

Bringing Forward the Left-Behind: Impact of Male Out-migration on Women in Hill Districts of Uttarakhand

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An intermix of push and pull factors in rural agrarian economies have led to high rates of out-migration and abandonment of agriculture.¹ Countries like India and China have had stark differences over the years where population engaged in agriculture reduced from more than 50% in 2010 to less than 48% in 2018.² This phenomenon has multiple repercussions on these economies, as they affect the sociocultural organisations that sustain agriculture and restrict space for agricultural innovation.³ Studies show that this shift which is slowly being observed in multiple rural contexts has led to an imbalance between labour needs and availability, overall food production of an area and the production systems at large.⁴

The reasons behind this shift have mainly been found to be stagnation of farm incomes⁵ and decline in average land holding sizes.⁶ Thus, these reasons coupled with contextual problems of the affected areas have led to a physical and figurative movement of these agriculturalists away from their original livelihood activity. All of this has eventually led to the abandonment of agriculture. This movement in India is so massive that according to a study, it can be said that “up to 100 million rural Indians are estimated to be mobile in search of livelihoods”.⁷ With such glaring figures, these distress-induced livelihood changes in rural India have been dramatic, to say the least.⁸ Adding to the aforementioned reasons for the shift, agrarian distress in India

¹ B D Jokisch, “Migration and Agricultural Change: The Case of Smallholder Agriculture in Highland,” *Human Ecology* 30, no. 4 (2002): 523–50; E M Hoffmann et al., “Is the Push-Pull Paradigm Useful to Explain Rural-Urban Migration? A Case Study in Uttarakhand,” *India. PLoS ONE* 14, no. 4 (2019).

² World Bank, *World Development Indicators*, 2019, <http://data.worldbank.org/data-catalog/world-development-indicators>.

³ R Mines and A de Janvry, “Migration to the United States and Mexican Rural Development: A Case Study,” *American Journal of Agricultural Economics* 64 (1982): 444–54; R Black, “Migration,” *Return, and Agricultural Development in the Serra Do Alvaio, Northern Portugal* 41 (1993): 563–85; C Greiner and P Sakdapolrak, “Rural–Urban Migration,” *Agrarian Change, and the Environment in Kenya: A Critical Review of the Literature* 524–553 (2013): 34; M Caulfield et al., “How Rural Out-Migrations Drive Changes to Farm and Land Management: A Case Study from the Rural Andes,” *Land Use Policy* 81 (2019): 594–603.

⁴ KC. Bren d’Amour, C; Reitsma, F; Baiocchi, G; Barthel, S; Guñeralp, B; Erb, K-H; Haberl, H; Creutziga, F; Seto, “Future Urban Land Expansion and Implications for Global Croplands,” *PNAS*, 2017, 114; Hoffmann et al., “Is the Push-Pull Paradigm Useful to Explain Rural-Urban Migration? A Case Study in Uttarakhand.”

⁵ A Vaidyanathan, “Farmers’ Suicides and the Agrarian Crisis,” *Economic and Political Weekly* 41, no. 38 (2006): 4009–13; M Taylor, “‘Freedom from Poverty Is Not for Free’: Rural Development and the Microfinance Crisis in Andhra Pradesh,” *India. Journal of Agrarian Change* 11, no. 4 (2011): 484–504; F Jannuzi, *Agrarian Crisis in India: The Case of Bihar* (Austin: University of Texas Press, 2014).

⁶ C Pritchard, B; Rammohan, A; Sekher, M; Parasuraman, S; Choithani, *Feeding India: Livelihoods, Entitlements and Capabilities* (Abingdon: Routledge, 2014).

⁷ P Deshingkar and S Akter, “Migration and Human Development in India,” *S. I., Human Development Research Paper* 2009/13 (2009).

⁸ A Sinha, “Farm Sector, Non-Farm Employment and Rural Livelihood: A Study,” *Social Change* 37, no. 1 (2007): 50–76; B Harris-White, “Introduction: India’s Rainfed Agricultural Dystopia,” *European*

is also inclusive of debt burdens due to the introduction of high-value crops growing in mostly rain-fed agriculture. This is because technological treadmills associated with their growth are usually not accounted for and add to the existing load. Thus, opportunities for the growth of these crops are also limited to certain geographical and social boundaries.⁹



Figure 1: Uttarakhand in Map of India

One of the biggest observations of such distress-induced movements in India can be seen in the northern state of Uttarakhand. Uttarakhand is one of the recently formed states of India¹⁰ and constitutes of 13 districts and has a population of 10,086,292 people. About 69.77% of this population resides in rural areas.¹¹ More than 700 villages in the State have been affected by the phenomena of ‘ghost villages’.¹² The State is geographically divided into ten hill districts and three plain districts. Here, agricultural production has declined drastically for a region which was once able to produce for both subsistence and surplus.¹³ The contribution of the primary sector which includes agriculture and allied services has gone down from 14% in 2011-2012 to approximately 10% in 2017-18 in the State.¹⁴ This shift in Uttarakhand has been primarily due to out-migration of households /families in light of declining agricultural productivity and disinterest of educated youth to engage in agriculture, among several other reasons discussed later. Lowered productivity has been partly attributed to erratic rainfall patterns and rise in conflict with wild animals.¹⁵ The decline in population in the *hill districts* is

Journal of Development Research 20, no. 4 (2008): 549–61; A Kundu and S Chakrabarti, “Non-Agricultural Informal Sector in India: Impacts of Agrarian Conditions,” *The Indian Journal of Labour Economics* 53, no. 2 (2010): 199–224.

⁹ G Gruère and D Sengupta, “Bt Cotton and Farmer Suicides in India: An Evidence-Based Assessment,” *Journal of Development Studies* 42, no. 2 (2011): 316–37.

¹⁰ Uttarakhand was recognised and declared as a separate state in 2000

¹¹ Census, *Census of India* (GOI, 2011).

¹² Villages which have been either completely abandoned or have a single digit population residing in them due to out-migration are termed as ghost villages.

¹³ N Naudiyal, K Arunachalam, and U Kumar, “The Future of Mountain Agriculture amidst Continual Farmexit, Livelihood Diversification and Outmigration in the Central Himalayan Villages,” *Journal of Mountain Sciences* 16, no. 4 (2019): 755–68.

¹⁴ GoUK, *Uttarakhand Migration Commission Report* (Uttarakhand, India: Rural Development and Migration Commission of Uttarakhand, Pauri Garhwal, 2018).

¹⁵ G Bhandari and B C Reddy, “Impact of Out-Migration on Agriculture and Women Work Load: An Economic Analysis of Hilly Regions of Uttarakhand,” *India. Ind. Jn. of Agri. Econ.* 30, no. 3 (2015): 395–404; GoUK, *Uttarakhand Migration Commission Report*; Naudiyal, Arunachalam, and Kumar,

matched with a sharp increase in the *plain districts*.¹⁶ With Himalayan foothills of India characterized by subsistence agriculture, rural poverty and high vulnerability to natural disasters, there are various reasons for this phenomenon to be limited to these hill districts.¹⁷ There have been scarce opportunities for livelihood diversification or income enhancement in these districts where subsistence agriculture is the primary source of livelihood. Therefore, the reasons identified for hill out-migration are not just limited to lowered agricultural productivity and youth disengagement but also coupled with economic backwardness.¹⁸ Economic backwardness when linked with out-migration reinforce each other and create a vicious circle that further heightens economic underdevelopment in the region.¹⁹ This economic backwardness in the districts has been reasoned due to the lopsided design and implementation of the development plan in the state, which has lacked the perspectives and specificities of these hills.²⁰ Being centred mainly around the plain districts, with hill districts remaining far off the pace in this increasing prosperity of the State.²¹ The resources present in these districts have been accrued to the advantage of urban centres and thus, have led to limited employment opportunities outside agriculture for the growing labour force in highlands.²² Thus, the unequal relationship between these districts, amidst a highly fragile resource base coupled with livelihood insecurities have led to out-migration as a response or a coping strategy.

This out-migration has been going on even before Uttarakhand was recognised as a separate state. This has led to it being scrutinised under the push-pull theory as well.²³ Wherein, push factors are extensively discussed above, the pull factors from urban centres include diverse and improved employment and educational opportunities and less social discrimination.²⁴ This has also helped realise migrant profiles and the type of migration, with the earliest literature consisting of multiple field level studies that focused on the temporality or permanence of people migrating and did not constitute the understanding of the pattern and nature of migration. Later studies explored that about 86% of these migrants from hill districts are males

“The Future of Mountain Agriculture amidst Continual Farmexit, Livelihood Diversification and Outmigration in the Central Himalayan Villages.”

¹⁶ Census, *Census of India*.

¹⁷ R Guha, *The Unquiet Woods* (Bangalore: University of California Press, 2000); M Rais, B Pazderka, and G Vanloon, “Agriculture in Uttarakhand,” *India—Biodiversity, Nutrition, and Livelihoods* 33 (2009): 319–35; A Satendra and others, *2015* (Uttarakhand Disaster 2013. New Delhi, National Institute of Disaster Management, 2013); R Mangain and D N Reddy, *OUTMIGRATION FROM HILL REGION OF UTTARAKHAND: Magnitude* (Challenges and Policy Options, Hyderabad: NIRD, 2016); P Singh, “Changing Trends of Agricultural Development and Its Effect on Environment of Uttarakhand,” *Scholarly Research Journal for Interdisciplinary Studies* 4 (2017): 8608–22; Hoffmann et al., “Is the Push-Pull Paradigm Useful to Explain Rural-Urban Migration? A Case Study in Uttarakhand.”

¹⁸ GoUK, *Uttarakhand Twelfth Five Year Plan and Annual Plan 2012-13* (New Delhi, s. n, 2012); GoUK, *Annual Plan 2013-14* (Planning Commission of Uttarakhand, 2014); GoUK, *Uttarakhand Migration Commission Report*.

¹⁹ P C Joshi, *Perspective of Planners from Above and People’s Perceptions from Below: The Problem of Bridging the Hiatus*, 1980.

²⁰ N Jodha, *Poverty Alleviation and Sustainable Development in Mountain Areas: Role of Highland-Lowland Links in the Context of Rapid Globalisation in Growth* (Kathmandu, ICIMOD, 2000); I Awasthi, “Migration Patterns in Hill Economy of Uttarakhand: Evidence from Field Enquiry,” *The Indian Economic Journal* 57, no. 4 (2010): 84–99.

²¹ GoUK, *Uttarakhand Twelfth Five Year Plan and Annual Plan 2012-13*; GoUK, *Annual Plan 2013-14*.

²² *Ibid.*

²³ E Lee, “A Theory of Migration,” *Demography* 3 (1966): 47–57; J Harris and M Todaro, “Migration, Unemployment and Development: A Two-Sector Analysis,” *The American Economic Review* 60 (1970): 126–42.

²⁴ K Sridhar, A Reddy, and P Srinath, *Is It Push or Pull? Recent Evidence from Migration in India* (South Asia Network of Economic Research Institutes, 2010).

with 52.4% of the age group of 30-49 years. Further, about 71% of these migrations are long ranging from 6-12 months.²⁵

The following figure establishes the literature based problem-flow seen in these hill districts:

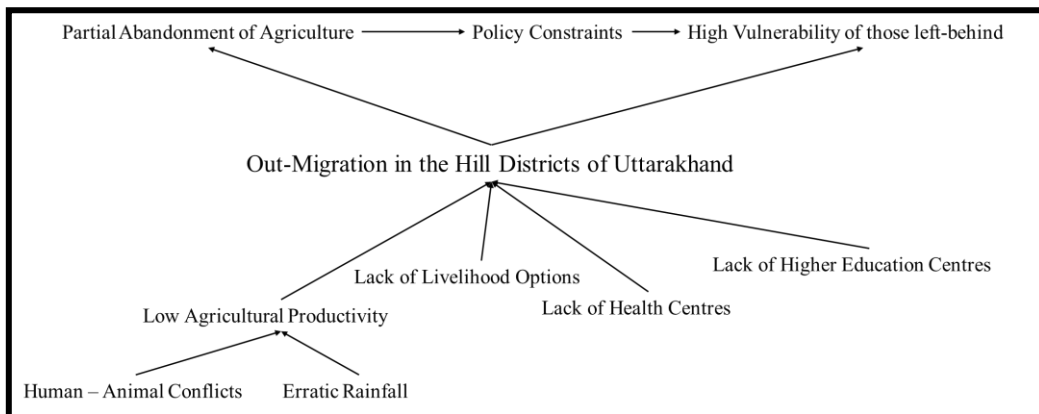


Figure 2: Literature-based Problem Tree

The consequences and repercussions of this occurrence have only come up recently in the literature. Multiple studies have identified a rise in agrarian distress in the region due to deteriorating productivity of land and decline in the yield obtained.²⁶ Widespread deagrarianisation²⁷ and abandonment of agricultural land is also being observed.²⁸ Thus, these processes hold the ability to further accentuate poverty and impact food security in the region.²⁹ Apart from the reduction in production, migration is also leading to a shortage of labour in agriculture. Remittances for households are not considered to be enough to compensate for this shortage because a greater portion of the migrated males are involved in low-paying, unskilled jobs.³⁰ The most affected by these changing dynamics of the source site are the ones *left-behind*, which constitute mostly women and children.

With women already undertaking a hefty amount of workload in the hills, this recent male out-migration seemed to have had an impact on the same. With their work considered 'drudgery' by earlier literature, recently there has been a bleak focus on the lives of the women left-behind.³¹ Women taking up a role in productive activities has only come up in the past 10-15 years. With families only having enough to be able to send a limited number of members to migrate to other places and women having to participate in unskilled productive activities, the

²⁵ Mamgain and Reddy, *OUTMIGRATION FROM HILL REGION OF UTTARAKHAND: Magnitude*.

²⁶ C Nicholas, "Geoforum Shifting Production / Shifting Consumption : A Political Ecology of Health Perceptions in Kumaon," *India* 64 (2017): 182–91; R Shukla et al., "Agriculture in the Western Himalayas – an Asset Turning into a Liability," *Development in Practice* 28, no. 2 (2018): 318–24.

²⁷ D F Bryceson, "Deagrarianization and Rural Employment in Sub-Saharan Africa: A Sectoral Perspective," *World Development* 24, no. 1 (1996): 97–111.

²⁸ P Tiwari and B Joshi, *Gender Processes in Rural Out-Migration and Socioeconomic Development in the Himalaya* (Migration and Development, 2015).

²⁹ B Pritchard, M Vicol, and R Jones, "How Does the Ownership of Land Affect Household Livelihood Pathways under Conditions of Deagrarianization? 'Hanging in', 'Stepping up' and 'Stepping out' in Two North Indian Villages," *Singapore Journal of Tropical Geography* 38, no. 1 (2017): 41–57.

³⁰ Shukla et al., "Agriculture in the Western Himalayas – an Asset Turning into a Liability."

³¹ E Byers and M Sainju, "Mountain Ecosystems and Women: Opportunities for Sustainable Development and Conservation," *Mountain Research and Development* 14 (1994): 213–28; B Sharma and K Banskota, "Women," *Water, Energy, and the Millennium Development Goals: Lessons Learned and Implication for Policy* ICIMOD (2006): 3–8.

feminization of agriculture is happening by default.³² With low education levels, limited skills and opportunities within the origin sites, women either by choice or no choice take up the responsibility of agriculture-based tasks.³³

Most of the studies based in other regions on the globe implied that there has been a significant amount of change in the lives of women due to male-outmigration. However, the results are diverse due to contextual constraints, the disposition of the impacts and consequences. Some studies emphasise on the role of remittances as a source to stabilise the source sites by helping in provide income for farm and non-farm-based wage labourers.³⁴ The irregularity of remittances and the cost of migration, however, is not considered. With remittances not enough, there is a possible rise in women's workload to suffice for household expense.³⁵ The interplay of the economic sector is also discussed, wherein, there has been observed a rise in unpaid work for women in the absence of a male member in the household.³⁶ Varied mixed results have been found concerning changes in the division of labour, women's mobility and their overall empowerment due to out-migration.³⁷

The changes through the impact of out-migration and the changing role of the women left-behind were highlighted much earlier in global contexts but have found space in Himalayan literature only recently.³⁸ The Himalayan literature has followed the broad themes such as involvement of women in traditionally male-dominated domains of agricultural work and the rise in their daily workload, changes observed in women's role at the community level, temporary effects on decision-making and mobility of women; and overall impact on their livelihood due to out-migration.³⁹ This changing role of women who are at the receiving end of this phenomenon at the source site is not discussed at length in the literature. Despite multiple

³² S Vepa, *Feminization of Agriculture and Marginalization of Their Economic Stake* (The Economic and Political Weekly, XL(25), 2004); G Kelkar, *The Feminization of Agriculture in Asia: Implications for Women's Agency and Productivity* (New Delhi: UNIFEM South-Asia Regional Office, 2007).

³³ Ibid.

³⁴ Van Rooij and A., *Women of Taghzoute: The Effects of Migration on Women Left Behind in Morocco (Interaction between Migration, Land and Water Management and Resource Exploitation in the Oases of the Maghreb)* (Amsterdam, University of Amsterdam, 2000).

³⁵ T Paris et al., *Impact of Male Out-Migration on Rice Household Economy and Gender Roles: A Case in Eastern Uttar Pradesh* (India, 2005).

³⁶ M Mendola and G Carletto, *International Migration and Gender Differentials in the Home Labor Market: Evidence from Albania* (Washington D, 2009).

³⁷ S Chant and N Craske, *Gender in Latin America* (New Brunswick: Rutgers University Press, 2003); J Mcevoy et al., "Gendered Mobility and Morality in a South-Eastern Mexican Community: Impacts of Male Labor Migration on the Women Left Behind," *Mobilities* 7, no. 3 (2012): 369–88.

³⁸ B Brown, "The Impact of Male Labour Migration on Women in Botswana," *African Affairs* 82, no. 328 (1983): 367–88; S Jetley, "Impact of Male Migration on Rural Females," *Economic and Political Weekly* 22, no. 44 (1987): 47–53.

³⁹ A Nandini, *Engendered Mobilization—the Key to Livelihood Security: IFAD's Experience in South Asia* (Rome, Italy: IFAD, 1999); M Lokshin and E Glinskaya, "The Effect of Male Migration on Employment Patterns of Women in Nepal," *The World Bank Economic Review* 23, no. 3 (2009): 481–507; A Maharjan, S Bauer, and B Knerr, "Do Rural Women Who Stay Behind Benefit from Male Out-Migration? A Case Study in the Hills of Nepal," *Gender, Technology and Development* 16, no. 1 (2012): 95–123; Bhandari and Reddy, "Impact of Out-Migration on Agriculture and Women Work Load: An Economic Analysis of Hilly Regions of Uttarakhand"; Tiwari and Joshi, *Gender Processes in Rural Out-Migration and Socioeconomic Development in the Himalaya*; B Joshi, *Recent Trends of Rural Out-Migration and Its Socio-Economic and Environmental Impacts in Uttarakhand Himalaya*, 2018; P Kandari, "Migration Pattern and the Increasing Participation of Females in the Economy of Hill Rural Areas: A Study of Pauri District in Uttarakhand," *IOSR Journal Of Humanities And Social Science* 17, no. 5 (2013): 27–33; S Desai and M Banerji, "Negotiated Identities: Male Migration and Left Behind Wives in India," *Journal of Population Research* 25, no. 3 (2008): 337–55; Mary Adhikari, Jagannath; Hobley, "Everyone Is Leaving. Who Will Sow Our Fields?" The Livelihood Effects on Women of Male Migration from Khotang and Udaypur Districts, Nepal, to the Gulf Countries and Malaysia," *Himalaya, the Journal of the Association for Nepal and Himalayan Studies*, 2015.

studies on economic contribution through remittances and changes in decision-making and mobility; women 'left-behind' as earning members and at the centre-stage of the local livelihood is not contextually found to be built in the existing literature.

These changing dynamics of lowered productivity and out-migration have also captured attention to make way for multiple livelihood interventions. Recently introduced interventions such as Integrated Livelihood Support Project (ILSP) by IFAD India and Sanjeevani intend to change the face of this downfall in the hill districts.⁴⁰ ILSP aims to “enable rural households to take up sustainable livelihood opportunities integrated with the wider economy” and is being implemented in 11 of the 13 districts of Uttarakhand.⁴¹

Thus, the women of these hill districts are functioning in a context with changing human resources and forthcoming opportunities leading to changes in the role they play in the source locations. Using an adaptation of the Sustainable Livelihood Framework, this research aims to assess not just the changes in the livelihood of women, but their strategies to cope with these changes leading to numerous positive and negative outcomes in their lives.

Conceptual Framework

Bringing women to the centre-stage, the Sustainable Livelihood framework has been adapted to determine the local context with a focus on women *left behind*, their asset base and the influence of formal and informal institutions on livelihood outcomes. The study is contextualized in hills districts where development interventions such as ILSP (of IFAD) is implemented. Table 1 outlines the adapted dimensions and indicators of the framework.

Table 1: Sustainable Livelihoods Framework

DIMENSIONS	INDICATORS
CONTEXT	Socio-economic: Demography, Migration, Income Sources Physical: Rainfall, Natural Resources, Land Use
POLICIES, INSTITUTIONS AND PROCESSES	Formal Institutions: Policies and Laws Informal Institutions: Local customs and norms Perception of people on informal and formal institutions Intermediary role of intervening bodies Interventions and their processes
ASSETS	<i>Human Capital</i> : Livelihood activity, choice of livelihood, knowledge and skills required for that livelihood <i>Physical Capital</i> : the basic infrastructure needed to make a living; the tools and equipment that they use <i>Financial Capital</i> : savings, in whichever form; access to financial services; regular inflows of money; contribution to household income; remittances

⁴⁰ ILSP, *Annual Outcome Survey* (s, 2017).

⁴¹ IFAD, *Integrated Livelihoods Support Project* (IFAD, 2017).

	<p><i>Natural Capital:</i> the natural resource stocks to draw for their livelihoods, including land, forests, water, air and so on</p> <p><i>Social Capital:</i> both vertical and horizontal relationships of trust, reciprocity and exchange that the poor can draw on in times of need, and that lower the costs of working productively together</p>
LIVELIHOOD STRATEGIES	<p>Migration</p> <p>Livelihood intensification</p> <p>Livelihood diversification</p> <p>Changes in Reproductive & Productive needs and roles</p>
OUTCOMES	
More Income & Improved Food Security:	<p>Control over the use of income, Changes in production; food self-sufficiency;</p> <p>Improved purchasing power</p>
Reduced vulnerability:	<p>Ownership and control over assets; Access to & decisions of credit; choice of livelihood</p> <p>Participation and contribution in institutional activities; Input in productive decisions</p>
Increased well-being:	<p>Workload (productive and reproductive); leisure time; ability to decide on career/education</p> <p>Freedom of movement</p>
More Sustainable use of NR Base: Changes in the use of Natural Resources	

Thus, based on the identified problem and using the aforementioned framework, the research aimed to study the socio-cultural and economic context of the study villages in Almora district, a hill district of Uttarakhand. This was to understand the socio-cultural and economic status of women in the context of male-out-migration at household and community level in the study villages. And further, to finally analyse the role of livelihood interventions in enabling women to cope with livelihood uncertainties, particularly in the case of male outmigration.

Methodology



Figure 3: Map of Uttarakhand with Selected District

District Almora was decided as the study area as it was one of the districts with negative decadal growth and high duration of development intervention activities. Similar criteria were

applied to the chosen block Syaldey. Since out-migration was a phenomenon prevalent almost everywhere, the study villages were chosen as such to fulfil the mentioned research objectives and to obtain a comparative understanding concerning the project. The selection was such that one village is where there is high-outmigration but no-implementation of development intervention and two villages are where there is high-outmigration but included under multiple development interventions. However, MGNREGS being a National Act was applied in all three villages by default. Further, criteria of the presence of diverse caste groups and agricultural activities were also considered.

Using purposive sampling technique, data collection was undertaken for three months. The primary respondents under the study were 80 women in the age groups: <20 years and between 20-50 years of age. Some other respondents were a few male members of the household (where available), Village *Pradhan* (Village Head); Technical Agents (TA) working with women or implementing livelihood programmes in these villages; District level project officials and the Chief Development Officer (CDO) and District Magistrate (DM) of Almora.

Mixed method approach was followed to collect comprehensive data from the concerned stakeholders. Different tools such as household survey questionnaire, interview schedules, focused group discussions and different means of Participatory Rural Appraisal techniques were used for data collection. Secondary data was collected from district census data, IFAD reports, UGVs's reading material and reports, State level reports and the available literature of the village/hill regions of Uttarakhand.

The notes collected in regular time intervals were revised and coded to organize and group similar data points using key-words. These notes further helped supplement the findings from other tools and techniques applied to gather data. Using the software, Stata 14.2, household questionnaires were analyzed to obtain the necessary information. Data was analyzed based on all visual information collected, it will include maps, calendars, field notes, observations etc. Data triangulation helped in cross-checking the information gathered and thus determining the validity and reliability of the data.

Findings

Livelihood Resources

Using the Sustainable Livelihoods Framework, the asset distribution helped understand why the women stayed behind in the villages, the livelihood options they took up and their present livelihood resource base.

Natural capital is one of the most important determining factors for the choice of livelihood taken up by the families of the community. Owning a piece of land coupled with historic practices of farming and intergenerational knowledge sharing (as human capital) in the families determined agriculture as the primary source of livelihood in the study villages.

Further, availability of water and other irrigation sources in the mountainous terrain helped determine the choice of livelihood taken up by the individuals of the family or, if agriculture, the types of crops to grow. For example, paddy, a water intensive crop, was found to be growing in hamlets closer to river beds. Therefore, for the landless, devoid of the ownership of the natural capital, animal husbandry was found to be the primary source of livelihood. However, over-time and also a cause for the rise in out-migration as determined by Himalayan literature as well, agriculture was now found unprofitable due to rise in human-animal conflicts and erratic rainfall pattern.

With 80 households interviewed, it was found that 86.7% of the out-migrated members were men. The reasons for the migration of male members were found to be work and education. 79% of out-migrated men, shifted to the other States of India and worked in jobs ranging from hotel staff to drivers. Other remaining percent shifted to either plain regions of Uttarakhand or relocated within the hill districts. The prevalence of out-migration was more within individuals

with higher education levels (Figure 4). This out-migration was found to be prevalent only among the productive age groups, with more than 60% men out migrated from age groups 25-45. This not only depicted the rise in the disinterest of youth towards agriculture but also put light on the degradation of knowledge and skill transfer pertaining to the primary livelihood activity.

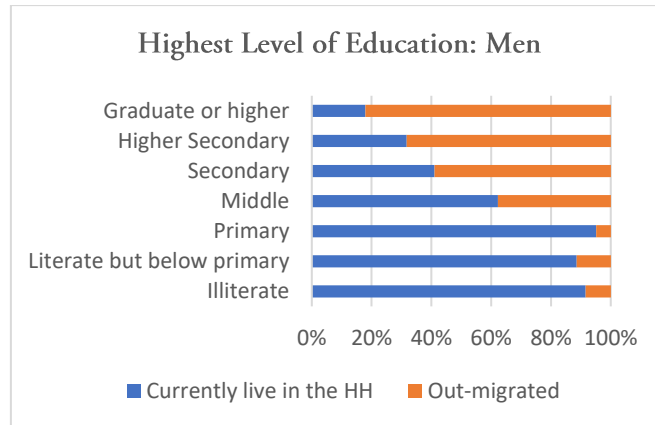


Figure 4: Education Level: Men

With agriculture as the primary activity of most households, 60.25% of households owned about 17,000 sq.ft. of land or less. Out of which, 89% women did not have property rights over that land which restricted their control and ownership over land. Traditional norms of sons taking forward the legacy of the household (patrilineal system) reinforced this asset distribution. The remaining percentage of women who had the property rights over land were either the sole member of what once was a family or had joint property over land. Further, due to declining human labour to work on fields, the entire fields were found to not being cultivated and cultivable land was forced to be left fallow. Therefore, out-migration leading to erosion of human labour was expected to fill that gap through remittances (as financial capital) to fulfil labour needs. This expected substitution could not suffice due to high cost of migration, low-paying menial jobs at destination sites and irregular and insufficient remittances. Less than 50% of out-migrated men provided remittances and more than 70% women were dissatisfied with the remittances sent home. Smoking and liquor consumption were lifestyle habits that men carried with them to cities and often served as a barrier to savings from income resulting in low remittances. The knowledge and skill transfer of agriculture is also seen to be declining over-time due to disinterest for the same amongst youth.

Therefore, with failure in the method of substituting types of capitals, the combination of livelihood resources was found ideal for them to be sustainable. However, access of those resources to those left-behind was limited. With barely any ownership over land for women, it restricted their access to credit and proved to be a safety net for those out-migrated. The women of the villages considered the produce obtained from the land they tilled, the equipment they used on the farm, the horizontal social relationships they built and the knowledge they garnered as their biggest assets. Thus, despite the informal institutions guiding control over certain assets, out-migration of male members made women get access to assets pertaining to the productive roles the women had now become a part of. However, they were also now in-charge for completion of certain activities like ploughing, which were traditionally considered to be only be completed by men's physical ability. This added an extra burden of hiring labour and bulls for this task which was once considered achievable through then existing members of the household.

Amidst the rise of women in participation of farm-based activities, or the default feminization of agriculture, it was important to note that there still wasn't any replacement for the reproductive roles they were traditionally a part of. Fending for the livestock, taking care of children and elders, collection of water, fodder and fuel was still considered as their

responsibility. Therefore, to achieve access to certain valued assets like contribution to household income, decision making regarding selling the produce and mobility within the community, the biggest trade off was their time. With schedules wrapped around such that they were devoid of any leisure time, the time spent with participating in these activities with fellow neighbors was highly cherished. However, these social relationships were also divided based on caste, with women belonging to Scheduled Castes and Other Backward Castes as not a welcoming part of the community. These women resided in hamlets geographically away from the rest of the village and mostly partook in animal husbandry or labour activities due to no or low ownership over land.

Another ironic note-worthy aspect of women left-behind was the rise in their education levels. Women of the villages valued education of their children to help them shift to other livelihood avenues and mark a shift away from, what had now become, *unprofitable* agriculture. This rise was seen starting from age groups 15-35, which stood in stark contrast with the older age groups where more than 80% of women were illiterate. Yet, the burden of the aforementioned dual responsibility was such that the cause and consequence of this rise in education was only to coerce them back to the hectic routine they wanted a bit of relief from. The more educated the woman, the better groom could be found for her. Wherein, she will be expected to take up the roles traditionally designed by the communities. A phrase heard rather commonly in the villages completely aligned with the mentioned practice – “*Aurat ka kaam yahi hai, ghaas kaatna, gobar saaf karna*” (This is what women have to do - cut grass, tend to livestock). This is further clarified in the following figure occupation of women despite a rise in education levels have remained limited to household-based tasks.

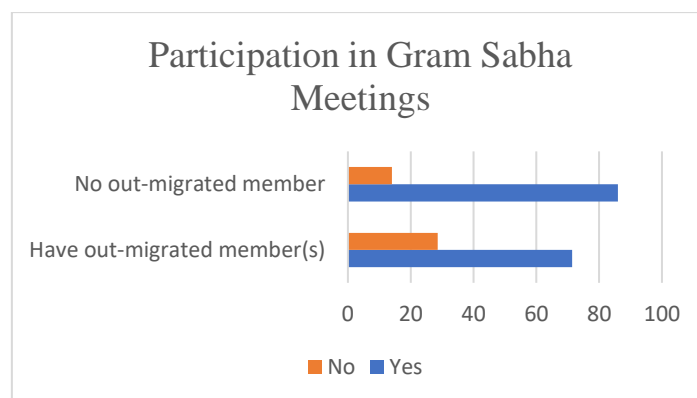


Figure 5: Participation in Gram Sabha Meetings

Access to village infrastructure and community level decisions and information was something women missed out on due to out-migrated members. Women preferred accompanying men while attending Gram Sabha meetings or received information from male members with respect to these meetings since these meetings were mainly attended by men. With out-migration of these members and women’s hectic schedule, their attendance in these meetings have gone down and the information received is limited. The participation decreased by 15% and the women also objected of not being taken seriously in these meetings. Further, the political representation of women was limited in households where their husband stayed within the household and had a position of power. Such women were made fun of by the community and were called pawns/puppets of their husbands. This was because they were considered not to have any power of decision making. Despite about 98% women voting in elections, 82.5% were not aware of the elected representatives of their district or state.

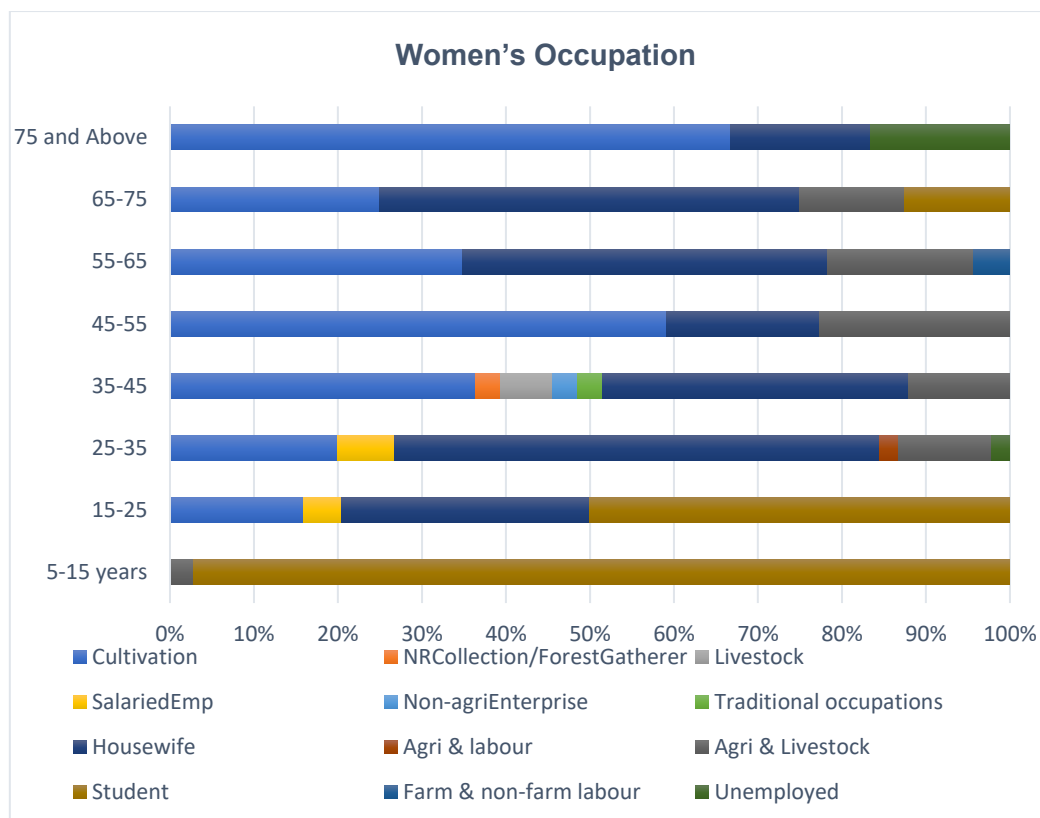


Figure 6: Women's Occupation - Age wise

Livelihood Strategies

Migration is evidently the most prominent strategy applied by the households of the study villages. However, this strategy employed by the individuals of the households had a larger impact on the communities of women and children they left behind. Due to the cost of migration or limited skills and knowledge, they had to rely on other options in the source sites. Despite agriculture being the primary activity that most women engaged in, they recognized themselves as housewives and considered the out-migrated men to still be the breadwinners of the households. Here, agriculture intensification or extensification was not a possibility for women. Intensification required a combination of natural capital such as land with economic capital to provide for newer technology or inputs. Here, since there wasn't seen any enhancement in income or savings due to out-migration of male members, this combination of capitals wasn't possible to employ the strategy. Further, extensification meant extension of land to grow produce on, which was a possibility as the land left fallow by out-migrated families was informally used by some households for cultivation. Again, this strategy was unemployable due to lowered availability of labour to work on those fields.

Thus, limited availability of choice of livelihood coupled with limited knowledge and skills left them devoid of options they could further participate in. With bare to no remittances, lowered demand for agricultural produce and lowered productivity, the women were only left with the options to diversify in sectors that could suffice with the skillset they were comfortable and accustomed to. Thus, women's participation in informal farm and non-farm labour enhanced. Opportunities through MGREGA⁴² and other labour needs in the village were now being fulfilled by women to make ends meet for the household. Social capital had an important role

⁴² Mahatma Gandhi Rural Employment Guarantee Act - National Act which operates as a social security measure that guarantees 'right to work' through 100 days of labour work

to play in this setup as bartering and moneylending was often found to be prevalent amongst close neighbors where the trust of the horizontal relationship lay. The reliance on animal husbandry also enhanced own oxen, cows, buffalos, roosters or goats. Since oxen became a great asset for ploughing due to unavailability of male members, however, only a few households put them on rent for labour purposes. About 75.2% households' own cows and buffalos which provide milk for household consumption. Only 28.5% households use livestock for commercial purposes due to market unavailability. However, roosters and goats are used as a safety net, in case of financial emergencies. These were strategies employed by women of the SC households, but they could also only find a limited market in the nearby petty shops. The households with elderly members provided an income source through pensions.

The scope to shift to other practices for diversification was limited due to lack of opportunities and already burdened individuals at the source site. This was also evident through the daily clock cycles of children, where girls were expected to do attend to household chores, thus limiting their time towards education and other possible training opportunities.

Therefore, the diversification strategies employed are not helpful for accumulation or reinvestment, but are used as coping strategies to the adversities faced by women due to male out-migration. This is due to limited resource endowments and low risks associated with the activities women tend to participate in. The limited number of men left-behind in the villages tend to work in petty shops by the road and at times, fulfil labour needs of the villages.

Livelihood Interventions

The onset of livelihood interventions has happened due to the alarming trends seen at the study site. Therefore, there are multiple changes intended to be made in the institutional framework by these interventions to enhance the means of livelihood.

ILSP by IFAD constitutes of four components: (1) Food Security and Livelihood Enhancement; (2) Participatory Watershed Development; (3) Livelihood Financing and (4) Project Management. The first and the third components are implemented by Uttarakhand Gramya Vikas Samiti (UGVS) and Uttarakhand Parvatiya Ajeevika Samvardhan Company (UPASaC) and are relevant to the study. The second component was not functional in the study district and the fourth component concerns with the overall Project Design and Management. The first component includes plans for ensuring food security and upscaling, access to market, vocational training and innovation linkages.

Sanjeevani, another intervention has identified vulnerable beneficiaries based on health-related problems members of the household have. The project follows a needs-based approach and provides avenues for skill training exercises based on community demands.

Outcomes: Beneficiaries and Non-beneficiaries

Since the research constituted of two case villages with interventions and one control village with no intervention, it has been easier to be able to generate a comparative idea of the outcomes obtained.

Income and Food Security

Income and food production remained stagnant, if not reduced due to out-migration in the communities. However, disposable income for women rose as they became in-charge of expenditures limited to the household. With the coming of the livelihood intervention that focused extensively on agriculture intensification, the produce obtained did rise marginally, but the weak linkage with the market did not help enhance the income of the household. Yet, agriculture received recognition amongst the community as a livelihood source which was worth investing in. However, projects providing diversification options (Sanjeevani), have made space for higher contribution to household income by women and have led to a marginal increase in income.

Vulnerability

Those unable to cope or adapt to stresses and shocks are vulnerable. With women employing temporary solutions to stressful conditions situated in locations susceptible to environmental distress (or shocks), male out-migration did make their state rather vulnerable. Livelihood interventions did bring about certain assets to help cope with these uncertainties better. With the expansion in financial capital through savings from producer groups or self-help groups, there was now a possibility of reinvestment to diversify to other strategies or intensify the existing one. Further, enhancing network through hamlets led to the expansion of social capital. However, utilisation of the generated resources towards *only* agricultural intensification was persuaded by ILSP. The intervention further did not take into account the missing links in the asset set, which could help strategize solutions towards sustainable livelihoods. However, women were able to fulfil the information gap within the village that had been created by male out-migrated members through cohesion of groups made by the project.

Well-being

The ideas of 'well-being'⁴³ and 'capability'⁴⁴ help provide a wider concern which is beyond comprehension of material indicators. This allows people to make their definitions of the criteria to identify their livelihood outcomes. With a reduction in leisure time due to out-migration, there were other added benefits of control of household income, being termed as the *temporary household head*, enhanced mobility within the community and not requiring permission within the boundaries of the village. However, these choices were still limited concerning the livelihood they followed. ILSP added an extra responsibility or a third role of a project member on these women. It did try understanding the context of the lives of the women, but only tended to immediate worries and was unable to create sustained impacts. Where going to meetings was considered burdensome and taking part in project activities felt pressurised in a venture that was failing due to reasons that couldn't be addressed with short term solutions.

Use of Natural Resources

There is a heavy reliance on natural resource base in this study context. With natural resource like land still having the ability to reap benefits, external factors of erratic rainfall and human-animal conflicts have led to the shift away thus also decreasing the farm lands due to the abandonment of cultivable land.

The intervention practices as an attempt to create sustainable livelihoods: successes and shortcomings

1. The intervention worked towards enhancement of economic capital through self-help or *producer* groups as savings, and making use of horizontal social relationships to strengthen social capital. The aim was to ensure their linkage to the input and output supply chain of agriculture. The idea behind connecting these loose ends was necessary to generate an incentive for agriculture, but this association was slow to scale up in the absence of adequate processes.
2. Erosion of physical labour and out-migration is a phenomenon that still persists which has been overlooked by the project. Replaceability of financial capital with human resources is a failed assumption that the intervention trusted upon.
3. Breaking barriers of informal institutions with women taking up socially barred roles like leadership positions in organisations (cluster-level producer groups), freedom of movement and participation in community level decision-making

⁴³ Amartya Sen, "Rights and Capabilities," in *Resources, Values and Development* (Oxford: Basil Blackwell, 1984), 307–24.

⁴⁴ R Chambers, "Poverty and Livelihoods: Whose Reality Counts?," *IDS Working Paper 347* (1995).

has been attempted by the intervention. As beneficiaries, these activities are valued, however, only remain confined to the village level.

4. The intention of the intervention to build capacities of women to be able to function in those organisations is limited by the burden of responsibilities that lie on women and the gendered norms that govern them. Further, limited access to assets and their underutilization also act as a handicap for the project activities to be successful.

Conclusion: Way towards best practices

The fundamental purpose of this study was to provide the centre stage of the sustainable livelihood framework to the left behind women of the hill districts of Uttarakhand. This helped explicitly identify the livelihood choices they made and how these choices and livelihood outcomes were impacted by the context of male out-migration and influenced by the onset of development interventions. All these aspects are bound together with formal and informal institutions; and organizations. With the attempt to bring changes to the institutional setup through interventions comes a massive responsibility to ensure taking forward all the elements of the framework to be able to generate long term positive outcomes.

This need for them to be given a centre stage within a thinning economy losing out on human resources was because of the rise in importance of their roles and rising vulnerability. Further, it was important to understand their coping strategies which helped to interpret the long-term trends that may follow in the region. With the comparative analysis between intervention and non-intervention villages, the scope and potential of these interventions concerning degrading hill economies could be comprehended.

Therefore, the rising trends of male out-migration may still continue over-time due to dormant conditions with respect to the identified push factors. Concerning the impact on women's lives, with the rise in their vulnerability, there also has been a minute rise in their mobility and decision making in a few aspects of their lives. Therefore, with a focus on their reducing their vulnerabilities in consideration of the resources they have is the need of the hour. Thus, what sustainable livelihoods would mean for them can be derived from a FGDs' field excerpt:

"Humein kya aata hai? Hum yehi karte hai. Hum sheher mei kahan rahenge? Ab yahan zameen hai toh iska dhyan hi rakhenge. Agar koi kaam aata, toh wo karte. Bachon ko aur aage padhaate. Kheti mei ab fayeda nahi hota. Pehle hota tha. Agar bachche ache sey padhte, toh wo hume sheher leke jaate. Hamare paas kuch nahi hai, toh yehi toh karenge"

(What do we know? We just do this. What will we do in the cities? We have land here so we'll take care of it. If we knew anything else, we would've done that. We would've made our kids study further. Agriculture is not profitable anymore. It used to be. If our kids study well, they will take us to cities. We don't have anything else, so we'll only do this)

Therefore, the mentioned quote can help identify what sustainable livelihoods would mean to them. To be able to have a choice over what they do and to have the skills over that choice that would help generate profits. The income generated that would fulfil their current means of living and would help their future generations to sustain themselves and grow would mean sustainable livelihoods for them.

If the focus is set on bringing in choice of the livelihood they follow, efforts to enhance or build the capacity of women farmers, women's effective rights to land and assets; and taking a holistic view of the beneficiary and not just as a part of the whole, there can be large pay-offs. These pay-offs will not just be limited to the lives of women but will impact the development of the region.

Thus, if the development approach is followed taking this inclusive view, there may be a way which could lead to voluntary feminization of agriculture and not feminization of agrarian distress in these hill districts. Ensuring the reduction in the vulnerabilities of those left-behind may be able to ensure faith in the growth of these hill districts and may be able to generate sustained livelihoods. These interventions in the region with women beneficiaries also require support through other intersectional policies which are currently only restricted to reproductive roles (Women and Child Development Programmes).

Recommendations

Taking in view the flexibility of these livelihood interventions, a few arguments have been suggested:

1. The availability of more opportunities based on the skill sets women have may be able to pull women out of their current misery. For example, with a rise in education which has happened due to traditional conventions can be considered an opportunity to grab upon. Incentivizing education by giving the rise to a specific set of opportunities is one solution. This may help limit the dependence on the institution of marriage for a woman to sustain herself and not be considered a burden by society.
2. Skill building exercises to induce livelihood diversification could help generate sustainable livelihoods. Since, agrarian intensification pigeon-holds beneficiaries to follow one track, diversification gives the reigns of expansion to the beneficiaries and could generate better income and may also help create other revenue sources.
3. If the objective is to generate and sustain livelihoods, then all income generational strategies, migration and remittances have to be looked under one lens,⁴⁵ and not avoid the rural-urban linkages it holds. Taking the original context towards the community's benefit can further be applied to create linkages in the wider economy. The immediate needs of the households may be identified but the solutions provided will only be short-lived if not taken concerning the entire context and if the current asset distribution is ignored.
4. Emphasizing on the process of introduction of activities instead of coming up with direct solutions may help ensure long-term impacts on the lives of women and eventually, the hill districts of Uttarakhand. Thus, potential policy decisions and interventions together can cut across conformist boundaries and still leave the power of decision-making strategies to the beneficiaries.

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⁴⁵ Ian Scoones, "Sustainable Rural Livelihoods: A Framework for Analysis," *IDS Working Paper 72* (1998).

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