organizational structures in 1992-93, the initiative has grown into a movement of 8.7 million SHGs nationally in 2018 with deposits over INR 195 bn (US$ 2.8 bn) and annual credit offtake of INR 470 bn (US$ 6.7 bn) and is a major global microfinance programme in India (Das & Guha, 2019). Nationally, most SHGs are women SHGs following a concerted push to encourage poor rural women to organize and form SHGs. Despite some key gaps in skill and education levels, needing capacity building that are being attempted to be filled by civil society NGO action, women SHGs have evolved into a major development vehicle in the country.

analysis. Conversation Analysis (CA) is "an inductive, micro-analytic, and predominantly qualitative method for studying human social interactions" (Hoey and Kendrick, 2018: 151). CA developed in the 1960s and 1970s through the work of Harvey Sacks, Emanuel Schegloff and Gail Jefferson. Goffman's (1967) new sociological inquiry of face-to-face interaction and Garfinkel's (1967) ethnomethodology critiqued prevailing theories of social order. CA holds that, rather than aggregate descriptions of social life, people expressed their circumstances *in situ* thus co-designing data collection with the enquirer (Heritage, 1984). In CA, talk is seen as the vehicle for action. Its hallmark here is talk-in-interaction in real settings (Hoey and Kendrick, 2018:153).

The descriptive apparatus in CA for conducting conversations in research have developed in four major aspects: Turn-taking, ie, ordering of verbal feedback among group members and an evolving turn-transfer to the next speaker (Sacks, 1992), Sequence organisation, ie, the way successive turns link coherently (Schegloff, 2007), Turn Design, ie, how members themselves implement their turns to speak (Drew, 2013), and Repair, a corrective action within the conversation (Schegloff, Jefferson & Sacks, 1977). These aspects may be visible in different degrees in a conversation interaction, for instance, while Schegloff, Jefferson and Sacks (1977) focus Repair more on the errors-rectification cycles by the speaker or another member, the aspect of Repair in conversation interaction also encompasses the difficulties in comprehending the spoken data due to language, expression or gesture. The latter was a strong focus of the researcher in this study which gained by the researcher having local knowledge of the language and culture. Both Turn Design and Turn Transfer were visible during the group meeting in the field work in the study where the respondents inherently followed a lead by the group head who took charge of the SHG organisation (described later) and gave way to each other to contribute in the interaction. The analysis drew a Sequence Organisation of the data from the group interaction combining the same with data from individual meetings.

Interviews were held with the eleven volunteer women SHG members each representing a household. These were held in the vernacular language known to the interviewer and participation was robust and did not have male participation (or as go-betweens) as might be expected in many poor rural Indian communities. First, a 2-hour long group meeting was held followed by individual meetings for three hours. The conversation flow in the group meeting witnessed Turn-taking and Turn-transfer, and Turn co-design mentioned above.

The villagers were informed of the research objective and, knowing their usually heavy work engagement throughout the week, convenient times were scheduled on Sunday when the women had help in their household chores from their children. While the community had been exposed to some survey work by development authorities and researchers, were unused to responding to qualitative queries in depth. Therefore, a fairly detailed set of descriptive and unambiguous questions was prepared along with the scope to elaborate on the qualitative questions, such as the kind of support they sought or obtained beyond financial support, in training or moral support, etc. The group also invited the researcher to join three of the group members for lunch between the group and individual meetings. This enabled a lot of *in situ* conversations and provided data of the inclusive nature of the community and SHG functioning as was later evident in their policy of a revolving fund creation for emergent needs of members and their treatment of a village member in distress described below. Such close interaction also facilitated the Repair aspect of CA in the individual meetings where other women folk expressed their opinions more freely. Member checks, an important part of qualitative data gathering and analysis (Lincoln and Guba, 1985) was undertaken through four subsequent phone meetings with the SHG leader arranged by HESCO's BK project coordinator.

FINDINGS AND ANALYSIS

SHGs in the village BK and the income-generating practices of SHG households

BK villagers have been familiar with SHG and have been operating an all-women SHG since 2012. The women who were lead members of the SHG were secondary school educated and kept the accounts of members. These SHG households had decided the men folk work in unskilled daily wage jobs in government-run projects with contractors under the state-sponsored employment schemes, such as MGNREGS, and the women folk would work with their business enterprises selling their farm produce and processed food, mainly pickles, and other ventures as described below. With daily wage jobs being available only part of the year, the men also worked in the field and thus were growing and harvesting crops. Effectively, therefore, the women folk, through the SHG, were the entrepreneurs in the village.

The system the group had devised was that each woman collected the money she earned from her sale and kept the sales proceeds within the SHG. Since almost all of them had their own houses and food from their farms, they met livelihood needs mainly from the men's wages. This approach enabled them to use their accumulated business sales proceeds for extraordinary expenses, such as weddings and house repairs for one of their members. These were taken as drawings from and also repaid into the SHG kitty accumulated as mentioned above. Currently, only two members had such funds drawn for family weddings which reflects regular fund replenishment and the group financial discipline of prudent use of this revolving fund.

Enterprise history of SHG members

The SHG has all eighteen households as members. It is an all-women SHG, the most common constitution of SHGs across the country and the women of these eighteen households are formal members of the SHG. Eleven of the women members participated in the study.

Early ventures: Sericulture, 2010-2020

In 2010, seventeen households belonging to the SHG had started sericulture activity with the technical and equipment assistance from the State government department who helped the women set up their sericulture farms, organized a regular supply of silkworm seeds and trained them to run these farms. The product was also bought back by the department which introduced it into the silk market supply chain. This initiative was part of a cluster development national pilot project by the Indian government to geographically enhance silk production by initiating rural SHGs to take up sericulture. After a decade in 2020 when the government withdrew[6] the scheme from BK's SHG, the women terminated the business. They reported that it was not feasible for them to deal with the market directly. When probed further, they expressed their inability not only to explore the market for potential buyers but even to leave the village for extended times as they had to attend to all their other work with their farming and family responsibilities. As long as their product were picked up by someone, here the department representatives, they were happy to continue the business.

[6] India has had traditional expertise and has been the second largest silk producer after China. In 1948, soon after India's independence, The Central Silk Board was established under the Ministry of Textiles which, through their state-level counterparts, proactively supported sericulture and the entire silk making industry. Southern India has traditionally been known for quality silk and the government set up a digitized auction in Bangalore for farmers that is the largest silk/cocoon auction market in Asia and is directly run by the government. After the decade-long development, focus was enhanced on north-east India for its favourable agro-climatic conditions, for sericulture operations and research, including genomic and genetic sequencing (Central Silk Board, 2020).

2012 to present, Pickle processing, organic farming and a mushroom initiative:

With some experience of having engaged in sericulture since 2010, the SHG member households started processing farm vegetables to make pickles for bulk sale to eateries and the restaurant sector in nearby towns, including the State capital Dehradun. Pickling is a traditional skill with recipes that come down generations in Indian families, rich and poor, and the women were well-honed in its techniques. With little change in this field, except for the need for early supply of short-cycle pickling served as spiced semi-pickled accompaniments with food in many restaurants, the women have had a good run of this business. The pandemic, however, has slowed this business down considerably due to restaurants being closed or semi locked down. The group held out and the sector is now bouncing back, as pandemic restrictions are relaxed and normalcy returns gradually.

The community, as have other village communities in the region, has traditionally grown rice and vegetable and reared animals. BK has usually practised low chemical agriculture as did most hill communities where, unlike in the plains, they have used cattle manure for agriculture, rather than processing it as cooking fuel. In 2014 HESCO, through an employee who lived in the district and who knew of BK's efforts in community enterprise, selected BK as a project site for a funding bid HESCO won from the government. Through this project, HESCO encouraged the BK SHG to organize specific organic farming processes. This was extended to mushroom farming in 2018 with further government funding through HESCO's engagement. These initiatives were either started independently by BK or as a setting for HESCO projects funded by the Indian government as part of government-NGO outreach.

COVID-19 impact: health, income and further business initiatives

The BK community did not have a single case of COVID-19. One case of a man who was landless and contracted the virus infection in an urban centre away from the village, where he had gone to earn a living, was BK's only brush with the health pandemic. He got caught in travel restrictions and stayed away, while the SHG included his wife in the group and initiated her to assist its functions and helped her with daily needs. BK not having a COVID - 19 case was an interesting consequence of rural remoteness and of the community being cautious about contact with the outside world.

In terms of income, all eighteen households in the SHG were reported to have engaged in the above-mentioned initiatives through the months of the pandemic. With the lockdown restrictions impacting offtake, the bulk pickles business suffered the most and ceased at the height of the lockdown restrictions. The SHG women tried another initiative at the time. They were introduced by the state government's horticulture department to inexpensive greenhouse practices of controlled environment farming with a low use of water under large plastic sheet-framed weather protected enclosures that were called 'polyhouses'. All the households trained to erect the polyhouses and started their polyhouse farming, which is expected to show results in 2023.

There were separate initiatives during the pandemic by individual SHG members too. One of them started a fishery facility with support from the government's Fisheries Department and another started a poultry farm with the Department of Animal Husbandry. Both received training and assistance to purchase assets/livestock to start the activities.

Qualitative data on the community's experience

Regarding the reason for embarking on business initiatives, all the participants said they started their ventures for income generation to tackle their lack of cash income and for financial security for their families and thus represent 'necessity entrepreneurs', rather than 'opportunity entrepreneurs' delineated by the Global Entrepreneurship Monitor 2001

(Reynolds *et al*, 2001). Asked if they thought they needed and got assistance for their income generation efforts, they all acknowledge the help of HESCO who they have engaged with, while one also engaged with another NGO run by a publishing house Amar Ujala. Besides the activities mentioned earlier, all of them reported that the community traditionally engaged in rearing animals, i.e cows, goats and some chickens, selling milk and clarified butter, growing and selling vegetable and turmeric, beekeeping and cultivating rice. That, however, did not earn them enough for their families' financial needs. On further questioning, it turned out that these activities were scattered and unorganized on an individual effort basis. With the help of local authorities, e.g for sericulture, and later with continuous assistance from HESCO, they organized themselves collectively through the SHG, kept abreast of government assistance schemes and obtained technical and basic financial training, particularly with the women taking up more organized production activities. Marketing effort was organized to the extent that the most outgoing and educated of the group's women regularly took the produce to the highway where they met with the traders from nearby urban centres on a regular basis and exchanged their wares (vegetable, pickles, and grain) for credit slips as I-Owe-Yous, which would be cashed on the traders' next visit. This was an ongoing relationship between the SHG and the traders. The community did not go out to seek customers. On their business financials, while they were reluctant to discuss and were expectedly inexact about their revenue and profits, they said all of them were making a surplus on their sales. They had rudimentary books of accounts and did not cost their time or the farm inputs, except when they purchased vegetables for pickling and any of their payments for material or occasional direct labour.

Market Access Need

The respondents, to a woman, fed back their need for smarter market access. They did not suggest that they themselves would source their market and clients or wish to be trained in the marketing process. In their businesses, they did not visit nearby urban centres or the state capital Dehradun 10 km away to make sales or market their products. Asked why that was so, even when trade was slowing down, they pointed to their inability to leave their domestic responsibilities and that it was not customary for the community women to leave the village by themselves. In their first initiative in sericulture, the women trained and obtained resources under the state programme to start the production of silk cocoons. There too, the department bought back the cocoons at the village, thus helping the community to sustain the activity for ten years. However, with capacity building limited to production, the women ceased the business when the department stopped the scheme to buy back the produce. The SHG members are aware of their need for market access and are happy to arrange selling to buyers that are willing to buy at BK. It is pertinent that the respondents did not attempt to raise loans during the pandemic. In fact, they traditionally kept away from loans. They would take any grants and in-kind assistance, such as training, assets and other resources available or market link-ups or buy-back assurances offered which did not have a repayment obligation. This links to the uncertainty of returns in running businesses under constrained conditions.

Role of HESCO: Capacity building, enhancing awareness of opportunities and government schemes

Civil society in the form of NGOs have played a significant role in much of India's development.[7] HESCO operates in the sub-Himalayan region of Uttarakhand led by a

[7] However, there is a history of NGOs including large, well-known international foundations and corporate entities having indulged in undesirable activities of either interfering in political processes, e.g with funding, or having engaged in unethical activity, e.g making possible medical trials with dubious consent mechanisms (cf.

charismatic, committed founder, an environmentalist well-known and much felicitated by the government for his work of establishing forests, recharging rivers/streams and building rural capacity for sustainable livelihood generation in the sub-Himalayan Uttarakhand region. The HESCO team has also designed low-cost household and agricultural equipment and local sustainable systems. It has obtained funding for capacity building and introducing sustainable practices for villages such as BK as their project sites. HESCO started working with BK in 2014 and has engaged in projects as mentioned above. The critical input in BK's community effort has been support and handholding by different government departments and officials and, on a sustained basis, by HESCO. It may have not been possible for this small village of twenty families to attract the attention of the authorities in all their initiatives for funding and other resources without the presence of HESCO. The local and dependable presence of HESCO has been a guiding hand for the community which also gives them visibility as seen in their being certified an "organic village" by Uttarakhand State Certification Agency in 2019.

DISCUSSION

The data from BK show multiple dimensions of the community's entrepreneurial action to generate income in a constrained environment. The case is, therefore, discussed in the backdrop of historical and socio-cultural-political factors that make for precarity in communities generally, and is then related to the conditions of the COVID-19 pandemic. Lessons drawn may be useful for such under-resourced at-risk communities elsewhere in general and for crisis preparedness in particular.

Historicity

The process of the creation and reproduction of poverty is evidently political, i.e political processes that reproduce social differences and are, necessarily, historical. In the context of commerce and industry in India, the recent history of Indian enterprise policy has had an unintended impact on growth. For thirty years since India's independence in 1947 the country's government, on the one hand, initiated an economic growth strategy on the basis of heavy industry with much government control and, on the other, mandated a large number of products to be reserved for small enterprise to encourage employment generation. This and the increasing complexity and restrictiveness of labour regulation for business enterprises as they grow from one size to the next (i.e micro, small, medium-sized and large as defined by the government) raised compliance costs, often sharply, with the last stage making it incumbent on an enterprise to obtain state government approval to dismiss an employee. This led to many enterprises preferring to remain within the small industry ambit at the cost of growth. It also led, historically, to a predominance of informal sector enterprise and, with the scarce national resources feeding heavy industry sub-optimally, it led to the relegation of light industrial products to an under-funded small and household enterprise that grew as an informal, unorganized sector (Panagariya, 2011, 2021). Data show own account enterprises (OAE), i.e tiny private enterprises with no hired employees, at 84.2% of total micro, small and medium-sized enterprises (MSME) in the country in 2015-16, representing 91.4% of rural MSMEs (NSSO, 2016). Historically, these micro enterprises, which need state support

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Noko, 2020; Weyzig & Schipper, 2008). Nevertheless, there are also several grassroots NGOs such as HESCO that function close to communities over the long term and have engaged in capacity building and to secure for underprivileged communities their *de jure* and *de facto* rights. NGOs from Baba Amte's *Anandwan* that grew out of his lifelong service of leprosy afflicted and other socially excluded people, to Action Research in Community Health and Development (ARCH) that uses technology for global positioning systems (GPS)-based forest demarcations to secure tribal communities their rights, have played a significant role at the grassroots level in alleviating rural poverty in India. There is a rise in such social work organizations across India today.

most, have been facing an absent state scenario. This improved after the 1980s, further helped by decentralization policy initiatives starting in the early 1990s. However, the rural hinterland, particularly in the topographically difficult hill regions, while improving in facilities such as satellite connectivity and electricity, are still lacking in health and education access, transport and infrastructure connectivity, and in income opportunities. Such a connectivity deficit has maintained increased urban migration, disrupting the socio-cultural fabric of rural communities. Systematic comparison with employer entrepreneurs and large enterprise employees have found that lower education and cognitive ability levels of OAE owner-workers were reasons for the lower motivation and tenacity needed to run and grow a business, resulting in a static business situation (de Mel, McKenzie and Woodruff, 2008). Furthermore, rural India also exhibits more awareness of caste divisions that impact on the development of the poorest who are essentially the lowest caste population. The movement of people across India and an increasingly secular economic life has seen this division weaken, although recently reviving in some pockets by Hindu nationalist elements. Uttarakhand, overall, sees much less of this schism due to its, albeit marginally, higher literacy levels and its relatively sparsely populated hilly terrain that dilutes the political strife apparent in the plains. It is in this backdrop that the livelihood generation activities of the BK community are studied,

BK's constraints, COVID-19 and community enterprise development

Bharwa Katal village has grid connected electricity and a fair level of intermittency with 16 to 20 hours of daily electricity availability and satellite mobile telephone connectivity of a fair quality but faces all of the above liabilities of remoteness with a lack of educational, healthcare, banking access and constrained infrastructure availability. However, being on a highway gives BK some locational advantage. Moreover, while remaining small and, despite some out-migration to urban centres for jobs, a reasonable number of families have stayed in the community. Established secondary and post-secondary education is available in the state capital 11 km away and hence should be accessible to BK. However, the cost of such education is beyond the villagers' capacity to bear. Medical care is also similarly available but affordability is limited to low cost but often inadequate government clinics.

BK has consistently worked through its constrained environment. BK engaged with a local government department since 2010 to access training and resources for sericulture. Close engagement with HESCO enhanced community awareness of government schemes for project resourcing and funding. While HESCO has been important for the community's wellbeing, it is the community itself that has risen to the occasion. The households came together through the SHG women navigating around their social-cultural, political and economic constraints. The critical support for each other through the revolving SHG fund testifies to the collective ethos among households. Literature on community based enterprise (CBE) often exemplifies constrained environment micro-businesses, as in BK, where decisions involve much of the household and are closely intertwined with the fate of the families and of the community, overcoming community poverty and operating with high levels of community trust (Cnaan et al., 2014).

Uniqueness of BK's community-based enterprise

The SHG members' business activities form an example of a unique community-based enterprise (CBE) in that they decided to meld their individual and collective efforts in ways that kept each household output distinct and collectively shared other critical aspects, i.e the market sales and bookkeeping processes. They also collectively took decisions to start or end individual ventures that depended on external engagement, such as the sericulture projects, and yet allow households freedom for individual projects, such as poultry and fish farming.

Compared to CBEs globally, where communities have socio-economic constraints, BK has an additional socio-cultural constraint of an inward-looking society emanating from gender and caste biases in rural India, the former being more pronounced in BK that restricts women's exposure to the world outside their household. Even though a third of BK's population is officially of low caste, the women of BK have empowered themselves by working collectively, together with the men, and taking joint decisions towards wellbeing of the family, a process led by the SHG women circumventing caste and gender-based barriers. This is no mean feat for a small constrained sub-Himalayan village in a country that has seen income, wealth and gender inequality rise sharply in the recent past as the World Inequality Report 2022 points out (Chancel, Piketty, Saez, Zucman, et al., 2022). Furthermore, during the COVID-19 pandemic, even though their income streams were dwindling, they did not resort to loan funding. This may be anathema to entrepreneurial action for growth but is consistent with the financial prudence of working without debt in a contracting market. It is also evidence f the SHG women taking a prudent decision to do without the burden of social status-based biases of traditional lenders in rural India as described in Sandhu *et al* (2017). That the community has practised this technique long before the pandemic is testimony to the fact that they always worked in constrained environments with COVID-19 being only an additional constraint in their lives. This is also a prevalent practice elsewhere in other constrained environment entrepreneurship settings, particularly among women entrepreneurs (Atarah et al., 2021).

Entrepreneurial pivoting

The BK women have shown since 2010 that they have always been keenly aware of the prospects of their businesses and have been ready to pivot and, indeed, have practised frequent pivoting. They have pivoted from sericulture to food processing and pickling to organic farming and mushroom farming, to controlled environment polyhouse vegetable growing, while all the while working through the ups and downs of their traditional grain farming and animal husbandry. Pivoting is an entrepreneurial trait that scholars have recommended for small firms, ie, to change their business or business model when the current business does not work, as reviewed in Ingoid et al (2020). The BK community households, through their SHG, have taken opportunities to start new business activities as and when such opportunities arose with adequate resource support. They have trained themselves together and sought each other's support even in individually starting the same new ventures and selling their wares in a joint effort. Even during the COVID-19 pandemic slowdown they started new ventures with polyhouse vegetable growing and some starting poultry and fish farm businesses. They have developed, through practice and awareness, an entrepreneurial agility that helped them pivot constantly in their attempt to keep precarity at bay, defining an extreme case of necessity entrepreneurship.

CONCLUDING REMARKS

This study started by aiming to explore the impact of COVID-19 on businesses in a small sub-Himalayan village community and their entrepreneurial resilience as might be seen through any financing of innovation to sustain those businesses during the pandemic. The study found that the BK village community faced persistently constrained conditions in normal times that have taught them techniques which sustained their income streams in general. They avoided debt since they lived financially at-risk lives that always bordered precarity. Operating at the edge of resource precarity, they continuously pivoted by keeping several businesses going, i.e new activities whenever such opportunities arose alongside those they knew traditionally. The role of external agency support is critical for such communities. BK obtained such support through HESCO and, occasionally, project-wise,

from government agencies. They also developed a system of community-based enterprise that struck a fine balance between collective action in some aspects of doing business (such as sales and accounting and occasional procurement), while keeping production at an individual level, thus making each person's productivity speak for itself. They developed social cohesion by pooling in cash resources from revenues to run a revolving fund for emergency funding for any member, a system that plugged the hole in their access to finance for non-routine expenses in an attempt to ward off precarity in their lives. Thus, the study, albeit of a single community, finds entrepreneurship in constrained environments is bound up with financial survival. Such livelihood generating entrepreneurship is found to develop systems of cohesion and inter-dependence for financial security within the community. It develops, beyond financial resourcing innovation, an innovative mix of collective as well as individual action and a readiness to pivot when the environment demands, thus, developing crisis preparedness as a trait in the community.

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