

# Impact Evaluation of Financial Inclusion Programmes of UPASaC in Uttarakhand



**National Institute of Rural Development and Panchayati Raj**  
Ministry of Rural Development, Government of India  
Rajendranagar, Hyderabad - 500 030, Telangana State, India

# IMPACT EVALUATION OF FINANCIAL INCLUSION PROGRAMMES OF UPASaC IN UTTARAKHAND

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# FOREWORD

by the Managing Director, UPASaC

Integrated Livelihood Support Project (ILSP) has been implemented by Government of Uttarakhand since 2013 in collaboration with International Fund for Agricultural Development (IFAD) in 44 blocks of 11 districts of Uttarakhand. The objective of ILSP is to provide food security, enhance livelihoods and income of the poor in the hilly region of Uttarakhand.

ILSP has been implemented by three agencies namely Uttarakhand Gramya Vikas Samiti (UGVS), Watershed Management Directorate (WMD) and Uttarakhand Parvatiya Aajeevika Sanvardhan Company (UPASaC) under Rural Development Department of Uttarakhand State Government. These three agencies have been implementing the project for food security, creation of livelihoods, market linkages, livelihood financing and financial inclusion in different roles.

Since UPASaC has been playing an important role in the area of financial inclusion, and the ILSP project is going to be completed in March 2021, Rural Development Department of Uttarakhand government entrusted the research project “Interim Impact Evaluation of Financial Inclusion Programmes of UPASaC” to National Institute of Rural Development and Panchayati Raj (NIRDPR), a reputed Institute in India.

I am happy that NIRDPR completed the study within the given time frame and as per the terms of reference. NIRDPR conducted the study with regard to UPASaC’s developmental activities in Uttarakhand during the three financial years i.e., 2016-17, 2017-18 and 2018-19 with a view to evaluating the effectiveness of various livelihood financing and financial inclusion programmes of UPASaC. The study also analysed the impact of bank linkage and externalities of institutional credit provided to members of producer groups, and livelihood collectives through UPASaC during the above said period and also proposed some valuable suggestions which will certainly improve the effectiveness of UPASaC’s activities in the days to come.

I am sure that the impact study report will be very useful for UPASaC and its stakeholders in its future endeavours.

With best wishes,

**Dr. RAM BILAS YADAV, IAS**

Additional Secretary  
Rural Development Department  
and Managing Director  
UPASaC, Dehradun  
Government of Uttarakhand

Dehradun,  
March, 2020



# FOREWORD

by the Director General, NIRDPR

The government of Uttarakhand, in collaboration with International Fund for Agricultural Development (IFAD), has been implementing Integrated Livelihood Support Project (ILSP) since 2013 to provide food security, enhance livelihoods and incomes of the poor in the hilly region. UPASaC, one of the project implementing agencies of ILSP, facilitates livelihood financing and creates sustainable livelihoods for the rural poor in the hilly region of Uttarakhand. It has been instrumental in ensuring bank linkage for members of Producer Groups (PGs) across all the 11 districts of Uttarakhand.

The development initiatives of UPASaC benefited individuals, households, members of producer groups and the community as a whole. The research team of NIRDPR has been able to collect primary data from 11 blocks located in 11 districts of Uttarakhand using stratified multistage random sampling method. The data have been collected from credit linked members (Group-A consisting of 205 members) as well as from non-credit linked members (Group-B consisting of 265 members) of PGs, to assess the impact of development interventions of UPASaC. Primary data have also been collected from office bearers of Livelihood Collectives (Group-C comprising sample size of 40) and other key stakeholders like bankers, officials in the government departments (Group-D consisting of 62 members). It has been established from the survey data that UPASaC has been instrumental in ensuring bank linkage for members of PGs across all the 11 districts of Uttarakhand. It was observed from the field study that UPASaC has been making concerted efforts in achieving last mile in financial inclusion through its training programmes on financial literacy and facilitation of livelihood financing to the members of PGs.

I appreciate the valuable contribution of Dr. M. Srikanth, Associate Professor and Head, Centre for Financial Inclusion and Entrepreneurship for conducting the study and highlighting the contributions made by UPASaC in financial literacy, livelihood financing and financial inclusion in State of Uttarakhand. I also appreciate the research team of CFIE for conducting research in key areas of financial literacy and education that are pertinent in today's discourse. I am thankful to the authorities of the Uttarakhand State administration for rendering their wholehearted cooperation during the time of data collection. I hope the report will be received well by one and all. We welcome feedback, if any, to sharpen similar endeavours by NIRDPR in the future.

Hyderabad,  
March, 2020

**Dr. W. R. REDDY, IAS**  
Director General, NIRDPR

## PREFACE

Financial inclusion is an essential process to graduate the poor people to a higher standard of living by providing them access to financial services. Access to safe, easy and affordable credit and other financial services is recognised as a pre-condition for accelerating growth and reducing income disparities and poverty. Uttarakhand, located at the foothills of the Himalayas, is primarily an agri-based economy. Lower productivity in the hilly region resulted in widespread poverty among the people whose livelihoods mainly depended on agriculture and forest produce. Since 2013, the government of Uttarakhand has been implementing Integrated Livelihood Support Project (ILSP), in collaboration with International Fund for Agricultural Development (IFAD), an agency of the United Nations Organisation. With the active support from agencies viz., Uttarakhand Gramya Vikas Samiti (UGVS), Project Society Watershed Management Directorate (PS-WMD), and Uttarakhand Parvatiya Aajeevika Sanvardhan Company (UPASaC), the government of Uttarakhand has been implementing the project with a view to reducing poverty and enhancing the livelihood opportunities of the people through various financial inclusion programmes.

As the implementation of ILSP is expected to be completed by 2020-21, UPASaC entrusted a research project to Centre for Financial Inclusion and Entrepreneurship (CFIE), NIRDPR on **“Impact Evaluation of Financial Inclusion Programmes of UPASaC in Uttarakhand”**. The primary objective of the study is to evaluate the effectiveness of various developmental programmes of UPASaC during the period 2016-17 to 2018-19. The study analysed the impact of bank linkage and externalities of institutional credit provided to members of producer groups, and livelihood collectives through UPASaC, in terms of development of enterprises, livelihood opportunities, and thereby improvement in their living standards. The study also examined impact of various insurance workshops and evaluated the effectiveness of financial literacy programmes conducted by UPASaC.

We praise the ALMIGHTY LORD for blessing us with time, energy and wisdom to complete the study successfully. We are grateful to Dr. W. R. Reddy, IAS, Director General, NIRDPR for reposing faith in the research team of CFIE and his kind support throughout the study.

We are grateful to Dr. Ram Bilas Yadav, Additional Secretary, Rural Development Department, Government of Uttarakhand and Managing Director, UPASaC for his constant guidance and encouragement for conducting this study. We are also grateful to Shri D. P. Gairola, Manager, Finance and Administration, UPASaC, and members of his team, Shri R. S. Godiyal, Consultant-Banking, UPASaC, and Shri Vikram Kapoor, Consultant-Company Secretary, UPASaC for their great support in data collection and other arrangements made for the study.

We extend our warm gratitude to all the members of the Producer Groups (PGs) and Livelihood Collectives (LCs) for their valuable responses while conducting the study. We profusely thank the officials of banks and line departments of the government of Uttarakhand for their time and valuable inputs while conducting our field study.

Our sincere thanks to Dr. Sonal Mobar Roy, Assistant Professor, Centre for Post Graduate Studies and Distance Education, NIRDPR, for her contribution in developing the final schedule for the study and guidance in analysis of data collected. Our heartfelt thanks are due to Shri Veneet. J. Kalloor and Ms. S. Navya Sridevi, Research Assistants, CFIE, and all other officers/staff involved in the research study. Last but not the least, we place on record the valuable contribution made by Dr. Bhavani Akkapeddi, Project Consultant, CFIE from conceptualisation to completion of the report.

We welcome constructive feedback on this report which will guide our future endeavours.

Hyderabad,  
March, 2020

**Dr. M. SRIKANTH**  
Associate Professor & Head,  
CFIE, NIRDPR

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# ABBREVIATIONS

AIC	Agriculture Insurance Company
APCFM	Andhra Pradesh Community Forest Management
ATM	Automated Teller Machine
BC	Banking Correspondent
BDO	Block Development Officer
BRAC	Bangladesh Rural Advancement Committee
CAGR	Compound Annual Growth Rate
CCL	Cash Credit Limit
CFIE	Centre for Financial Inclusion and Entrepreneurship
DFID	Department for International Development
FGD	Focus Group Discussion
FLW	Financial Literacy Week
FSDC	Financial Stability Development Council
GDP	Gross Domestic Product
HH	House Hold
ICDS	Integrated Child Development Services
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
ILSP	Integrated Livelihood Support Project
KCC	Kisan Credit Card
LC	Livelihood Collective
MAVIM	Mahila Arthik Vikas Mahamandal
MSME	Micro Small Medium Enterprise
MUDRA	Micro Units Development and Refinance Agency
NABARD	National Bank for Agriculture and Rural Development
NFHS	National Family Health Survey
NGO	Non-Government Organisation
NIRDPR	National Institute of Rural Development and Panchayati Raj
NPA	Non-Performing Asset

NRLM	National Rural Livelihood Mission
NSFI	National Strategy for Financial Inclusion
PG	Producer Group
PIA	Project Implementing Agencies
PMFBY	Pradhan Mantri Fasal Bima Yojna
PMJJBY	Pradhan Mantri Jeevan Jyoti Bima Yojana
PMSBY	Pradhan Mantri Suraksha Bima Yojana
PPP	Public Private Partnership
RBI	Reserve Bank of India
RFC	Rural Finance Coordinator
RISE	Rural Women's Initiative for Self-Sustained Enterprises
RSETI	Rural Self-Employment Training Institute
RUTF	Ready to Use Therapeutic Food
SC/ST	Scheduled Caste/Scheduled Tribe
SDG	Sustainable Development Goal
SHG	Self-Help Group
SHG-BLP	Self-Help Group-Bank Linkage Programme
SKDRDP	Shri Kshetra Dharmasthala Rural Development Project
SLF	Sustainable Livelihood Framework
SRC	Self-Reliant Cooperative
THR	Take Home Ration
TL	Term Loan
UGVS	Uttarakhand Gramya Vikas Samiti
ULDB	Uttarakhand Livestock Development Board
ULIPH	Uttarakhand Livelihoods Improvement Project for the Himalayas
UNDP	United Nations Development Programme
UNO	United Nation Organisation
UPASaC	Uttarakhand Parvthiya Ajeevika Sanvardhan Company
USRLM	Uttarakhand State Rural Livelihood Mission
VPG	Vulnerable Producer Group
WMD	Watershed Management Directorate

## EXECUTIVE SUMMARY

Financial inclusion is one of the most important paths to end poverty. An overwhelming body of evidence shows that providing people with the ability to save and borrow reduces poverty and increases their economic well-being. To achieve the United Nation's Sustainable Development Goals (SDGs) financial inclusion will be the key to end all forms of poverty. Keeping this objective in mind, the Government of Uttarakhand has been implementing Integrated Livelihood Support Project (ILSP) in collaboration with International Fund for Agricultural Development (IFAD), since July, 2013. Uttarakhand Parvatiya Aajeevika Sanvardhan Company (UPASaC) is one of the three project implementing agencies under ILSP that facilitates access to finance to improve livelihoods of the poor in the hilly regions of Uttarakhand. The current study evaluated the interim impact of financial inclusion programmes of UPASaC for the period 2016-17 to 2018-19. Besides, the study also assessed the extent of the impact on the living standards, entrepreneurship development and asset creation amongst the members of Producer Groups (PGs) spread across 11 districts of Uttarakhand.

As part of the study, primary data have been collected from 11 blocks located in 11 districts of Uttarakhand using stratified multistage random sampling method. The data have been collected from credit linked members (Group-A consisting of 205 members) as well as from non-credit linked members (Group-B consisting of 265 members) of PGs, to assess the impact of development interventions of UPASaC. Primary data have also been collected from members of Livelihood Collectives (LCs) (Group-C comprising sample size of 40). Besides, views have been collected from other stakeholders like bankers, officials in the government departments (Group-D consisting of 62 members). Apart from the above, relevant secondary data have been collected from publications of ILSP/UPASaC/Government of Uttarakhand, etc. Some of the salient findings of the study are given below:

UPASaC has been instrumental in ensuring bank linkage for members of the PGs across all 11 districts of Uttarakhand. As such, more than 97 per cent of the respondents in credit linked group (Group-A) and around 70 per cent of the respondents in non-credit linked group (Group-B) are satisfied with the bank linkage support facilitated by UPASaC. While more than 51 per cent of the respondents in Group-A expressed that they had received support in opening accounts with banks, more than 61 per cent of the members in Group-B felt that they could transact with banks due to concerted efforts of UPASaC. Majority of the respondents in credit linked PGs reported a significant improvement in their living standards, viz., food (84%), clothing (66%), shelter (69%), healthcare (79%), and education (74%) due to bank linkage/credit linkage.



More than 98 per cent of the respondents in Group-A and 95 per cent in Group-B felt that their decision making ability improved with respect to financial matters due to UPASaC's development initiatives. Almost all respondents in Group-A and B replied that they received training on financial literacy arranged by UPASaC. More than 85 per cent of the respondents in Group-A and over 82 per cent of the members in Group-B received regular handholding support from UPASaC with regard to livelihood financing activities.

As of 31<sup>st</sup> March, 2019 UPASaC, facilitated 1,412 Term Loans of Rs.19.89 crore, 2,136 Cash Credit Limit accounts of Rs. 17.31crore, and 12,656 Kisan Credit Cards of Rs. 60.31crore from banks to rural households in Uttarakhand. The data from UPASaC suggest that there is a phenomenal growth in number of these loan accounts with banks during the three year period 2016-17 to 2018-19, which is an indicator of creation of rural livelihoods among the members of the PGs. It is surprising to note that both groups of PG members, more or less, had similar income profile though the Group-B members did not have access to finance. This is partly attributed to single dose of loan given to most of the PG members in Group-A.

While 91 per cent of the members in Group-A availed one loan from the banks, only 9 per cent availed multiple doses of credit (i.e., more than one loan from banks through UPASaC). Most of the respondents availed bank loans (first loan) for the purpose of cultivation, dairy, and non-farm livelihoods, in that order. In case of the members who availed second loan, the main purposes were non-farm micro enterprises, cultivation of crops, dairy and education of children. Hence, there was a shift towards non-farm enterprises and asset creation by the PG members from the first dose of loan to the second dose of loan. As only nine per cent of members of credit linked PGs availed second dose of bank loan through UPASaC, final impact evaluation after completion of the ILSP i.e., after March 2021, will give a better picture in respect of livelihood financing, asset creation and financial inclusion.

Nearly half of the credit linked group members received a loan amount between Rs. 10,000 and Rs. 50,000 and one third of the respondents received a loan amount of above Rs. 50,000 for income generating activities. While 77 per cent of these respondents obtained the bank loan within a fortnight, around five per cent received the loan after a month from the date of their application. 95 per cent of the members in Group-A received bank loan at an interest rate of less than 12 per cent per annum. Around 37 per cent of the credit linked PG members did not receive interest subvention support, which needs critical review.

The primary data indicated that majority of the members of credit linked (78%) and non-credit linked PGs (68%) were involved in dairy farming / cattle rearing activities. 82 per cent of the

members of Group-A mentioned that the loan amount provided by banks was adequate. It is noticed from the responses of Group-A members that while availing bank loans, some of them faced bottlenecks such as huge documentation formalities (26%), high interest rates (24%), and long distance to reach the bank (19%). Since, credit linkage with banks normally takes place within a year of formation of producer group, it appears that credit linkage in Uttarakhand is work-in progress as over 90 per cent of the Group-B members did not receive institutional credit even after having membership in a PG for more than a year.

The survey results showed that around 95 per cent of the members of credit linked PGs (Group-A) followed good practices, barring regular record keeping activity (89%) and rotation of leadership positions (71%), leading to empowerment and sustainability of the PGs. The corresponding figures were slightly lower than 90 per cent in case of Group-B since they were not credit linked through UPASaC. Nevertheless, members in non-credit linked group opined that they conducted regular meetings (99%), saved regularly (99%), and maintained proper books of accounts (91%). However, it was observed that the rotation of leadership positions in both groups of the PGs did not take place at regular intervals.

UPASaC conducted insurance workshops for 11,367 households in the year 2018-19, out of which 9,106 households had been insured for different insurance schemes covering life, health, cattle and crops. It is noticed from the data that both of the Groups (A and B) stated that they could cover life as well as health as part of their risk management mainly due to workshops/awareness campaigns conducted by UPASaC. However, the corresponding numbers with regard to crop insurance and cattle insurance were, comparatively, on the lower side for both of the groups. During the three year period 2017-19, UPASaC conducted 174 training programmes covering 10,180 participants on various topics such as financial literacy, banking services, insurance claim settlement, skills and development of micro/small enterprises. Around 90 per cent of respondents of both credit and non-credit linked PG members reported that they received support from UPASaC on training and capacity building for setting up of the enterprises.

It was also noticed that there was a continuous growth in the turnover and profits generated by Livelihood Collectives (LCs). The turnover of the LCs increased by 105 per cent and profits increased by 180 per cent between 2016-17 and 2018-19. Of the total 233 LCs, UPASaC financed 146 LCs to the extent of Rs. 8 crore for various entrepreneurial activities, viz., making of pickles, jam and squash, farm machinery bank, agricultural tools, animal feed, transport vehicles, trading of pulses, grains and spices, etc.

Majority of the Group-D members (more than 90 per cent) who are other stakeholders such as field officers/managers in banks, officials of the various government departments opined that

UPASaC was instrumental in creating right awareness on financial literacy among the members of the PGs. Majority of these stakeholders expressed that the financial literacy programmes of UPASaC were appropriate and enabled the PG members to improve the latter's knowledge, skill, habits and attitude with respect to financial matters. However, some of them opined that training on pension (26%), remittances (18%) and consumer protection (16%) was less than satisfactory.

The officials testified that the PG members are in a position to budget expenses of their families, and confidently communicate with regard to financial transactions after attending the training programmes of UPASaC. These respondents also opined that the women members of PGs in Uttarakhand are more empowered now and are involved in financial decision making at home. As such there are visible positive changes in the lifestyle of PG members in terms of usage of ATM cards, Rupay cards, creation of livelihoods, social awareness, women empowerment, and education of girl children in the hilly region of Uttarakhand.

It was observed that co-ordination of UPASaC with different government departments was excellent in some of the districts of Uttarakhand. For instance, UPASaC's contribution towards financial inclusion in Uttarakhand was appreciated by senior government officials in Rudraprayag district. It is pertinent to mention here that Shri Narendra Modi, Hon'ble Prime Minister of India cited the poverty alleviation efforts of the ILSP in his 'Mann ki Baat' address in All India Radio on 29<sup>th</sup> April, 2018. Under the 'Hilans' brand, ILSP initiated online marketing of rural produce through Facebook, YouTube, Twitter, Amazon, Flipkart and Big Basket, etc., thereby enhancing income of the rural households in Uttarakhand. Development takes long time, more so in Uttarakhand due to its difficult hilly region. As UPASaC has been instrumental in imparting financial literacy and facilitating rural livelihood financing through banks thereby enhancing incomes of the poor and achieving the last mile in financial inclusion, it would be a good idea to extend support to UPASaC in the years to come.

# 1. INTRODUCTION

Access to safe, easy and affordable credit and other financial services is recognised as a pre-condition for accelerating growth and reducing poverty. In India, the government policy to achieve financial inclusion pushed the share of people with a bank account to 80 per cent; still India is home for 190 million unbanked (Asli Demirgüç-Kunt, 2017). Financial inclusion allows people to save for family needs, borrow to support a business, or a cushion against an emergency. Though there has been a significant increase in bank accounts and microfinance in the recent past, there is a lot of scope for further financial inclusion and the resultant socio-economic development in India (Srikanth & Reddy, 2017).

Financial inclusion is an essential process in enabling people to overcome poverty by transforming their production and employment activities (Yunus, 1998; Phillipe & Bolton, 1997; Basu & Srivastava, 2005; Banerjee & Newman, 1993; Burgess & Pande, 2003). The main objective of the Sustainable Development Goals (SDGs) of the United Nations is to end all forms of poverty; hence, several nations, international agencies and Non-Government Organizations (NGOs) are committed to eliminate poverty from the planet by 2030. According to the SDG index 2019, Denmark topped the list with a score of 85, and India's rank was 115 with a score of 61.1 (United Nations, 2019). The proportion of Indian population below poverty line was 21.92 per cent as per the estimates of Planning Commission for the year 2011 – 12 (MoSPI, 2018). In fact, poverty in hilly regions is higher compared to that in the plains (Institute for Human Development, 2018).

Uttarakhand State, located at the foothills of the Himalayas, is primarily an Agri-based economy. Most of the area of the State is under forests and wastelands. Only, 14 per cent of the land is used for cultivation and is rain-fed (Government of Uttarakhand, 2019). So, productivity of the hilly area is low, resulting in widespread poverty. The State has great potential to enhance its cropping intensity thereby increasing its agricultural production and productivity especially in the field of pulses, oilseeds, and organic farming. Further, there is a scope for diversification of agriculture, post-harvest technologies, strengthening of market interventions, and use of farm machinery to make agriculture a more profitable occupation (Government of Uttarakhand, 2013). In view of the above, the Government of Uttarakhand has been implementing Integrated Livelihood Support Project (ILSP) since 2013, to reduce poverty and enhance incomes of the people, in collaboration with International Fund for Agricultural Development (IFAD)<sup>1</sup>, an agency of the United

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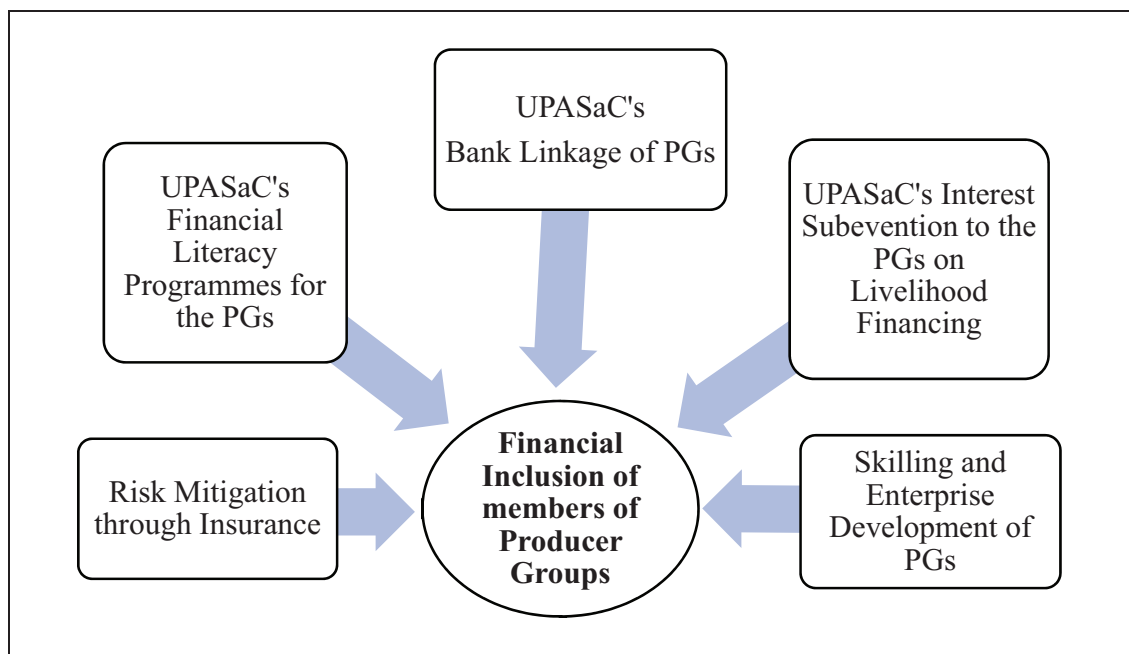
<sup>1</sup>IFAD is an international financial institution and a specialized agency of the United Nations that works to address poverty and hunger in rural areas of developing countries.

Nations Organisation. The main objective of the ILSP is to enable rural households to undertake sustainable livelihood activities integrated with the wider economy. The objective of the project is to support and develop food production systems, which will take care of basic livelihoods of the rural households; further, the project intends to generate income by way of promoting non-farm livelihoods, especially community involvement in rural tourism, and vocational training (ILSP, 2018).

IFAD believes that poverty and hunger are human-made phenomena. The root causes of food insecurity and malnutrition are poverty and inequity as much as shortage of food. IFAD assists rural people to improve their agricultural productivity, strengthen their resilience to absorb shocks, market their products at remunerative prices and increase their incomes, both on-farm and off-farm. IFAD's policies aim at rural transformation as an integral part of economic modernisation. Its guiding principle is inclusive, sustainable and risk proofed against climate change, benefiting the poorest and the vulnerable groups in the rural population.

Keeping in view of the vision and mission of IFAD, ILSP aims at supporting members of producer groups by providing technology and access to markets to improve food security and livelihoods of the poor in the hilly terrain. ILSP has been implemented in Uttarakhand by three Project Implementing Agencies (PIAs), namely Uttarakhand Gramya Vikas Samiti (UGVS), Project Society Watershed Management Directorate (PS-WMD) and Uttarakhand Parvthiya Ajeevika Sanvardhan Company (UPASaC). UGVS supports crop and livestock production and develops higher value cash crops and rural tourism to provide food security, creation of livelihoods and enhancement of incomes. PS-WMD implements participatory watershed development with an increased focus on food security, livelihoods and market linkages. UPASaC, the third PIA, facilitates livelihood financing for the rural poor in the hilly regions of Uttarakhand. The main focus areas of UPASaC are imparting training on financial literacy, risk management, and enterprise development apart from facilitating bank linkages, and rural financial services to the poor. UPASaC was formed as a 'Social Venture Capital Company' and got registered under the Indian Companies Act, 1956 on 29<sup>th</sup> March, 2006. Later it was licensed under Section 25 (Revised Section 8) of the Companies Act, 2013. The company has been promoted by Rural Development Department, the State government of Uttarakhand. UPASaC is operating in all 44 blocks of 11 districts of Uttarakhand State in accordance with the agenda of the ILSP. The present study assessed the contribution of UPASaC, a livelihood financing agency in generation of income and creation of assets by the members of producer groups in Uttarakhand through its financial inclusion programmes.



**BOX 1.1: UPASaC: THE CHANGE AGENT IN UTTARAKHAND**

Source: Authors' Own

## 2. REVIEW OF LITERATURE

Financial inclusion is defined as the delivery of banking services at an affordable cost to the vast sections of the disadvantaged and low income groups (Leeladhar, 2006). Essentially, financial inclusion may be described as a spectrum; it is not just opening of savings bank account for the financially excluded. Apart from equipping themselves with financial literacy, the poor need to have access to savings, credit, insurance, pension, remittances, and financial advisory services to reach to the last mile in financial inclusion. Access to formal financial services helps the poor to absorb the shocks emanating from sudden illness, death or loss of employment, etc. (Subbarao, 2010). In fact, financial exclusion is a key policy concern since running a household or a small enterprise without having access to formal finance channels is expensive (Mohan, 2006). People, in general, rely on informal/non-institutional sources of credit, when they cannot access it from formal sources for their immediate needs and to fulfil their aspirations.

While achieving the financial inclusion in India, Raghuram Rajan (2016) commented that there exists an impossible trinity: a) ceiling on interest rates, b) collateral free lending (which is not so common in the Indian banking context), and c) unrestricted access to financial services. Inclusive growth and reduction in income inequality are possible when the poor have free access to the financial services in a transparent, fair, and equitable manner at a low cost (RBI, 2008). Inclusive finance helps people, who are at the bottom of the pyramid, to manage their risks, increase their incomes, acquire capital and overcome poverty (United Nations, 2006). Hence, there is a positive relationship between per capita gross domestic product and financial inclusion (Easton, 2005).

In developing countries, lack of access to finance is a major hindrance to the operation and growth of enterprises (UNDP, 2015). Availability of credit to lower income groups has improved their access to financial services, which in turn has enabled them to undertake productive activities and smoothen their consumption in the face of short term adverse shocks (Asian Development Bank, 2015). Thus, financial inclusion is important in making economic growth pro-poor (Honohan, 2007). On the other hand, financial exclusion is a reflection of social exclusion. Countries with low per capita Gross Domestic Product (GDP), relatively higher levels of income inequality, low rates of literacy, low urbanisation and poor connectivity are less financially inclusive. A study on 49 countries confirmed that the nations which have high level of human development are associated with relatively a high level of financial inclusion (Pais, 2008).

Financial inclusion index is a comprehensive metric to assess the financial inclusion of a country. At the global level, the Global Findex developed by the World Bank is a measure of individual's use of financial products across economies. The index incorporates the progress of a country on indicators related to financial services such as savings, credit, payments and risk management, etc. (The Global Findex database, 2017). The success of financial inclusion is measured in terms of availability of financial services (such as the number of bank branches, ATMs, etc.), product penetration (number of bank accounts opened) and geographic location (proximity of financial services to the people). In India, the first attempt to measure financial inclusion was made by Mandira Sharma (2008), through a cross-country index, followed by a state level index developed by Mehrotra et al. (2009). Later, CRISIL Inclusionix measured the progress of financial inclusion in India at the district level in 2013. The index measured critical parameters namely branch penetration, deposit penetration, credit penetration and insurance penetration to assess the level of financial inclusion in the country (CRISIL, 2018). Kumar et al. (2018) found that the banking outreach index had a positive and statistically significant impact on per capita income growth in India. Another study showed that penetration of bank branches, continuous credit flow and presence of Automated Teller Machines (ATMs) across different states in India had a positive influence on the states' income during the period 1991 to 2015 (Buragohain, 2018).

In a recent study conducted by NABARD revealed that opening of new savings bank accounts by the poor helped accessing various banking/financial services including government-backed insurance schemes. Further, the banks in the study region reported an increase in their loan portfolio towards income generating activities which acted as a catalyst for the financial inclusion (NABARD, 2019).

There is a broad international consensus regarding the importance of access to finance as a crucial poverty alleviation tool (RBI, 2008). To make economic development wider, deeper and more inclusive, developing countries need to design appropriate country specific strategies. Multiple stakeholders like governments, financial institutions, civil society organizations, development partners, and the private sector should work together over the long term for increasing access to financial services by all segments of the population (United Nations, 2006). To achieve diversification of productive activities and long-term sustainable growth, citizens' access to financial services is necessary; as such, vigorous interventions of the government in framing policies towards financial inclusion is mandatory (ILO, 2019).

Unless the financial inclusion is achieved, the problem of poverty cannot be addressed (Mundra, 2015). After achieving independence, the objective of banking was to support planned economic development in India through mobilisation of savings and channel them into productive sectors (RBI, 2008). However, the needs of the common man have not been served well by the Indian financial sector, despite all the investment, innovation and strengthening of banks (Reddy, 2015). Though the banking outreach index showed improvement in access to financial services, there was wide disparity amongst states in India (Kumar et al., 2018). Public Private Partnership (PPP) can accelerate the development of financial markets and the degree of financial integration (Imboden, 2005).

Self-Help Group-Bank Linkage Programme (SHG - BLP) is one of the PPP models in financial inclusion space that helped in empowering the poor, especially rural women. SHG-BLP assists women establishing tiny micro enterprises thereby generating employment opportunities. With the active collaboration of NGOs, banks, the governments and the National Rural Livelihoods Mission, the SHGs mobilised savings of Rs. 23,324 crore with a total loan outstanding of Rs.87,098 crore as on 31<sup>st</sup> March, 2019. It is interesting to note that 88 per cent of these loans were disbursed to rural poor women (NABARD, 2019). There is a substantial improvement in the living standards of women members of SHGs in terms of their income, savings and purchasing power post credit linkage with banks. The social standing of the women improved as they gained self-confidence, could speak boldly in front of a large group, involved in decision-making with regard to their household financial matters (Priyakumari, 2015).

Access to finance is likely to result in socio-economic development of an individual. But the financial needs of rural demographic is not limited to only credit, which is the most widely propagated financial service in rural India (Mahajan, 2017). Having a bank account serves as an entry point into the formal financial sector which encourages savings and opens access to credit; it can also make it easier to pay wages, make remittances, etc. (Klapper, 2013). But mere ownership is not same as frequent usage of savings bank account; understanding the ownership and use of formal bank accounts form the foundation of financial inclusion. Cross country studies revealed that financial literacy is strongly correlated to usage of formal bank accounts (Grohmann, Klühs, & Menkhoff, 2018). Further, a recent study showed that banks in India with a strong capital position and asset quality are more effective in financial inclusion through their financial literacy initiatives; besides, the study found substantive evidence of the impact of financial literacy on the efficacy of

financial decision making of the households (Ghosh, 2019). Another study on financial education in Indonesia concluded that migrant workers when compared to members of their families may achieve better financial outcomes though financial education is received by both of them (Doi, McKenzie, & Zia, 2014). Similar households generally have different levels of wealth. And the level of the wealth of the household depends on its ability to plan its finances. The households with a higher propensity to financial planning is positively correlated to wealth accumulation (Ameriks, Caplin, & Leahy, 2003). Hence, a well-targeted financial education can have a positive impact on the economic well-being of the households.

### **BOX 2.1: FINANCIAL LITERACY**

#### **Observation of Financial Literacy Week**

Financial Literacy Week (FLW) is an initiative of Reserve Bank of India (RBI) to create awareness on financial inclusion among the people in India. The financial literacy week has been conducted every year since 2016 by RBI to spread financial education especially among the masses. Every year the campaign propagates financial education message on a specific theme. Themes of financial literacy week of various years are given below:

2017 - Know and Plan your Finances to Live a Better Life

2018 - Consumer Protection

2019 - Farmers

2020 - Micro, Small and Medium Enterprises' (MSMEs)

Under this campaign, the focus will be on creating awareness about aspects related to financial education in MSME sector like encouragement of informal enterprises to become mainstream formal enterprises, availability of collateral free loans, discounting of receivables, rehabilitation of stressed units and timely repayment of loans to banks and financial institutions.

Source: RBI's Financial Education Initiative, [www.rbi.org.in/FinancialEducation](http://www.rbi.org.in/FinancialEducation).

An asset-based welfare policy goes well beyond simple income maintenance to having a long-term impact on the overall well-being of the poor (UNESCO, 1995). Access to credit may solve the short-term income need of an individual but sometimes results in asset destruction also. Such a concept does not emphasize on enhancing cash flow while building assets and mere access to credit in



such cases more often than not leads to over indebtedness (Kruger, 2015). Rethinking of financial inclusion from the perspective of asset building rather than income and cash flow management is the hallmark of the 'graduation approach' pioneered by Bangladesh Rural Advancement Committee (BRAC). Such an approach seeks to move the ultra-poor away from extreme poverty by promoting asset building along with income enhancement through a combination of social protection, microfinance, and livelihoods (UNHCR, 2014). Assets created by the SHG members is a long term measure of overall development of the poor as opposed to short to medium term parameter namely income generated by them (Swain & Varghese, 2008).



### 3. RESEARCH METHODOLOGY

As the implementation of ILSP is estimated to be completed by 2020-21, CFIE, NIRDPR was entrusted to conduct an interim impact evaluation study with regard to UPASaC's developmental initiatives in Uttarakhand during the three financial years 2016-17, 2017-18 and 2018-19. The main motive behind the current study is to evaluate the progress in financial literacy, bank linkage as well as credit linkage, insurance and livelihood enterprises. It also focused on challenges faced by beneficiaries and areas of improvement in making credit available in a timely and adequate manner, at affordable interest rates.

#### Objectives of the Study

The primary objective of the study is to evaluate the effectiveness of various programmes of UPASaC that are contributing to livelihood financing and suggest improvements thereon in line with the goals of the ILSP. Other objectives of the study are given below:

1. Analysis of bank linkage provided to members of Producer Groups (PGs), and Livelihood Collectives (LCs) through UPASaC.
2. Impact of externalities of institutional credit supplied to members of producer groups, and livelihood collectives through UPASaC in terms of development of enterprises, livelihood opportunities, etc.
3. Assessment of the impact of insurance workshops conducted by UPASaC; and
4. Evaluation of financial literacy programmes as part of financial inclusion drive conducted by UPASaC.

#### Study Period

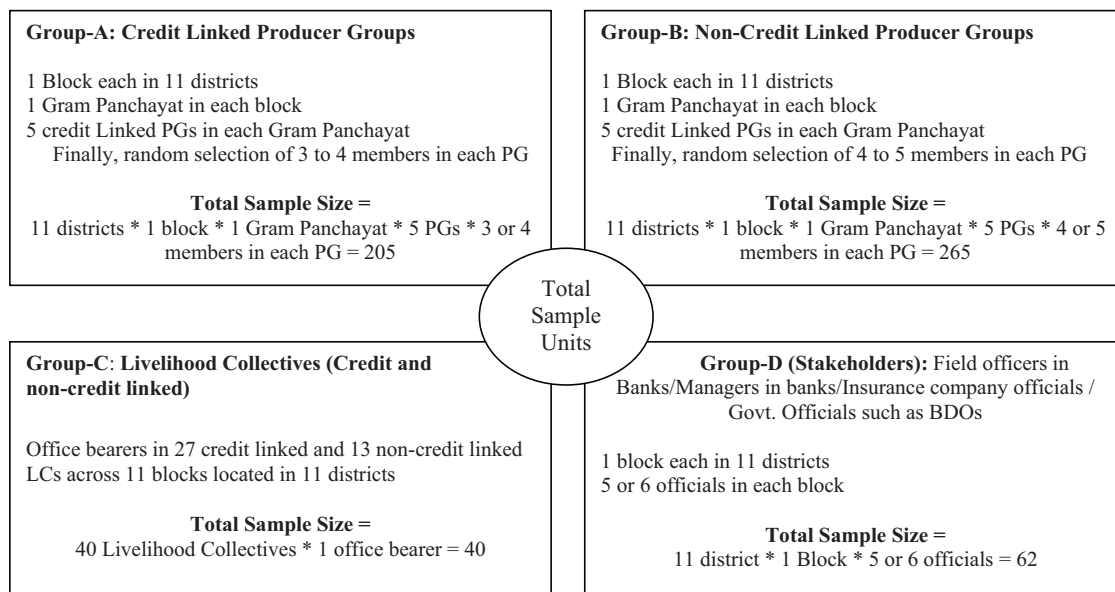
Since the implementation of the ILSP is expected to be completed by 2020-21, the study period was chosen as three financial years 2016-17, 2017-18, and 2018-19 in which UPASaC's developmental initiatives had taken place. Through this interim study, UPASaC and other stakeholders may make course correction, if any, in future.

#### Sample Size

Primary data were collected from 11 blocks out of 44 blocks located in 11 districts of Uttarakhand using stratified multistage random sampling method. Primary data were collected by using schedules from credit linked group (Group-A) as well as from non-credit linked group (Group-B)

members of PGs. Besides, primary data from office bearers of LCs (Group-C) and other stakeholders (Group-D) were collected as shown in figure 3.1.

**Figure 3.1: Collection of Primary Data – Sample Size**



The sample for Group-A was selected from one Gram Panchayat in each of the 11 blocks; later, from each of the Gram Panchayat, five PGs were selected and from each of the PG, three to four members were randomly selected for the final sample (thus total sample size =  $11 \text{ districts} * \text{one block} * \text{one Gram Panchayat} * \text{five PGs} * \text{three or four members} = 205$ ). Similarly, for Group-B, the sample was selected from one Gram Panchayat in each of the 11 blocks; subsequently, from each of the Gram Panchayat, five PGs were selected and from each of the PG, four to five group members were randomly selected for final sample (thus total sample size =  $11 \text{ districts} * \text{one block} * \text{one Gram Panchayat} * \text{five PGs} * \text{four or five members} = 265$ ).

In addition to the above, a questionnaire was administered on the representatives/office bearers of LCs. This group of respondents formed Group-C (sample size = 40 consisting of 27 credit linked LCs and 13 non-credit linked LCs in 11 blocks).

Besides, an appropriate questionnaire was administered on field officers, bank managers, insurance company officials and government officials such as Block Development Officers (BDO), etc. These stakeholders (Group-D) are a very important source of information, as they understand the

nature of work of UPASaC, assess the impact and suggest improvements there on. Hence, the data collected from these officials give a broad understanding of functioning and impact of UPASaC's various financial inclusion programmes. With regard to Group-D, five to six officials from each block were selected for the study (thus sample size of Group D = 11 districts \* 1 Block \* 5 or 6 officials = 62). Apart from the above, Focus Group Discussions (FGDs) with members of PGs/LCs were conducted. Besides, the study documented some successful case studies in respect of the development programmes implemented by UPASaC in Uttarakhand. Also, secondary sources of data like National Family Health Survey (NFHS) III and IV and annual reports of the ILSP were used for analysis and discussion.

### **Analysis of Data**

Based on the data collected as mentioned above, a 360-degree analysis was made in respect of developmental interventions undertaken by UPASaC in the domain of financial inclusion and sustainable livelihoods. Cross-sectional analysis was done to identify similarities and differences in achieving the goals of the project, across different blocks and districts. The impact of the development programmes of UPASaC was evaluated through comparison between credit linked and non-credit linked PGs on various indicators viz., financial literacy, bank/credit linkage and enterprise development, etc. Suitable statistical tools like averages, percentages, Compounded Annual Growth Rate (CAGR) and Mann Whitney test were used in the study.

## 4. PROFILE OF MEMBERS OF PRODUCER GROUPS/ LIVELIHOOD COLLECTIVES/STAKEHOLDERS IN UTTARAKHAND

With a view to evaluating the impact of livelihood financing programmes of UPASaC, a field study was conducted across 11 districts of Uttarakhand in June, 2019. Initially, a pilot study was conducted in two blocks located in Tehri and Dehradun districts by testing the sample schedule on the members of producer groups; subsequently, primary data were collected after finalising the schedule based on the responses received in the pilot study. A total of 22 enumerators were engaged in data collection from the 11 blocks for the pilot study. Besides, a series of interviews, and focus group discussions were held with members of PGs/LCs in the sample area.

### Profile of Respondents from Credit linked and Non-Credit linked PGs (Group-A & B)

Group-A consists of 205 members from credit linked PGs, and Group-B comprises 265 members from non-credit linked PGs. The members in Group-A have access not only to savings bank accounts but also to bank finance, facilitated by UPASaC. However, members in Group-B have access only to savings bank accounts. The age profile of Group-A and B are given in Table 4.1.

**Table 4.1: Age Profile of Members of Producer Groups**

S. No.	Age Interval (in Years)	Number of Credit Linked PG Members	Number of Non-Credit linked PG Members
1.	20-30	28 (13.66)	36 (13.58)
2.	31-40	80 (39.02)	98 (36.98)
3.	41-50	59 (28.78)	81 (30.57)
4.	51-60	32 (15.61)	39 (14.72)
5.	More than 60	6 (2.93)	11 (4.15)
	<b>Total</b>	<b>205</b> <b>(100.00)</b>	<b>265</b> <b>(100.00)</b>

Source: Field Survey

Note: Figures in brackets denote percentage of respondents

As per Table 4.1, majority of the respondents in Group-A as well as B fall in the age category of 31 to 40 years followed by age category of 41 to 50 years. It is interesting to note that the average age of the respondents was 42 years for both of the groups. In case of members in Group-A, the minimum age is 20 years and the maximum age is 70 years; the corresponding figures are 21 years and 78 years respectively in respect of Group-B. Education level of the members of the PGs is shown in Table 4.2.

**Table 4.2: Education Level of the Members of the PGs**

S. No.	Education Level	Credit Linked PG Members		Non-Credit Linked PG Members	
		Number of Respondents	%	Number of Respondents	%
1.	Illiterate	44	21.46	57	21.51
2.	Up to 5 <sup>th</sup> Standard	75	36.59	97	36.60
3.	Up to 10 <sup>th</sup> Standard	46	22.44	65	24.53
4.	Intermediate	21	10.24	27	10.19
5.	Diploma/Graduate and above	19	9.27	19	7.17
	<b>Total</b>	<b>205</b>	<b>100.00</b>	<b>265</b>	<b>100.00</b>

Source: Field Survey

According to Table 4.2, majority of the respondents in Group-A as well as B studied up to 5<sup>th</sup> standard. More than one-fifth of the respondents (>21%) in Group-A and Group B are illiterate. While 9.27 per cent are diploma holders/graduates in Group-A, 7.17 per cent studied beyond intermediate in Group-B. Table 4.3 presents years of association of the PG members as given below:

It is noticed from Table 4.3 that 91.79 per cent of the members in Group-A and 68.68 per cent respondents in Group-B have been associated with producer groups for more than 3 years. Since, credit linkage with banks normally takes place within a year of formation of producer group, it appears that credit linkage in Uttarakhand is work-in progress as over 90 per cent of the Group-B members did not receive institutional credit even after having membership in a PG for more than a year. Around one-tenth of Group-B members (9.06%) were associated with PGs for less than a year and as such they are not credit linked so far.

**Table 4.3: Association of Members with the Producer Groups**

S. No.	Association with PG (in Years)	Credit Linked PG Members	Non Credit linked PG Members
1.	Less than 1 year	0 (0.00)	24 (9.06)
2.	More than 1 year but less than 2 years	12 (5.79)	45 (16.98)
3.	More than 2 years but less than 3 years	5 (2.42)	14 (5.28)
4.	More than 3 years but less than 4 years	79 (38.65)	105 (39.62)
5.	Above 4 Years	109 (53.14)	77 (29.06)
	<b>Total</b>	<b>205 (100.00)</b>	<b>265 (100.00)</b>

Source: Field Survey

Note: Figures in brackets denote percent of respondents

During the FGDs, it was observed that the longer the association of members with PGs, the more possibility of involving in income generating activities/development of micro enterprises and gradual building up of their asset base. Longer association of the members with SHGs and multiple doses of credit resulted in more asset creation and members moved away from pure agriculture as a source of income to other livelihoods like dairy, fisheries, rental income, forest produce, etc. (Swain & Varghese, 2008). A robust asset-base serves as a potential exit avenue from chronic poverty. Assets also help in reduction of individuals' vulnerability to shocks (Hulme & McKay, 2005). UPASaC in collaboration with other PIAs has been working towards asset creation for the members of PGs, and their households by providing financial literacy, skilling, finance, infrastructure, market linkages, technology and regular handholding support. As such, it is pertinent to conduct a final impact evaluation study on financial inclusion and livelihood financing programmes of UPASaC after completion of the ILSP. Literacy and other related skills of the PG members are presented in Table 4.4.

**Table 4.4: Basic Literacy and Other Skills of Members of PGs**

S. No.	Literacy and Other Skills	Credit-Linked PGs (n = 205)	Non-Credit Linked PGs (n = 265)
		No. of Members Saying 'Yes' (%)	No. of Members Saying 'Yes' (%)
1.	Reading	77.07	75.85
2.	Writing	77.07	73.96
3.	Counting numbers and basics of arithmetic such as addition, subtraction, multiplication, and division	67.80	65.28
4.	Discussing in PG meetings (Public speaking skills)	92.20	84.15

Source: Field Survey

It is evident from Table 4.4 that literacy and other skill profile of PG members is, more or less, similar in respect of three 'R's – Reading, Writing, and Arithmetic; however, members in Group-A possess slightly better literacy and public speaking skills when compared to Group-B members perhaps due to credit linkage from banks facilitated by UPASaC; it appears that access to finance by PG members has a positive impact on their literacy and public speaking skills on account of frequent interaction with bank officers and government officials. Occupation profile of the PG members is reported in Table 4.5.

It is clear from Table 4.5 that cultivation is the main occupation for most of the respondents in both groups since they are members of producer groups in Uttarakhand relying on agriculture / forest produce. Next to agriculture, 9.76 per cent of the members from credit linked PGs reported self-employment as the main occupation. Whereas only 2.26 per cent of non-credit linked PG members are self-employed. Credit linkage is the plausible explanation for higher level of self-employment in Group-A when compared to Group-B members.



**Table 4.5: Occupation Profile of the Respondents**

S. No.	Type of Occupation	Credit Linked PG Members		Non-Credit Linked PG Members	
		Number of Respondents	%	Number of Respondents	%
1.	Self-employed	20	9.76	6	2.26
2.	Wage labour	2	0.98	7	2.64
3.	Cultivation	179	87.32	249	93.96
4.	Private Service	1	0.49	1	0.38
5.	Others	3	1.46	2	0.76
	<b>Total</b>	<b>205</b>	<b>100.00</b>	<b>265</b>	<b>100.00</b>

Source: Field Survey.

**Table 4.6: Number of LCs Formed in Each Year in Uttarakhand**

S. No.	Year	No. of LCs Formed
1.	2007	4
2.	2008	25
3.	2009	16
4.	2010	17
5.	2011	5
6.	2012	0
7.	2013	1
8.	2014	0
9.	2015	69
10.	2016	39
11.	2017	24
12.	2018	33
	<b>Total</b>	<b>233</b>

Source: UPASaC

### Profile of Group-C: Livelihood Collectives

The overall goal of ILSP is to reduce poverty by enabling rural households to take up sustainable livelihood opportunities integrated with the wider economy. ILSP was taken up through organisation of PGs and Vulnerable Producer Groups (VPGs – consisting of predominantly of SC/ST members) and further making them as Federations and/or LCs. In the hilly regions, the cooperation of the small farmers makes them produce over and above subsistence, access markets, and sell their produce at remunerative prices. The LCs also facilitates their members purchase commodities for their household needs and farming requirements at more economical prices. Details of formation of LCs across Uttarakhand are shown in Table 4.6. With the financial support of ILSP, UPASaC facilitated formation of LCs since 2007. It is noticed from Table 4.6 that majority (71%) of the LCs were formed after 2014 and the largest number of LCs (69) were formed in the year 2015.

Details of entrepreneurial activities of LCs financed by banks through UPASaC are given in Table 4.7.

**Table 4.7: Bank Financing for Entrepreneurial Activities of LCs**

S. No.	Name of the Activity	No. of LCs Received Finance	Amount (Rs. in Lakh)
1.	Micro Finance	10	75.00
2.	Agri Up-Scaling	11	110.00
3.	Take Home Ration	2	3.28
4.	Café on Wave	1	3.50
5.	Transport Vehicles	22	139.58
6.	Farm Machinery Bank	55	233.45
7.	Spice & Oil Unit	3	15.80
8.	Trading of Pulses, Grains, Spices etc.	36	178.72
9.	Spice Grinding Unit (Masala Chakki)	1	2.00
10.	Pickle unit	1	2.50
11.	Rice selling unit	3	16.20
12.	Generator sets	1	2.57
	<b>Total</b>	<b>146</b>	<b>782.60</b>

Source: UPASaC

It is observed from Table 4.7 that UPASaC facilitated bank finance to 63 per cent of LCs (146 out of 233 LCs) to the extent of Rs. 7.83 crore to undertake various entrepreneurial activities. It is interesting to note that farm machinery bank, trading of pulses, grains, spices and transport vehicles received the largest share of bank finance. As a result, there is a continuous growth in the turnover and profits generated by LCs. Details of financial performance of LCs are provided in Table 4.8.

**Table 4.8: Performance of LCs**

<b>Year</b>	<b>Number of Households (Beneficiaries)</b>	<b>Number of PGs</b>	<b>Number of LCs</b>	<b>Turnover (Rs. in Lakh)</b>	<b>Profit (Rs. in Lakh)</b>
2016-17	67013	7328	150	1011.86	78.80
2017-18	87685	9572	153	1331.77	108.13
2018-19	115423	12952	207	2073.17	220.88

Source: UPASaC

It is noticed from Table 4.8 that while the turnover of LCs was more than doubled, profits almost tripled between 2016-17 and 2018-19 primarily due to their involvement in income generating activities. Further, identification of the factors determining the success of each LC is important, to replicate the model by other LCs. In view of the same, some of the success stories of self-reliant cooperatives (SRCs) from Garhwal region and Kumaon region of Uttarakhand were documented in the form of case studies, and presented in **Appendix I**. Brief details of case studies of SRCs are given in Table 4.9.

**Table 4.9: Brief Details of Successful LC/SRCs in Uttarakhand**

S.No.	Name of the Livelihood Collective (LC / SRC)	Unique Features	Major Activities
1.	Naari Ekta Swayat Sahkarita	<ul style="list-style-type: none"> <li>• Village Industry</li> <li>• Motivated office bearers and staff</li> <li>• Collaboration with Government departments</li> </ul>	Processing and trading of grains and spices
2.	Vikash Aajeevika & Pragati Aajeevika Swayat Sahkarita	<ul style="list-style-type: none"> <li>• Agri-processing unit</li> <li>• 'Ho-Daaju' café outlet</li> <li>• Symbiotic relationship</li> </ul>	Manufacturing of jams, pickle and bakery products
3.	Ujjwal Aajeevika Swayat Sahkarita	<ul style="list-style-type: none"> <li>• Land pooling and cooperative farming</li> <li>• Awarded the best performing LC</li> <li>• Dedicated leadership</li> </ul>	Diverse livelihood activity: cultivation, rearing of goats, and dairy farming
4.	Lata Baba Aajeevika Swayat Sahkarita	<ul style="list-style-type: none"> <li>• Agri-tool manufacturing unit</li> <li>• Indigenous tool design and manufacturing</li> <li>• Visionary office bearers, committed members and staff</li> </ul>	Sale and supply of Agri-tools
5.	Chamba Massoorie Bagwani Ekikrit Aajeevika Swayat Sahkarita	<ul style="list-style-type: none"> <li>• Blending of activities for enhancing agricultural incomes</li> </ul>	Kisan Outlet, farm machinery bank, and microfinance

### Profile of Group-D: Other Stakeholders of UPASaC

In order to have a broad understanding of the impact of UPASaC's developmental initiatives on various financial inclusion programmes, and livelihood financing activities, etc., primary data were collected from other stakeholders consisting of field officers in banks, bank managers, insurance company officials, directors of Rural Self-Employment Training Institute (RSETI) and officials from line departments in Uttarakhand State. In this context, primary data through a questionnaire were collected from 62 officials across 11 districts of Uttarakhand. Profile of 62 stakeholders of UPASaC (Group-D) is given in Table 4.10.

**Table 4.10: Occupation Profile of Stakeholders**

S. No.	Occupation of the Stakeholders	Number of Respondents	%
1.	Bank managers	23	37.10
2.	Field officers in banks	7	11.29
3.	Government officials (Rural Development, Irrigation, Forest, and Animal Husbandry departments of Uttarakhand)	21	33.87
4.	Insurance company officials	2	3.23
5.	Directors of RSETI	9	14.52
	<b>Total</b>	<b>62</b>	<b>100.00</b>

Source: Field survey

As per Table 4.10, majority of other stakeholders of UPASaC are officials in banks and government departments, who are the right persons to offer feedback on its developmental interventions. As they are on the other side of the table providing livelihood financing to the members of PGs, views of these key stakeholders are important for the study on impact evaluation of financial inclusion programmes of UPASaC.

## **5. DEVELOPMENT PROGRAMMES OF UPASaC IN UTTARAKHAND**

### **Uttarakhand at a Glance**

Uttarakhand, the 27<sup>th</sup> State of India, formed on 9<sup>th</sup> November, 2000 when it was carved out of erstwhile Northern Uttar Pradesh. It is located at the foothills of the Himalayas with a total population of 101.17 lakh, as per the Census 2011 and with a total geographical area of 53,483 sq km. Most of the area of the State is under forests and wastelands. The total forest area is spread over 34,651 sq km. Only 14 per cent of the total geographical area is used for cultivation and is rain-fed. The State's economy is mainly based on agriculture and livestock with a total GDP of Rs. 1,139.57 billion (Government of Uttarakhand, 2013). Agricultural productivity of the hilly area is low, resulting in higher poverty in hilly districts as compared to that in the plains. The number of small scale industries was 25,294 providing employment to 63,599 persons. Most of the industries are agri/forest-based enterprises. The State has abundant availability of quality human resources with a literacy level of 79.63 per cent higher than that of national average (74.04 per cent) (Government of Uttarakhand, 2013).

Since formation, government of Uttarakhand has been at the forefront of promoting financial inclusion in the State. The State through Uttarakhand State Rural Livelihood Mission (USRLM) provides financial support to the institutions of poor with intent to inject financial resources for meeting their credit needs both for consumption purposes and income generating activities (USRLM, 2015). As on 31<sup>st</sup> March, 2019 there were 13,249 SHGs in Uttarakhand with a total loan outstanding amount of Rs. 59.83 crore from various banks; however, the gross non-performing assets (NPAs) of SHGs stood at 32.47 per cent involving Rs. 19.42 crore in Uttarakhand (NABARD, 2019).

### **Development Programmes of UPASaC**

With the active support of UPASaC, the ILSP touched 1,26,730 households, 13,017 PGs and (VPGs) formed into 233 Livelihood Collectives (LCs)/Federations and registered under the Self-Reliant Cooperative Act (ILSP, 2018). The main objective of UPASaC is to enhance livelihood opportunities for the poor through facilitation of financial services, and utilization of resources (IFAD, 2012). UPASaC imparts training on financial literacy, risk management, and provides bank and credit linkages across 3,507 villages located in 44 blocks of 11 districts of Uttarakhand State (ILSP, 2018).

The very first step towards comprehensive financial inclusion starts with the opening of savings bank accounts. All the members of the PGs and VPGs now have a bank account due to concerted efforts of UPASaC. The bank account ensures access to a range of financial services like access to need-based credit, payments/remittances facility, insurance and pension to members of the PGs/VPGs. Bank linkage also facilitates acceleration of economic activities of the PGs and LCs.

### **Training and Capacity Building Programmes of UPASaC**

The foundational intervention of UPASaC towards financial inclusion is through its financial literacy training programmes. UPASaC educated members of PGs and LCs by conducting training programmes on financial literacy, banking products, insurance products, skilling and enterprise development. The training and capacity building programmes of UPASaC have varied time frames. While duration of training on literacy of banking products/financial services ranges from one to three days, period of training programme on skilling/enterprise development is of ten days.

The main emphasis of the banking related training programmes is on educating the participants about savings bank account, TL, CCL and KCC. UPASaC also educates participants on fixed deposits, Kalyani Card Scheme<sup>1</sup>, Sukanya Samriddhi Accounts<sup>2</sup> and Gold bonds. In its training programmes, UPASaC also makes the participants well aware of various loan products like MUDRA loans, gold loans, MSME schemes for entrepreneurship, NABARD schemes and other government schemes. Under the risk management programmes, UPASaC conducts workshops on crop insurance (Pradhan Mantri Fasal Bima Yojana), cattle insurance and Jan Suraksha (Pradhan Mantri Suraksha Bima Yojana and Pradhan Mantri Jeevan Jyoti Bima Yojana) schemes. It also imparts training on insurance claim settlement process to the members of LCs/PGs.

Besides, UPASaC collaborates with Rural Self Employment Training Institutes (RSETIs) and various government departments like Animal Husbandry, Agriculture, and Horticulture for conducting training on skill and enterprise development for the members of PGs and LCs. These training programmes typically focus on the value chain activities like dairy, poultry, floriculture apart from preparation of proper business plan to undertake livelihood enterprises. UPASaC also trains some members of the LCs to act as Business Correspondents (BCs) of the banks.

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<sup>1</sup>Kalyani Card Scheme provides hassle-free bank credit to women in rural and semi-urban areas by encouraging them to undertake income-generating activities to supplement their family income.

<sup>2</sup>Sukanya Samriddhi Account is a small deposit scheme for the girl child launched as a part of the 'Beti Bachao Beti Padhao' campaign with a view to meeting her educational and marriage expenses in future.

During the three year period (2017-2019), UPASaC exceeded the targets set for different training programmes related to financial inclusion. Details of training programmes conducted by UPASaC are reported in Table 5.1. UPASaC conducted 174 training programmes covering 10,180 participants on various topics during the three year period. It is evident from Table 5.1 that UPASaC facilitated training to a large number of PG members on financial literacy, followed by insurance products and enterprise development during the same period.

**Table 5.1: Training Programmes Conducted by UPASaC**

		During 2018-19		During 2016-17 to 2018-19	
S. No.	Title of Training Programme	No. of Programmes	Total No. of Beneficiaries	Total No. of Programmes	Total No. of Beneficiaries
1.	Financial Literacy	33	1,241	73	3,491
2.	Banking Products	5	63	16	400
3.	Insurance Products	6	1,120	16	3,921
4.	Insurance Claim Settlement	36	1,141	36	1,141
5.	Skill and Enterprise Development	11	415	33	1,227
	<b>Total</b>	<b>91</b>	<b>3,980</b>	<b>174</b>	<b>10,180</b>

Source: UPASaC

### **Provision of Banking Products to Households and LCs/PGs through UPASaC**

Access to finance is an important prerequisite for asset creation among the low-income households. Under the provision of bank finance, UPASaC facilitates Cash Credit Limit and Term Loans mainly to LCs and PGs. Kisan Credit Cards are provided to individual farmers.

#### **Cash Credit Limit**

UPASaC facilitates the members of LCs and PGs to obtain sanction of cash credit from banks. The Cash Credit Limit (CCL) is a working capital loan extended for the entrepreneurial and income generating activities of the PGs/LCs. The withdrawal of money from CCL is restricted to the extent



of borrowing limit, fixed by the bank. The interest on this facility is levied on the running account balance and not on the borrowing limit which is beneficial for the micro enterprises. Details of CCL are furnished in Table 5.2.

During 2018-19, UPASaC facilitated 900 CCL accounts to PG members residing in 36 blocks across 11 districts of the ILSP. Between 2016-17 and 2018-19, the amount of CCL extended through UPASaC grew for all districts except in case of Bageshwar, Nainital and Champawat. Almora district topped the list with a CCL disbursement amount of Rs. 3.16 crore as on 31<sup>st</sup> March, 2019. The total value of the disbursed CCL amount increased from Rs. 2.04 crore to Rs. 8.25 crore for all the 11 districts during this period. It is clear from Table 5.2 that the average disbursed amount in CCL was Rs. 91,667 in 2018-19 which is an indicator of undertaking income generating activities by PGs/LCs so as to improve their livelihoods.

**Table 5.2: CCL Facility Facilitated by UPASaC to Members of PGs**

S. No.	Name of the District	No. of CCL Accounts			Disbursed Amount (Rs. in Lakh)			
		2016-17	2017-18	2018-19	2016-17	2017-18	2018-19	Growth rate in CCL Amount (%)
1.	Almora	166	379	484	98	242	316	222
2.	Bageshwar	26	18	28	18	29	15	-17
3.	Chamoli	15	13	25	11	56	90	718
4.	Dehradun	18	13	42	13	33	80	515
5.	Nainital	0	0	3	0	0	3	-
6.	Champawat	0	0	0	0	0	0	-
7.	Pauri	2	38	41	3	61	39	1200
8.	Pithoragarh	52	106	79	12	51	38	217
9.	Rudraprayag	6	14	21	2	50	92	4500
10.	Tehri	149	172	153	35	145	112	220
11.	Uttarkashi	40	9	24	12	35	40	233
	<b>Total</b>	<b>474</b>	<b>762</b>	<b>900</b>	<b>204</b>	<b>702</b>	<b>825</b>	<b>304</b>

Source: UPASaC

## Kisan Credit Cards

Kisan Credit Card (KCC) is an initiative by the Government of India, launched in the year 1998 and offered by banks in India. Farmers' access credit through KCC for cultivation of crops at an affordable rate of interest from banks, without depending on money lenders who charge higher rates of interest. Details of KCC facilitated by UPASaC are provided in Table 5.3.

**Table 5.3: KCC Facilitated by UPASaC to Members of PGs**

S. No.	Name of the District	Number of KCC Accounts			Disbursed Amount (Rs. in Lakh)			
		2016-17	2017-18	2018-19	2016-17	2017-18	2018-19	Growth rate in KCC Amount (%)
1.	Almora	86	968	1684	36	394	678	1783
2.	Bageshwar	440	582	567	135	255	280	107
3.	Chamoli	159	290	401	99	156	213	115
4.	Champawat	0	0	138	0	0	72	-
5.	Dehradun	95	323	617	121	282	492	307
6.	Nainital	0	6	324	0	4	210	-
7.	Pauri	42	167	224	12	63	82	583
8.	Pithoragarh	48	557	481	19	310	256	1247
9.	Rudraprayag	84	799	843	37	324	363	881
10.	Tehri	419	616	707	143	211	196	37
11.	Uttarkashi	162	239	588	73	186	329	351
	<b>Total</b>	<b>1535</b>	<b>4547</b>	<b>6574</b>	<b>675</b>	<b>2185</b>	<b>3171</b>	<b>370</b>

Source: UPASaC

It is observed from Table 5.3 that the growth rate in number of accounts as well as disbursed amount in KCC is phenomenal during the three year period (2017–19). While UPASaC facilitated access to credit through KCC in respect of 6,574 farmers (across 44 blocks in Uttarakhand), a

total amount of Rs.31.71 crore was disbursed by banks as on 31<sup>st</sup> March, 2019. The availability of credit through KCC enabled farmers to procure seeds, fertilisers, pesticides, and meet other cultivation expenses. Further, KCC enabled the producer groups to grow a variety of cash crops, off-season vegetables like french bean, european vegetables, mushroom and capsicum, etc., along with traditional crops.

### Term Loans (TLs)

UPASaC facilitated PGs with TLs for long-term investments such as setting up of farm machinery bank, poultry, dairy farming, food processing units, purchase of transport vehicles, etc. Unlike the CCL, term loan is sanctioned for creation of the fixed assets of the enterprise set up by the members of PGs. Details of TL facilitated by UPASaC are provided in Table 5.4.

**Table 5.4: Term Loans Facilitated by UPASaC to Members of PGs**

S. No.	Name of the District	Number of TL Accounts			Disbursed Amount (Rs. in Lakh)			
		2016-17	2017-18	2018-19	2016-17	2017-18	2018-19	Total Disbursed Amount
1.	Almora	47	89	312	86	157	237	480
2.	Bageshwar	18	23	42	34	46	79	159
3.	Chamoli	28	35	66	31	116	116	263
4.	Champawat	0	0	7	0	0	19	19
5.	Dehradun	17	3	44	47	14	74	135
6.	Nainital	0	0	55	0	0	44	44
7.	Pauri	13	96	208	24	87	226	337
8.	Pithoragarh	6	61	24	15	95	124	234
9.	Rudraprayag	13	22	22	11	34	66	111
10.	Tehri	28	28	35	33	34	51	118
11.	Uttarkashi	22	5	43	25	14	50	89
	<b>Total</b>	<b>192</b>	<b>362</b>	<b>858</b>	<b>306</b>	<b>597</b>	<b>1086</b>	<b>1989</b>

Source: UPASaC

It is evident from Table 5.4 that the number of term loans rose from 192 to 858 and the disbursed loan amount increased by 2.55 times during the period 2017-19. The average disbursed amount of TL was Rs. 1,26,573 meant for creation of assets and or setting up of various enterprises by PG members. While Almora and Pauri districts were leading the pack, Champawat, Nainital and Uttarkashi were lagging behind in terms of asset creation/livelihood enterprises by the PG members.

All the banking products viz., CCL, KCC, and TL facilitated through UPASaC had grown continuously between 2016-17 and 2018-19. The exponential growth in all these bank loan accounts is an indicator of development of entrepreneurship and creation of assets and enhancement of livelihoods among the members of the PGs in Uttarakhand.

### **Provision of Insurance Products by UPASaC**

UPASaC as part of its risk management strategy conducted several insurance workshops on life insurance, general insurance, crop insurance, livestock insurance schemes for the benefit of PG members during the study period. In 2017-18, UPASaC incentivised the members of LC/PGs by reimbursing 50 per cent of the premium paid by the members with a view to promoting the government-backed low-cost insurance schemes such as Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY). While PMBSY provides accidental insurance cover of Rs.2,00,000 (to the Indian residents aged between 18 and 70) at an annual insurance premium of Rs.12, PMJJBY provides a life insurance cover of Rs.2,00,000 (to the Indian residents aged between 18 and 50) at an annual insurance premium of Rs.330. However, UPASaC reduced reimbursement from 50 per cent to one per cent of the premium paid by the members during the year 2018-19 which reduced the insurance coverage to some extent. UPASaC also trains the staff of the livelihood collectives on insurance claim settlement process.

The beneficiaries from remotest area, in general, are unaware or apprehensive or find it time consuming to approach the institutions for settlement of the insurance claims. Through UPASaC's intervention, two households from Pauri and one from Tehri of remote hilly region received a PMBSY claim of Rs. 2,00,000 each on account of accidental death of their family members in the year 2018-19. Details of insurance coverage of PMSBY and PMJJBY are provided in Table 5.5.

**Table 5.5: Insurance Coverage of PMSBY and PMJJBY among PG Households (HH)**

S. No.	District	No. of HHs Covered		Insured value (Rs. in Lakh)	
		2017-18	2018-19	2017-18	2018-19
1.	Almora	14	65	124	130
2.	Bageshwar	1,130	0	2,260	0
3.	Chamoli	214	165	428	330
4.	Champawat	0	0	0	0
5.	Dehradun	0	0	0	0
6.	Nainital	0	0	0	0
7.	Pauri	312	68	778	136
8.	Pithoragarh	800	85	1,600	425
9.	Rudraprayag	0	1,988	0	3,976
10.	Tehri	61	0	732	0
11.	Uttarkashi	0	234	0	448
	<b>Total</b>	<b>2,531</b>	<b>2,605</b>	<b>5,922</b>	<b>5,445</b>

Source: UPASaC

It is observed from Table 5.5 that the insured value, under PMSBY and PMJJBY, declined from Rs. 59.22 crore to Rs. 54.45 crore during 2018-19 due to reduction in reimbursement of insurance premium from 50 per cent to one per cent by UPASaC. In spite of the reduction in reimbursement of insurance premium, the number of household subscribers increased during the same period, which is a healthy sign. These low-cost and affordable insurance schemes are linked to Prime Minister Jan Dhan Yojna (PMJDY) bank accounts; as such, UPASaC has been instrumental in achieving last mile financial inclusion in remote parts of Uttarakhand State through promotion of social security schemes. It is noticed that average life/health insurance cover per household was Rs. 2,09,000 during 2018-19.

### Crop Insurance

UPASaC collaborated with Agriculture Insurance Company of India (AIC) for providing Prime Minister Fasal Bima Yojana (PMFBY) to the farmers. Details of crop insurance provided to the members of PGs are provided in Table 5.6.

**Table 5.6: Crop Insurance Provided to Members of Producer Groups**

S. No.	District	No. of HH Covered		Insured value (Rs. in Lakh)	
		2017-18	2018-19	2017-18	2018-19
1.	Almora	695	932	184.96	321.07
2.	Bageshwar	867	392	74.36	36.64
3.	Chamoli	225	71	88.46	179.02
4.	Champawat	0	414	0	34.35
5.	Dehradun	642	884	548.64	1632.62
6.	Nainital	0	995	0	691.71
7.	Pauri	39	145	5.67	7.22
8.	Pithoragarh	465	1001	189.88	347.04
9.	Rudraprayag	378	132	106.12	53.41
10.	Uttarkashi	802	827	550.12	761.49
11.	Tehri	3266	408	562.82	51.19
	<b>Total</b>	<b>7379</b>	<b>6201</b>	<b>2311.03</b>	<b>4115.76</b>

Source: UPASaC

It is noticed from Table 5.6 that the insured value increased by 78 per cent though the number of households opted for crop insurance declined by 16 per cent during 2018-19. There were more subscribers to crop insurance in Almora, Champawat, Dehradun, Nainital, Pauri, Pithoragarh and Uttarkashi districts in 2018-19. This reflects that the concerted efforts of UPASaC are yielding fruits in the financial inclusion domain. Average crop insurance cover per household was Rs. 66,373 during 2018-19. Details of claim settlement of crop insurance are provided in Table 5.7.

**Table 5.7: Crop Insurance Claims Received by Cultivators during 2018-19**

S. No.	Name of the District	No. of HHs Covered	Insured Value (Rs. in Lakh)	Claim Settlement Amount (Rs. in Lakh)
1.	Almora	265	99.75	12.46
2.	Dehradun	698	652.49	203.78
3.	Pauri	19	5.57	0.48
4.	Pithoragarh	1632	318.02	8.32
5.	Tehri	15	0.42	0.15
	<b>Total</b>	<b>2629</b>	<b>1076.25</b>	<b>225.19</b>

Source: UPASaC

It is observed from Table 5.7 that 2,629 households (42.4%) out of 6,201 households received claim settlement of Rs. 225.19 lakh in respect of crop insurance in 2018-19. Therefore, claim settlement ratio of crop insurance was just 20.9 per cent in 2018-19 which needs to be improved further in order to encourage risk mitigating mechanism among the producer groups. While interacting with the members of LCs in Dehradun, it was revealed that they are motivated to opt for crop insurance during 2018-19 due to favourable settlement of claims by the agriculture insurance company during the previous year.

### Cattle Insurance

UPASaC collaborated with Uttarakhand Livestock Development Board (ULDB) and Animal Husbandry Department for promoting cattle insurance among the members of producer groups. The details of cattle insurance cover are furnished in Table 5.8.

**Table 5.8: Coverage of Cattle Insurance in Uttarakhand**

S. No.	Name of the District	No. of HHs Covered		Insured value (Rs. in Lakh)	
		2017-18	2018-19	2017-18	2018-19
1.	Almora	107	35	27.78	24.50
2.	Pauri	74	0	2.08	0
3.	Pithoragarh	215	131	55.03	69.00
4.	Nainital	0	40	0	9.92
5.	Chamoli	90	0	26.40	0
6.	Uttarkashi	6	0	1.50	0
7.	Rudraprayag	3	21	1.50	12.45
8.	Tehri	50	0	25.65	0
9.	Bageshwar	107	73	79.47	47.50
10.	Dehradun	48	0	15.90	0
	<b>Total</b>	<b>700</b>	<b>300</b>	<b>235.31</b>	<b>163.37</b>

Source: UPASaC

It is seen from Table 5.8 that the total insured value of cattle insurance as well as the coverage of households got reduced during the 2018-19. This is partly due to lower claim settlement ratio in cattle insurance - only 23 households in Bageshwar and Pithoragarh districts received a claim

settlement amount of Rs. 7,14,000 during the year 2018-19. During the FGDs, it was revealed that the farmers prefer indigenous cow to crossbreed or Jersey cow. They expressed that crossbreed cows give more milk, but they are more prone to diseases and rearing them is riskier too. Whereas, the indigenous breeds are more resistant to nature's vagaries and the time spent in maintenance of these cows is less. As the price of indigenous cows is on the lower side compared to Jersey cows, the farmers may not avail any bank loan at the time of purchase and therefore they may not opt for cattle insurance. Further, it is noticed that average cattle insurance cover per household was Rs. 54,457 during 2018-19.

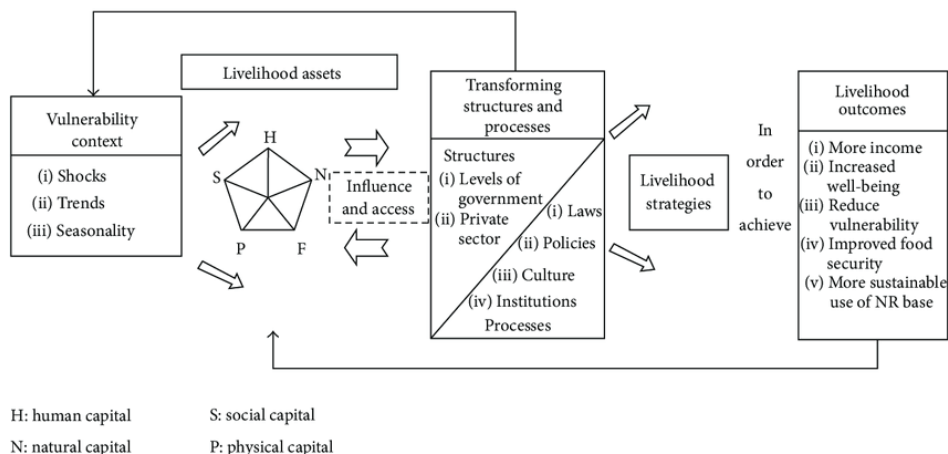
UPASaC conducted insurance workshops for 11,367 households in the year 2018-19, out of which 9,106 households had been insured for different insurance schemes covering life, health, cattle and crops. The field survey revealed that 12.2 per cent of members of credit linked PGs and 3.2 per cent of non-credit linked PGs received insurance claims. Penetration of insurance cover, in general, is low and considering the intensity of disasters in the state of Uttarakhand insuring against various risks and hazards seems more prudent. As insurance coverage across Uttarakhand needs to expand further, such an endeavour will increase the level of financial inclusion in the State. Greater amount of insurance coverage among the members of credit linked groups makes them and their enterprises better secured against various risks in the disaster-prone hilly region.



## BOX 5.1: LIVELIHOOD FINANCING

### Sustainable Livelihood Approach

The sustainable livelihood approach adopted at Department for International Development (DFID) United Kingdom is one of the most widely used livelihood approaches in the development space. Although DFID maintains that application of livelihood approach is both specific and adaptable to local context, its sustainability is dependent on the analysis of the livelihoods of the poor. The sustainable livelihood approach of DFID is marked by underlying core principles: *i*) it is people-centric, *ii*) it is holistic in nature in understanding the stakeholders' livelihoods, *iii*) it is dynamic just as the stakeholders' livelihoods, *iv*) it builds on the inherent strength of the stakeholders' livelihoods, *v*) it links the stakeholders' livelihoods, **and vi**) it focuses on the sustainability of the stakeholders' livelihoods. The livelihood analysis conducted in DFID's projects has a guiding structure in the form of Sustainable Livelihood Framework (SLF) which can be depicted as given below:



Source: DFID (2000)

The foundational role of livelihood approach of DFID is to build the asset base of the poor and to make the livelihoods sustainable by supporting the effective functioning of various structures and processes like public, private institutions, market support and social relations, etc. Households with stronger asset base are better capable to navigate vulnerabilities and are better positioned to influence structures and processes. The different elements of the SLF can be summarised as: *"...The framework depicts stakeholders as operating in a context of vulnerability (degree of exposure to hazards, shocks, risks), within which they have access to certain assets (human capital, social capital, natural capital, physical capital and financial capital). Assets gain weight and value through the prevailing social, institutional and organisational environment (policies, institutions and processes). This context decisively shapes the livelihood strategies that are open to people in pursuit of their self-defined beneficial livelihood outcomes."* (Kollmair et al., 2002).

Source: DFID's Sustainable Livelihoods Approach and its Framework, [www.soas.ac.uk](http://www.soas.ac.uk)

## 6. PERCEPTIONS OF KEY STAKEHOLDERS ON DEVELOPMENT PROGRAMMES OF UPASaC

Based on the primary data collected by administering a schedule on Group-A and Group-B members, an interim impact evaluation was done in terms of effectiveness of programmes of UPASaC with regard to achievement of financial inclusion, extent of bank/credit linkage, utilisation of loans availed by PG members, and bottlenecks faced by them, etc. Also, there was an attempt to evaluate the entrepreneurship development, income generation, and asset creation amongst PG members apart from improvement in their living standards. Income level of PG members is given in Table 6.1.

**Table 6.1: Monthly Income of Members of Producer Groups**

S. No.	Monthly Income of PG Members	Credit Linked PGs (Group A)		Non-Credit Linked PGs (Group B)	
		Number of Respondents	%	Number of Respondents	%
1.	<Rs. 500	41	20.00	50	18.87
2.	Rs. 501-2000	72	35.12	120	45.28
3.	Rs. 2001-5000	51	24.88	40	15.09
4.	Rs. 5001-10000	14	6.83	14	5.28
5.	Rs. 10001-15000	10	4.88	15	5.66
6.	>Rs. 15000	11	5.37	4	1.51
7.	No Response	6	2.93	22	8.30
	<b>Total</b>	<b>205</b>	<b>100.00</b>	<b>265</b>	<b>100.00</b>

Source: Field Survey

It is witnessed from Table 6.1 that 35.12 per cent of the PG members in Group-A and 45.28 per cent in Group-B earn between Rs. 501 and Rs. 2,000 per month. Around four-fifth of the members in both of the groups earned Rs. 5,000 or less per month. While 5.37 per cent of Group-A earn more than Rs.15,000 per month, only 1.51 per cent of Group-B members earn that much amount. It is surprising to note that both groups of PG members, more or less, have similar income profile though Group-B members do not have access to finance. This is partly attributed to single dose of loan given to most of the PG members in Group-A. Research indicates that income level of the poor is generally moving upwards when the poor avail bank loans on consecutive basis to

undertake economic activities. During FGDs, the members of credit linked PGs endorsed these views and stated that they have been experiencing improvement in their standards of living mainly due to credit linkage facilitated by UPASaC.

We conducted Mann-Whitney U test to test the following null hypothesis on the statistical significance of monthly income with regard to credit linked and non-credit linked producer groups.

**H<sub>0</sub>:** There is no significant difference in the monthly income of credit linked and non-credit linked PG members.

The p-value of 0.0523 implies that we fail to reject the null hypothesis and there is no significant difference in the monthly income of credit linked and non-credit linked PG members. The test statistics table is given in **Appendix II**.

Financial literacy is a precursor to reaching the last mile in financial inclusion. Deficit in financial literacy limits the ability of the poor to access various banking and financial services. UPASaC, through its various financial literacy training programmes/workshops contributes to enhancement of financial literacy among the PG members thereby influencing their financial behaviour in order to achieve economic well-being and financial inclusion in Uttarakhand. Usage of formal banking and financial services usually takes place after opening of savings bank account. UPASaC handholds the PG members in terms of bank linkage and credit linkage in line with the goals of ILSP. Perceptions of PG members on UPASaC's financial inclusion initiatives are given in Table 6.2.

It is noticed from Table 6.2 that almost all respondents in Group-A and B replied that they received training on financial literacy arranged by UPASaC. More than 98 per cent of the respondents felt that the decision-making ability of its members improved with respect to financial matters in credit-linked group (Group-A) and it is 95 per cent in case of non-credit linked group (Group-B). More than 85 per cent of the respondents in Group-A and over 82 per cent of the members in Group-B received regular handholding support from UPASaC with regard to livelihood financing activities. However, 51 per cent of the respondents in Group-A and 61 per cent of the members in Group-B felt that they had received support in opening of savings accounts with banks; these figures are relatively on the lower side compared to other initiatives mainly due to opening of bank accounts was done by the respective PGs before passing it on to UPASaC for regular handholding support to achieve financial inclusion.

**Table 6.2: Perceptions of PG members on Receipt of Benefits from UPASaC's Initiatives**

S. No.	Responses of PG Members	Credit-Linked PGs (n = 205)	Non-Credit Linked PGs (n = 265)
		No. of Members Saying 'Yes' (%)	No. of Members Saying 'Yes' (%)
1.	Opening of bank accounts through UPASaC	51.22	61.51
2.	Training on financial literacy by UPASaC	99.51	98.11
3.	Improvement in awareness among PG members on financial literacy programmes conducted by UPASaC	99.02	94.72
4.	Decision making ability of PG members in respect of household financial matters	98.54	95.47
5.	Regular handholding support from UPASaC	85.85	82.26

Source: Field Survey

**Table 6.3: Time Period between Formation of PG and Credit Linkage from Banks through UPASaC**

S. No.	Duration	Credit Linked PG Members (Group A; N = 205)
1.	Less than 6 months	57.97
2.	>6 < 8 months	7.73
3.	> 8<10 months	1.45
4.	> 10<12 months	5.31
5.	Beyond 12 months	27.54
	<b>Total</b>	<b>100.00</b>

Source: Field Survey

Bank linkage is one of the primary activities of UPASaC. Bank linkage of Group-A (credit linked PG members) includes not only opening of savings bank account but also obtaining financial assistance from banks (i.e., credit linkage). Whereas, it is only imparting training on financial

literacy and opening of bank accounts in respect of non-credit linked PG members. Normally, a producer group becomes credit worthy and will be credit linked when it follows PANCHASUTRAS: conducting meetings, mobilising savings, internal lending, repayment of loans, and maintenance of records by the members on a regular basis. Details of credit linkage provided by UPASaC are presented in Table 6.3.

According to the data in Table 6.3 that majority (58%) of the respondents in Group-A reported that credit linkage with banks through UPASaC happened within six months from the date of formation of PG. Whereas, 27.54 per cent of the respondents reported that it took more than 12 months for their credit linkage with banks, which needs course correction. Table 6.4 presents good practices being followed by the members of PGs.

**Table 6.4: Good Practices Followed by PGs**

S. No.	Good Practices Followed by PGs	Credit-Linked PGs (n = 205)	Non-Credit Linked PGs(n = 265)
		No. of Members Saying 'Yes' (%)	No. of Members Saying 'Yes' (%)
1.	Regular meetings	99.02	98.87
2.	Regular savings	99.02	99.25
3.	Regular internal lending	94.15	89.81
4.	Regular repayment of loans	97.56	88.30
5.	Regular record keeping	89.27	90.94
6.	Regular rotation of leadership positions of PGs	71.22	75.09

Source: Field Survey

It is noticed from Table 6.4 that majority of the members of credit linked PGs (Group-A) followed good practices leading to empowerment and sustainability of the PGs. The corresponding figures, however, are slightly lower in case of Group-B. Nevertheless, members in non-credit linked group opined that they do conduct regular meetings (99%), save regularly (99%), and maintain proper books of accounts (91%). Further, it is observed that both of the groups need to improve on maintenance of proper books of accounts and rotation of leadership positions at regular intervals.

### Implementation of Good Practices by Members of PGs: A Statistical Approach

Pancha Sutras are the key principles of democratic governance and financial discipline based on which Self-Help Groups (SHG) are graded (DAY-NRLM & NIRDPR, 2017). Successful implementation of the Pancha Sutras- Regular meeting, Regular saving, Regular internal lending, Regular repayment of loans, Regular record keeping determine the sustainability of the SHGs; the same are applicable to sustainability of the PGs too. In this study, the PGs were assessed on implementation of Pancha Sutras plus regular rotation of leadership positions. With a view to finding out the statistical significance of the implementation of Pancha Sutras, the following hypotheses were tested using Chi-square and Fisher's exact tests and the results are tabulated in Table 6.5:

- i) There is no significant difference in conducting of regular meetings between credit linked and non-credit linked PGs
- ii) There is no significant difference in regular savings between credit linked and non-credit linked PGs
- iii) There is no significant difference in regular internal lending between credit linked and non-credit linked PGs
- iv) There is no significant difference in regular repayment of loans between credit linked and non-credit linked PGs
- v) There is no significant difference in maintaining of regular record keeping between credit linked and non-credit linked PGs
- vi) There is no significant difference in regular rotation of leadership positions between credit linked and non-credit linked PGs.

**Table 6.5: Statistical Significance of Implementation of Good Practices**

S. No.	Best practices followed by PGs	Test Statistics, p-value	Statistical test	Null Hypothesis
1.	Regular meetings	$p = 1.000$	Fisher's exact test	Fail to reject
2.	Regular savings	$p = 0.583$	Fisher's exact test	Fail to reject
3.	Regular internal lending	$\chi^2(1) = 2.47, p = 0.116$	Chi-square test	Fail to reject
4.	Regular repayment of loans	$\chi^2(1) = 15.10, p = 0.0001$	Chi-square test	Rejected
5.	Regular record keeping	$\chi^2(1) = 0.338, p = 0.561$	Chi-square test	Fail to reject
6.	Regular rotation of leadership positions in PGs	$\chi^2(1) = 0.7109, p = 0.399$	Chi-square test	Fail to reject

Statistical Significance is determined by using the p-value, which gives the probability of observing the test result under the null hypothesis. Therefore, a p-value which is less than 0.05 indicates strong evidence against null hypothesis. Based on the above p-values, we concluded that there is no significant difference between the two PGs in terms of implementation of good practices except in case of regular repayment of loans. In other words, there is a significant difference in respect of repayment of loans between the credit linked and non-credit linked PG members. While credit linked groups repay loans to banks, non-credit linked groups repay internal loans taken from the PG. The detailed test statistics are given in **Appendix III**.

In order to make credit affordable and encourage entrepreneurial activities, UPASaC provided interest subvention support to the members of PGs and LCs. Under this component, interest subvention is paid on CCL and TLs availed by LCs, PGs and VPGs. Interactions with UPASaC team and office bearers of LCs revealed that the interest subvention given by UPASaC was in the range of 2 per cent to 5.5 per cent. Details of receipt of interest subvention by members of credit linked group are presented in Table 6.6.

**Table 6.6: Receipt of Interest Subvention Support Provided by UPASaC on Bank Loans (Figures in %)**

Details	Members of Credit Linked PGs (n = 205)		
	Yes	No	No Response
Received interest subvention support from UPASaC	58.54	36.59	4.88

Source: Field Survey

It is noticed from Table 6.6 that more than 58 per cent of members of Group-A confirmed receipt of interest subvention. But, around 37 per cent of the credit linked PG members did not receive interest subvention support, which needs critical review. Details of satisfaction level of the PG members are given in Table 6.7.

**Table 6.7: Satisfaction Level of PG Members on the Bank Linkage Facilitated by UPASaC**

S. No.	Satisfaction Level	Credit Linked PGs (Group-A)	Non-Credit Linked PGs (Group-B)
1.	Poor	0 (0.00)	0 (0.00)
2.	Satisfactory	5 (2.44)	27 (10.19)
3.	Good	84 (40.98)	105 (39.62)
4.	Very Good	73 (35.61)	69 (26.04)
5.	Excellent	43 (20.98)	9 (3.4)
6.	No Response	0 (0.00)	55 (20.75)
	<b>Total</b>	<b>205 (100.00)</b>	<b>265 (100.00)</b>

Source: Field Survey

Note: Figures in brackets denote percentage of respondents

It is seen from Table 6.7 that UPASaC has been instrumental in ensuring bank-linkage to members of PGs in Uttarakhand. More than 97 per cent of the respondents in credit linked group (Group A) and around 70 per cent of the respondents in non-credit linked group (Group-B) are satisfied with the bank linkage support facilitated by UPASaC. However, one-fifth of the respondents in Group-B (20.75%) did not respond to our question may be due to lack of access to credit through UPASaC.

One of the primary objectives of UPASaC is to facilitate livelihood finance to members of PGs and LCs. In addition to the consumption needs, UPASaC also facilitated credit to members of PGs/LCs to undertake various farm and non-farm livelihood activities. Size of the loan amount, number of loans availed by the PG members, time taken to avail the loan, and rate of interest levied by the banks are important parameters in assessing the impact of livelihood finance. Details of loans availed by Group-A are furnished in Table 6.8.



**Table 6.8: Profile of Loans Availed by Members of Credit Linked PGs**

S. No.	Loan Profile of PG members		% of Respondents in Credit Linked PGs
1.	Amount of loan availed	Less than Rs. 10,000	14.15
		Rs.10,001-25,000	17.07
		Rs.25,001-35,000	5.85
		Rs.35,001- 50,000	24.88
		Above Rs.50,000	32.68
		No Response	5.37
		<b>Total</b>	<b>100.00</b>
2.	No. of loans availed	No loans	0.00
		1 loan	90.73
		2 loans	4.88
		3 loans	2.93
		More than 3 loans	1.46
		<b>Total</b>	<b>100.00</b>
3.	Time taken for disbursement of the loan	Within 7 days	40.00
		7-15 days	36.59
		16-20 days	8.29
		21 – 30 days	10.24
		Above 30 days	4.88
		<b>Total</b>	<b>100.00</b>
4.	Interest rate on the loan	Less than 10% p.a.	37.07
		11% p.a.	17.07
		12% p.a.	40.00
		13% p.a.	0.49
		Above 13%	0.00
		No Response	5.37
		<b>Total</b>	<b>100.00</b>

Source: Field Survey, N=205

It is clear from Table 6.8 that while 91 per cent of the members in Group-A availed one loan from the banks, only 9 per cent availed multiple doses of credit (more than one loan from banks through UPASaC). Nearly half of the credit linked group members received a loan amount between

Rs. 10,000 and Rs. 50,000 and one-third of the respondents received a loan amount of above Rs. 50,000, which could be invested in income generating activities. While 77 per cent of these respondents obtained the bank loan within a fortnight, around five per cent received disbursement of the loan after a month from the date of their application. Majority (95%) of the members received loan at less than 12 per cent per annum. Perceptions of the PG members on the adequacy of bank loans are provided in Table 6.9.

**Table 6.9: Perceptions of PG Members on Adequacy of Loan to Undertake Income Generating Activities**

S. No.	Nature of Perception on Adequacy of Loan	Members of Credit Linked PGs
1.	More than adequate	21 (10.24)
2.	Just adequate	147 (71.71)
3.	Not adequate	34 (16.59)
4.	No Response	3 (1.46)
	<b>Total</b>	<b>205 (100.00)</b>

Source: Field Survey

Note: Figures in brackets denote percentage of respondents

As per Table 6.9 that majority of the respondents (82%) felt that the credit provided by banks for undertaking various economic activities was 'adequate'. Whereas around 17 per cent of the respondents expressed that the loan amount was not adequate. Adequate finance is an ideal situation compared to under finance or excess finance, which may result in diversion of funds or mis-utilisation of the loan. Inadequacy of loans might also lead to PG members' access to informal sources of finance, which are high cost loans. On the other hand, excess finance, in the absence of financial prudence, may lead to extravagant expenditure by the PG members. In both of the cases, cost of credit increases and repayment becomes an issue, making the borrower more vulnerable to debt trap. While accessing finance, PG members faced certain challenges which are reported in Table 6.10.

**Table 6.10: Challenges faced by PG Members while Accessing Finance through UPASaC (Figures in %)**

S. No.	Nature of Challenge	Credit Linked PG Members		
		Yes	No	No Response
1.	Delay in sanction of bank loans	16.59	81.95	1.46
2.	Huge documentation formalities	25.85	73.66	0.49
3.	Lack of transparency	5.85	92.68	1.46
4.	Higher interest rates levied by banks	23.90	74.63	1.46
5.	Long distance to travel to reach the bank	18.54	80.98	0.49
6.	Corruption / favouritism of bank officials	0.98	97.56	1.46

Source: Field Survey, N=205

It is evident from Table 6.10 that majority of the respondents stated that they did not face any challenges while accessing the finance arranged by UPASaC. While nearly one-fourth of respondents (25.85%) faced huge documentation formalities in banks, 23.9 per cent of the PG members expressed that they paid higher interest on the loans. Probably, these members of the PG might not have received interest subvention. While 19 per cent of the PG members informed that they had to travel long distances to access the bank finance, 17 per cent felt that they obtained bank loans with delay. End use of loans by PG members is given in Table 6.11. End use of loan determines its repayment by the borrower, creation of assets and the intended outcome of the finance. Data were collected from members of credit linked PGs to assess utilisation of credit extended to them by the banks.

It is witnessed from Table 6.11 that most of the respondents availed bank loans (first loan) for the purpose of cultivation (72%), dairy (62%), and non-farm livelihoods (53%), in that order. In case of the members who availed second loan, the main purposes are non-farm micro enterprises (74%), cultivation of crops (68%), dairy (42%), and education of children (42 per cent). Hence, there was a shift towards non-farm enterprises and asset creation in the utilisation of loans facilitated by UPASaC from the first dose of loan to the second dose of loan. As only 9.27 per cent (19) of members of credit linked PGs availed second dose of bank loan through UPASaC, impact evaluation after completion of ILSP i.e., after March 2021 will give a better picture in respect of livelihood financing, asset creation and financial inclusion. Further, during the field survey, several

members of credit linked PGs mentioned that they stopped taking loans from money lenders, friends, and relatives post credit linkage of their PGs with banks.

**Table 6.11: End Use of Loans Availed by PG Members (Figures in %)**

S. No.	Utilisation of Loan by PG Members	Credit Linked PGs (First Loan)			Credit Linked PGs (Second Loan)		
		Yes	No	No Response	Yes	No	No Response
1.	Goat / Sheep rearing	30.11	69.35	0.54	15.79	84.21	0.00
2.	Poultry farming	24.19	75.27	0.54	10.53	84.21	5.26
3.	Dairy farming	61.83	36.56	1.61	42.11	57.89	0.00
4.	Farming Activities / Cultivation of crops such as rice, pulses, etc.	71.51	28.49	0.00	68.42	31.58	0.00
5.	Non- Farm Enterprises (Petty business shop, seeds, fertilizers, Transport services / Utility vehicles, Hotel, Food processing etc.)	52.69	47.31	0.00	73.68	26.32	0.00
6.	Repayment of past loans	1.61	98.39	0.00	0	100	0.00
7.	Household/personal consumption	11.29	88.71	0.00	0	100	0.00
8.	Medical emergency	10.75	89.25	0.00	10.53	89.47	0.00
9.	House construction	18.82	81.18	0.00	5.26	94.74	0.00
10.	Marriage and other social functions	23.66	76.34	0.00	10.53	89.47	0.00
11.	Children's education	25.81	74.19	0.00	42.11	57.89	0.00

Source: Field Survey, N=205

Note: The dataset involving credit linked group is divided into two: Members availing one loan ( $n_1 = 186$ ) and members availing more than one loan ( $n_2 = 19$ ); total sample size ( $n$ ) =  $186 + 19 = 205$ .

Traditional agriculture is wholly based upon the factors of production that have been used by farmers for generations, and where the investment in agriculture in terms of equipment, fertilizer, animals, seeds and inventories was less (Schultz, 1965). The hilly regions of Uttarakhand, before the launch of the ILSP, were symbolic of traditional agriculture. For traditional agriculture to

experience a positive growth, the food production system needs to be adequately supported and developed through market infrastructure & linkages, skill development, innovative livelihood initiatives, which is primarily the obligation of government rather than the private enterprise (Lewis, 1978). Government of Uttarakhand, through ILSP, is involved in creating those modern sources of income streams in Uttarakhand, by supporting and developing the food production systems and by creating non-farm livelihoods through community involvement and vocational training. UPASaC supports training, capacity building and market linkages for the PG members and acts as a catalyst in mobilising financial resources to develop commercially viable enterprises and livelihood activities, which are the modern sources of income streams. Table 6.12 presents the perceptions of PG members on training and handholding activities of UPASaC.

**Table 6.12: Perceptions of PG Members on Training and Handholding Activities of UPASaC**

S. No.	Activity/ Response	Credit-Linked PGs (n = 205)	Non-Credit Linked PGs (n = 265)
		No. of Members Saying 'Yes' (%)	No. of Members Saying 'Yes' (%)
1.	Training and capacity building of PGs for setting up of enterprises	92.20	89.81
2.	Support for bank transactions including loan processing	90.73	65.28
3.	Market linkage of PGs for their products and services	67.32	67.17

Source: Field Survey

It is clear from Table 6.12 that around 90 per cent of respondents of both credit and non-credit linked PG members reported that they received support from UPASaC on training and capacity building for setting up of their enterprises. More than 90 per cent of the members from credit linked PG informed that they received support from UPASaC for banking transactions as compared to 65 per cent from non-credit linked PG members. This is partly attributed to credit linkage of Group-A from banks. As the main focus of UPASaC is on financial inclusion, both of the group members' assigned lower rating on the market linkages provided by UPASaC. Details of farm

based livelihoods i.e., dairy farming of PG members, are given in Table 6.13.

Cultivation is the main occupation for most of the members of the PGs in Uttarakhand. Besides, majority of the members of credit linked (78%) and non-credit linked (68%) PGs are involved in dairy farming/cattle rearing activities. The households/members of PGs generally purchase cattle from within the village as well as from the neighbouring villages. The mode of purchase of dairy animals from cattle fairs and livestock auction markets is negligible.

**Table 6.13: Dairy Farming and Mode of Purchase of Cattle by PG Members  
(Figures in %)**

S. No.	Nature of Activity	Credit-Linked PG Members (N = 205)			Non-Credit Linked PG Members (N = 265)		
		Yes	No	No Response	Yes	No	No Response
1.	Involvement in Dairy Farming	77.56	22.44	0.00	67.92	32.08	0.00
<b>Mode of Purchase of Cattle</b>							
1.	From Cattle Fair	0.63	98.74	0.63	1.11	98.89	0.00
2.	From Friends/Relatives/ Neighbours	78.62	20.75	0.63	81.11	18.89	0.00
3.	From Livestock Auction Market	0.00	99.37	0.63	1.11	98.33	0.56
4.	From Farmers in other villages	97.48	1.89	0.63	91.11	8.89	0.00

Source: Field Survey

PG members predominantly rear local breeds of cattle, where the yield is low and have shorter lactation cycles. As such, the low and seasonal supply becomes a challenge in supplying the required quantities of milk to the market, hindering continuous stream of income for the households. Therefore, suitable plan may be thought of for continuous supply of milk, expansion of dairy farming activity and enhancement of income for the households.

To promote economic development in Uttarakhand, UPASaC implements several financial inclusion initiatives like financial literacy programmes, capacity & skill development programmes, and entrepreneurial development programmes. It is well established that access to formal financial services brings a significant improvement in the standards of living of the poor. Table 6.14 presents the improvement in basic needs of PG members on account of credit linkage facilitated by UPASaC.

**Table 6.14: Improvement in Basic Needs of PG Members due to Credit Linkage**

S. No.	Improvement in Basic Needs of PG Members	Credit-Linked PGs (n = 205)
		No. of Members Saying 'Yes' (%)
1.	Food	83.90
2.	Clothes	66.34
3.	Shelter	68.78
4.	Education	73.66
5.	Healthcare	79.02

Source: Field Survey

The members of credit linked PG (Group-A) expressed that their living standards improved due to utilisation of bank credit facilitated by UPASaC. According to Table 6.14 that majority of the respondents reported a significant improvement in the basic parameters of living standards viz., food (84%), clothing (66%), shelter (69%), health (79%) and education (74 %). The primary data suggests that UPASaC's livelihood financing initiative through banks, at low rates of interest, and working 'without any motive to earn profit' enhanced the standards of living of the poor in the State of Uttarakhand.

It is pertinent to mention here that a research study evaluating group lending by a micro-finance company in Hyderabad found no significant improvement in health, education, and women's empowerment of members of SHG women. Though there was no substantial rise in the consumption expenditure of SHG households, their expenditure on 'temptation goods' - alcohol, tobacco, betel leaves, gambling, and food consumed outside the home – declined. The study showed an increased expenditure on durable goods of the SHG members, facilitated by microfinance lending. Further, the study concluded that 'not-for-profit microfinance lending coupled with lower rates of interest' may have larger positive effects on the poor (Banerjee et. al, 2015).

### **Perceptions of Other Stakeholders on Contribution of UPASaC in Financial Inclusion**

Majority of other stakeholders of UPASaC are officials in banks and government departments, who are the right persons to offer feedback on its developmental interventions. As they are on the other side of the table and are providing livelihood financing to the members of PGs, views of these key stakeholders are important for the study on impact evaluation of financial inclusion programmes of UPASaC. Perceptions of other stakeholders (Group-D; n = 62) on the financial literacy training provided by UPASaC are furnished in Table 6.15.

**Table 6.15: Coverage of Financial Literacy Programmes offered by UPASaC**

S. No.	Programme Module of UPASaC	Stakeholders (n = 62)
		No. of Respondents Saying 'Yes' (%)
1.	Savings bank account and various types of deposits like fixed deposits / recurring deposits, etc.	95.16
2.	Credit / Loans	93.55
3.	Insurance (Life Insurance / General Insurance)	95.16
4.	Pension	67.74
5.	Payments/Remittances	62.90
6.	Consumer Protection	72.58

Source: Field survey

It is observed from Table 6.15 that while more than 90 per cent of the stakeholders were of the opinion that UPASaC trained members of PGs on aspects of financial literacy related to savings, loans and insurance; however, some of the stakeholders opined that training on pension (26%), remittances (18%) and consumer protection (16%) is less than satisfactory. During the discussion with the stakeholders, it was informed that UPASaC may think of including additional components in its financial literacy module such as credit score and digital transactions, etc. In addition, majority of the respondents from Group-D felt that sensitisation programmes on financial products to be scaled up by UPASaC. Table 6.16 shows the appropriateness of financial literacy module offered by UPASaC to the PG members.

**Table 6.16: Appropriateness of Financial Literacy Programmes offered by UPASaC**

S. No.	Particulars of Programme	Stakeholders (n = 62)
		No. of Respondents Saying 'Yes' (%)
1.	Resources in terms of trainers/material, etc.	91.94
2.	Time allotted	88.71
3.	Language	98.39
4.	Style and delivery	93.55
5.	Content	88.71

Source: Field survey



It is clear from Table 6.16 that a majority of the respondents of Group-D expressed that the financial literacy programme is appropriate in terms of suitable content, appropriate resources, delivery in simple manner, adequacy of time, and vernacular language. The stakeholders are of the opinion that training programmes of UPASaC enabled the PG members to improve the latter's knowledge, skill, habits and attitude with respect to financial transactions. Positive spillovers of financial literacy training programmes of UPASaC on the lives of PG members are given in Table 6.17.

**Table 6.17: Positive Effects of Financial Literacy Programmes of UPASaC**

S. No.	Positive Effects of Financial Literacy on PG Members	Stakeholders (n = 62)
		No. of Respondents Saying 'Yes' (%)
1.	Knowledge on Savings	96.77
2.	Knowledge on Credit	90.32
3.	Knowledge on Insurance	88.71
4.	Knowledge on Pension	59.68
5.	Knowledge on Remittances	56.45
6.	Budgeting for family expenses	91.94
7.	Ease of communication regarding financial transactions	91.94
8.	Confidence	96.77

Source: Field survey

According to data in Table 6.17, training programmes imparted by UPASaC had many positive spill overs on the lives of the PG members. Nearly nine out of ten stakeholders stated that these training programmes resulted in improvement of PG members' knowledge related to savings, credit and insurance. Further, the officials mentioned that the PG members are in a position to budget expenses of their families, and confidently communicate with regard to financial transactions after attending the training programmes of UPASaC. The stakeholders, however, felt that awareness level of PG members on pension and remittances was on the lower side. Table 6.18 presents positive changes in the lifestyle of PG members due to UPASaC's development interventions.

**Table 6.18: Positive Changes in the lifestyle of PG Members due to interventions of UPASaC**

S. No.	Positive Changes in the lifestyle of PG Members	Stakeholders (n = 62)
		No. of Respondents Saying 'Yes' (%)
1.	Usage of banking/financial services like ATM cards, Rupay cards, etc.	88.71
2.	Creation of livelihoods	98.39
3.	Importance of women in decision making at home(women empowerment)	96.77
4.	Woman as a financial powerhouse	88.71
5.	Betibacho, Betipadhao	96.77

Source: Field survey

This is evident from Table 6.18 that more than 88 per cent of Group-D respondents believed that usage of banking/finance products like ATM cards, Rupay cards among the members of PG improved due to development interventions of UPASaC. Around 98 per cent of the stakeholders viewed that UPASaC's interventions led to livelihood creation for members of the PGs. These respondents opined that UPASaC brought in many positive changes in the lifestyle of PGs, particularly the women. Now, women are involved more in decision making at home as they are generating income through economic activities facilitated by UPASaC's credit linkage programme. Now, the women are more empowered and could send their girl children (97 per cent) to school.

Also, most of the stakeholders (91.93 per cent) felt that the flow of credit from banks through UPASaC is better than any other channel to serve the members of PGs and LCs. A majority of the stakeholders (66.13 per cent) considered that UPASaC's support towards credit/bank linkage to PGs/LCs either very good or excellent. Based on the perceptions of the PG members and stakeholders, it is concluded that UPASaC facilitated access to the formal sources of finance to the poor and provided an alternative to informal financial sources like money lenders. In summary, ease of access to finance resulted in better standards of living for the poor in Uttarakhand, thanks to UPASaC.

Further, information was gathered from 27 credit linked and 13 non-credit linked LCs (Group-C consisting of 40 office bearers drawn from 40 LCs), through a schedule. Details of their responses

are furnished in Table 6.19. As per the data, members of the credit linked PGs could receive credit from the banks, budget for family expenses, covered their risks through low-cost government backed insurance schemes and involved in remittances through banks. The situation is similar in respect of non-credit linked PG members except in case of obtaining bank loans. These benefits are accrued to LCs and its members mainly due to the concerted efforts of UPASaC across Uttarakhand.

**Table 6.19: Benefits Received by LCs and the PG Members**

S. No.	Activity / Response	Credit-Linked LCs (n = 27)	Non-Credit Linked LCs (n = 13)
		No. of Respondents Saying 'Yes' (%)	No. of Respondents Saying 'Yes' (%)
1.	Budgeting for family expenses	77.78	61.54
2.	Obtaining Credit	62.96	30.77
3.	Insurance Coverage	74.07	69.23
4.	Pension	23.08	7.69
5.	Remittances	34.62	38.46

Source: Field Survey

The field survey further revealed that around 44 per cent of the LCs received credit within six months of their formation and 33 per cent of them took more than a year to get credit linked. Around three-fourth of the respondents representing the credit linked LCs were of the opinion that bank linkage and credit support facilitated by UPASaC led to discontinuation of reliance of PG members on moneylenders, friends and relatives. It was observed that the LCs were following good practices of micro finance, namely regular meeting, saving, internal lending, repayment of loans and record keeping. Apart from these, regular rotation of leadership positions and regular handholding support of UPASaC were acknowledged as per the data in Table 6.20.

In 2004 formation of LCs was initiated by Uttarakhand Livelihoods Improvement Project for the Himalayas (ULIPH) - a development project of government of Uttarakhand. Since 2012, ULIPH has been succeeded by ILSP and details of its impact on the livelihoods are presented in Table 6.21.

**Table 6.20: Good Practices Followed by LCs**

S. No.	Good Practices	Credit-Linked LCs (n = 27)	Non-Credit Linked LCs (n = 13)
		No. of Respondents Saying 'Yes' (%)	No. of Respondents Saying 'Yes' (%)
1.	Regular meetings	92.59	76.92
2.	Regular savings	92.59	100.00
3.	Regular internal lending	70.37	61.54
4.	Regular repayment of loans	85.19	61.54
5.	Regular record keeping	92.59	76.92
6.	Regular rotation of leadership positions in LCs	88.89	61.54
7.	Regular handholding by UPASaC towards livelihood financing	100.00	100.00

Source: Field Survey

**Table 6.21: Impact of ULIPH on Living Standards of PG Members in Uttarakhand**

S.No.	Before 2004	After 2004
1.	Majority were small-holder farmers and production was subsistence based	Small Holder farmers are involved in market-based production through self-reliant cooperatives (SRCs)
2.	Lack of transportation facilities, presence of middlemen in the market resulting in realisation of low prices	SRCs purchased vehicles with the support of UPASaC (Term Loans). Produce of the small farmers is pooled and priced competitively based on market rates reported in local dailies and TV channels like DD Kisan. As such the presence of middlemen is reduced substantially
3.	Adverse climatic conditions and wild animal attacks led to low yielding crops	Productivity of crop enhanced due to crop diversification, innovative techniques like use of poly-house. Support of technical experts from Agriculture Department also improved the crop production. Menace of wild animals was also reduced because of smart crop choices by the farmers. SRCs also practised land pooling and cooperative farming for making better use of land

4.	Large scale distress migration due to inefficient farming	Agriculture became productive due to higher crop production through crop diversification and enhanced land fertility
		Farmers produce different varieties of crops: <b>Fruits:</b> Mango, Malta, Lemon and Walnut <b>Spices:</b> Coriander, Turmeric, Chilli, Ginger, Dalchini and Tezpaat <b>Pluses:</b> Soya-beans, Gahath, and Masoor
5.	Farming was the only source of livelihood in the village	Apart from cultivation, different non-farm enterprises (Spices grinding units, food processing units like pickles, jams and squashes, THR & Urja, bakery unit, Agri-tools manufacturing unit, farm machinery banks, weaving, restaurants, etc.) provided employment opportunities. Micro-finance to the SRCs created additional income, employment and farmers realised better prices for their produce
6.	Absence of adequate extension support from external agencies and government agencies	Members of LCs/PGs/SRCs make use of different government schemes and the expertise of different government departments to enhance their livelihood and standard of living
7.	Disempowered women, several cases of domestic violence, women lacking purchasing power and not having access to better education and health	Empowered women, higher purchasing power and decision-making ability related to household financial matters. Now women contribute to household income and can access better healthcare and education for their households. They are able to fight against domestic violence and alcoholism
8.	Large scale prevalence of obstructing socio-cultural practices and taboos	Incidence of weird socio-cultural practices was reduced
9.	As per NFHS-3, 2005-06; Children per woman/Total fertility rate was 2.6	As per NFHS-4, 2015-16: Total fertility rate decreased to 2.1, which is an indicator of development
10.	As per NFHS-3, 2005-06: For children under five years of age, stunting (low height-for-age) was 44 per cent; wasting (low weight-for-height) was 19 per cent; underweight (low weight-for-age) was 38 per cent.	As per NFHS-4, 2015-16: For children under five years of age, stunting decreased to 34 per cent; wasting increased slightly to 20 per cent; underweight reduced to 27 per cent.

Source: Field Survey and NFHS 3 & 4 (<http://rchiips.org/nfhs/NFHS-4Reports/Uttarakhand.pdf>)

## 7. CONCLUSION

Since 2013, government of Uttarakhand, in collaboration with International Fund for Agricultural Development (IFAD), has been implementing Integrated Livelihood Support Project (ILSP) to provide food security, enhance livelihoods and incomes of the poor in the hilly region. UPASaC, one of the implementing agencies of ILSP, facilitates livelihood financing for the rural poor in the hilly region of Uttarakhand.

Through UPASaC, the ILSP supported 1,26,730 households, 13,017 PGs and VPGs formed into 233 Livelihood Collectives (LCs)/Federations. UPASaC collaborates with RSETIs and various government departments like Animal Husbandry, Agriculture, and Horticulture for conducting training on skill and enterprise development for the members of PGs and LCs. During the three-year period (2017-2019), UPASaC conducted 174 training programmes covering 10,180 participants on various topics such as financial literacy, banking/financial services, insurance claim settlement, skills and enterprise development.

Further, UPASaC has been instrumental in ensuring bank-linkage for members of PGs across all the 11 districts of Uttarakhand. As of 31<sup>st</sup> March, 2019 UPASaC facilitated 1,412 Term Loans (TLs) of Rs. 19.89 crore, 2,136 Cash Credit Limit (CCL) accounts of Rs. 17.31crore, and 12,656 Kisan Credit Cards (KCCs) of Rs.60.31crore from banks to rural households in Uttarakhand. The data from UPASaC suggests that there is a phenomenal growth in number of loan accounts (CCL, TL, and KCC) with banks during the three year period 2016-17 to 2018-19 which is an indicator of creation of rural livelihoods among the members of the PGs. As such, more than 97 per cent of the respondents in credit linked group (Group-A) and around 70 per cent of the respondents in non-credit linked group (Group-B) are satisfied with the bank linkage support facilitated by UPASaC.

While more than half of the respondents in Group-A expressed that they had received support in opening accounts with banks, more than three-fifth of the members in Group-B felt that they could transact with banks due to concerted efforts of UPASaC. Majority of the respondents in credit linked PGs reported a significant improvement in the basic parameters of their living standards, viz., food, clothing, shelter, health and education.

Majority of the stakeholders expressed that the financial literacy programmes of UPASaC are appropriate and enabled the PG members to improve the latter's knowledge, skill, habits and attitude with respect to financial matters. The officials testified that the PG members are in a

position to budget expenses of their families and confidently communicate with regard to financial transactions after attending the training programmes of UPASaC. These respondents also opined that the women members of PGs in Uttarakhand are more empowered now and are involved in financial decision- making at home and could also send their girl children to school.

On the whole, the development initiatives of UPASaC benefited individuals, households, members of producer groups and the community as a whole. The interaction with the members of PGs revealed that the bank linkage resulted in socio-economic development of the members of PGs particularly the women. There has been a significant improvement in the social standing of the women, post-development interventions of ILSP. The women members gained self-confidence while interacting with bank officials and organising community meetings. They now contribute to their household income and are involved in decision making related to personal finance. The additional income they generate allows them to send their children to school. Besides, they are able to spend more on healthcare and nutrition oriented diet.

#### **Some Suggestions for further Improvement of Financial Inclusion Programmes:**

- It is noticed from field survey that around 37 per cent of the respondents did not receive interest subvention probably due to lack of adequate financial literacy and awareness. Hence, UPASaC has to strive for creating full awareness in this aspect among the members of PGs so as to cultivate better banking habits
- There is a need to enhance insurance coverage of members of PGs in Uttarakhand mainly with respect to crop and cattle insurance to protect the livelihoods of the people. UPASaC may rethink introduction of partial reimbursement of insurance premium to cover various risks of the PG members in the disaster prone hilly region
- Since the stakeholders namely officials of banks and BDOs, etc., felt that awareness level of PG members on pension and remittances was on the lower side, UPASaC may think of imparting special modules on these topics as part of its financial literacy campaign
- UPASaC may have to work towards digitisation of transactions and opt for credit scoring of PG members so as to ensure better repayment of loans to banks since gross non-performing assets (NPAs) of SHG Bank Linkage Programme stood at 32.47 per cent involving Rs. 19.42 crore in Uttarakhand as on 31<sup>st</sup> March, 2019

- While promoting the usage of digital financial services, consumer protection and grievance redressal mechanism should be given a major thrust to enhance the reliability/trust thereby achieving the financial inclusion in Uttarakhand
- At present, UPASaC has 11 rural finance co-ordinators (RFCs) working in 11 districts of Uttarakhand. To scale-up its financial inclusion and livelihood financing activities, UPASaC may increase the number of its staff given the large hilly terrain and huge population to be served
- It is noticed from the field study that the co-ordination of UPASaC with State Agriculture department is fairly good, resulting in diversified crops and agricultural surpluses of PGs. It needs to build similar rapport with other departments as well in order to enhance non-farm livelihoods among the rural households
- There are well documented cases of impact of financial inclusion in generating productive employment, enhancing incomes and improving standards of living of the poor. As the State has large forest cover, there is a great scope for collaboration between UPASaC and the Forest department of Government of Uttarakhand. There are models/projects within the country like Andhra Pradesh Community Forest Management (APCFM), wherein the communities market the forest produce for livelihood enhancement. Hence, PGs and LCs may be encouraged to produce conventional and contemporary eco-friendly consumer products and durable furniture and market them for enhancement of their income. The study suggests for expansion of the existing efforts of poverty alleviation by adding asset building as the new frontier in financial inclusion. Thinking beyond income and cash flow management to include perspective on building assets can make a greater impact towards sustainable development
- The PG members should be encouraged to invest more in micro enterprises by providing access to technical knowhow through constant training, credit, and market linkages through cluster-based livelihoods as experimented by Mahila Arthik Vikas Mahamandal (MAVIM) in Maharashtra. Further, these PG members should be groomed in terms of confidence to excel in income generating activities by embracing technology as in the case of RISE - Rural Women's Initiative for Self-Sustained Enterprises – a project funded by Vodafone Foundation. Also, the SHG members should be given flexibility in repayment of bank loans (e.g: weekly repayment schedule) based on their sources of income/cash flows as stipulated by SKDRDP – Shri Kshetra Dharmasthala Rural Development Project based in Karnataka



- Essentially, the PG members should have free access to education (including digital/financial literacy), healthcare, finance and markets. Sustainable livelihoods for PGs can be created through value chain – skilling, financial literacy, credit infrastructure, market linkages, technology and regular handholding support. The PG members should be provided multiple doses of adequate credit, so that they will be more likely to involve in income generating activities and less likely defaulting on bank loans. UPASaC should focus on good practices in formation of groups apart from developing brand image for products/services offered by the PGs such as geographical indication tagging for Osmanabadi goats
- As UPASaC has been focussing on financial literacy, livelihood financing and financial inclusion, other programme implementing agencies (UGVS and WMD) may complement and supplement the former's concerted efforts to alleviate poverty in Uttarakhand through convergence
- Development takes long time, more so in Uttarakhand due to its difficult hilly region. As UPASaC has been instrumental in imparting financial literacy and facilitating rural livelihood financing through banks thereby enhancing incomes of the poor and achieving the last mile in financial inclusion, it would be a good idea to extend support to UPASaC in the years to come.

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**BOX 7.1: FINANCIAL INCLUSION****National Strategy for Financial Inclusion**

Financial Inclusion is recognised as a key enabler to achieve economic growth and alleviate poverty. In fact UNO considers financial inclusion to achieve seven of the Sustainable Development Goals (SDGs). Reserve Bank of India (RBI) developed National Strategy for Financial Inclusion (NSFI) for the period 2019-2024, which has been finalised and approved by the Financial Stability Development Council (FSDC). To achieve the vision of financial inclusion, the NSFI incorporated strategic objectives relevant to the Indian context. The objective of the NSFI is to “provide access to formal financial services in an affordable manner, broadening & deepening financial inclusion and promoting financial literacy & consumer protection”. The key objectives of national strategy for financial inclusion are:

- 1) Universal access to financial services
- 2) Providing basic bouquet of financial services
- 3) Access to livelihoods and skill development
- 4) Financial literacy and education
- 5) Customer protection and grievance redressal
- 6) Effective co-ordination among various stakeholders

The national strategy for financial inclusion views universal access to financial services and providing basic bouquet of financial services as the starting point for achieving financial inclusion. While the efforts so far towards financial inclusion resulted in increasing the access to basic financial services including banking, insurance and pension, there is a need to increase the usage of these financial services to deepen financial inclusion. Therefore, focussed and sustained coordination among key stakeholders namely the government, regulators, financial service providers and skill training institutes, etc., is necessary to increase the capacity building of the consumers. A major hurdle for this path is low financial literacy and awareness among the consumers which needs an innovative approach to enhance the financial literacy level (both concept and process literacy). The NSFI opines that customer trust should be enhanced while leveraging the technology to offer the entire bouquet of financial services. While promoting the usage of digital financial services, consumer protection and grievance redressal mechanism should be given a major thrust to achieve the financial inclusion in India.

Source: National Strategy for Financial Inclusion 2019-2024, [www.rbi.org.in/Scripts](http://www.rbi.org.in/Scripts)

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## APPENDIX- I

### Case Study 1

#### Naari Ekta Swayat Sahkarita: a Self Reliant Cooperative



**Village industry of Nari Ekta SRC, Almora**

Naari Ekta Swayat Sahkarita (Self Reliant Cooperative–SRC) was formed in Bhasiyachanna Block, Almora district of Uttarakhand in 2007. The SRC operates in 33 villages covering 19 Gram Panchayats in Almora district. As on 31<sup>st</sup> March, 2019, the SRC had 105 PGs comprising 1,336 members. Naari Ekta SRC encouraged village industries in Almora primarily to stop the migration of local farmers from Uttarakhand. Prior to setting up of the SRC, the farmers used to receive low remuneration for their agricultural produce due to lack of value addition, logistics, and presence of middlemen in the value chain. To address these issues, the SRC introduced innovative farming practices, seed-bank scheme, and new farm inputs among the PG members.

With the full-fledged support of the ILSP, the SRC procured processing machines which increased the value of agricultural produce and enhanced the income of PG members due to efficient market linkages. Over a period of time, the SRC diversified into non-farm activities like establishing farm machinery banks, cultivation of off-season vegetables, fruits and napier grass, etc. Besides, the SRC collaborated with Aanchal<sup>1</sup> for marketing of dairy products, Village Ways<sup>2</sup> for exporting handloom

<sup>1</sup>Aanchal is the apex level state federation of district Milk Co-operative Unions in the State of Uttarakhand.

<sup>2</sup>Village Ways - a village tourism enterprise for marketing of handlooms in Uttarakhand.



products, Mother Dairy<sup>3</sup> for sale of fruits and vegetables and participated in various state, national level fairs and buyer-seller meets. The SRC collaborated with various government departments to supply Ready to Use Therapeutic Food (RUTF) and Take-Home Ration (THR) for Integrated Child Development Services (ICDS)<sup>4</sup>. The SRC was able to provide sustainable livelihoods for the local farmers by purchasing Manduwa—one of the main ingredients in THR and RUTFs. Members of the SRC were well trained in governance, business and marketing strategies. The activities of the SRC resulted in empowerment of its members, particularly the women. They became tech-savvy using WhatsApp, Skype for organising community meetings, using Tally software for maintaining books of accounts.

Nari Ekta SRC is one of the oldest LCs in the region. Currently it is a self-sustained SRC and no longer dependent on the grants of the ILSP. Nari Ekta's team, its office bearers, members and staff are determined to improve their standards of living and bring prosperity to their region by engaging in income generating activities. This improved its annual turnover and profits substantially thereby achieving self-reliance in finance. Brief financials of the SRC are given below:

<b>Year</b>	<b>Turnover (Rs. in Lakh)</b>	<b>Net Profit (Rs. in Lakh)</b>	<b>Net Profit Margin (%)</b>
2016-17	19.08	1.81	9.48
2017-18	35.87	1.68	4.68
2018-19	58.15	3.79	6.51

Source: UPASaC

The activities of the village industry promoted by the SRC not only increased the farm productivity in Almora, but also reduced the domestic drudgery of women in the region.

<sup>3</sup>Mother Dairy is a subsidiary of National Dairy Development Board, and it is in partnership with the LCs for forward linkage of fruits and vegetables in Uttarakhand.

<sup>4</sup>Integrated Child Development Services (ICDS) is a government programme in India which provides food, pre-school education, primary healthcare, immunisation, health check-up and referral services to children under six years of age and their mothers.

## Case Study 2

### Vikash and Pragati : Agri-processing Units



**Agri-processing unit of Vikash and Pragati SRC, Almora**

Henry Ford said, “Coming together is the beginning. Keeping together is progress. Working together is success”. This is true in case of Pragati SRC and Vikash SRC. Both of the SRCs have a symbiotic agricultural value chain relationship wherein output of Vikash SRC serves as input for Pragati SRC.

Vikash SRC was set up in 2015 with an aim to procure and trade seasonal agricultural commodities to realise fair prices for the small farmers and prevent them from migration. Subsequently, UPASaC facilitated bank finance to Vikash SRC to set up agri-processing unit in order to add value to the procured seasonal agricultural products from the farmers. Thus, Pragati SRC came into existence through establishment of the agri-processing unit in 2018. The agri-processing unit produces different varieties of jam, marmalade, pickle, garlic paste and Malta juice, etc.

Later, Pragati SRC identified a business opportunity in selling bakery items, it obtained technical and infrastructure support from the ILSP and the local government to establish bakery unit. Now, the bakery unit produces different varieties of muffins, breads, biscuits, cakes and pastries. One of its trademark products, Manduwa biscuits, has become so popular that the Honourable Prime Minister, Shri Narendra Modi’s radio programme ‘Mann ki Baat’ featured a story on these biscuits. The bakery products are sold through the outlet ‘Ho-Daaju’ at Raghunath city mall in Almora.

These SRCs have been performing well in financial terms too, details of which are presented below:

Name of the SRC	Year	Turnover (Rs. in Lakh)	Net Profit (Rs. in Lakh)	Net Profit Margin (%)
Vikash	2016-17	5.61	0.31	5.52
	2017-18	9.77	0.40	4.09
	2018-19	35.99	2.54	7.05
Pragati	2016-17	2.78	0.32	11.51
	2017-18	7.03	0.37	5.26
	2018-19	22.49	2.25	10.00

Source: UPASaC

It is noticed from the financials, Pragati SRC has higher net profit margin compared to Vikas SRC, due to its value addition to agricultural produce. Both Vikash SRC and Pragati SRCs created direct employment through the agri-processing unit and the bakery units. The members of SRCs save regularly in thrift deposits and help each other through internal lending. The SRCs are also generating additional indirect employment and enhancing income of local farmers by purchasing produce for agri-processing and bakery units.

### Case Study 3

#### Ujjwal SRC's Cooperative Farming - Cooperation in Letter and Spirit



Office of Ujjwal SRC, Almora

Ujjwal Aajeevika Swayat Sahkarita came into existence in the year 2015 in Dhamas of Hawalbag block, Almora district. It has 501 members from 10 villages and 46 PGs and VPGs. Fragmented landholdings, lower fertility of agricultural land and frequent crop failures, resulted in poor agriculture output to the local farmers. To lessen the loss, Ujjwal SRC started pooling land for cooperative farming of Manduwa crop. To increase the output from the pooled land, the crop was selected after calculating the risks involved in producing the crop. Consequently, the SRC took up the activity of supplying Take Home Ration (THR) to Anganwadis under Integrated Child Development Services (ICDS). To further risk proofing community members, the SRC diversified into many activities such as dairy farming, cattle feed, transportation/ambulance service, etc. As such, the SRC attained financial sustainability over time as detailed below:

Year	Turnover (Rs. in Lakh)	Net Profit (Rs. in Lakh)	Net Profit Margin (%)
2016-17	58.71	4.54	7.73
2017-18	135.89	9.18	6.75
2018-19	109.00	11.98	10.99

Source: UPASaC

The LC's activities not only generated sizable turnover and profits but also created jobs during the above mentioned three year period. As such, the office bearers and members of the SRC successfully made three villages in Almora district 100 per cent financially included with PMJJBY and PMSBY. The performance of the Ujjawal SRC was duly recognised across Uttarakhand and it was awarded as the best performing LC in 2019.



#### Case Study 4

### Lata Baba – Saviour of Small Farmers in the Hilly Regions of Uttarakhand



**Agri-tool manufacturing unit of Lata Baba SRC, Rudraprayag**

Lata Baba Aajeevika Swayat Sahkarita was formed in the year 2016 in Sumadi village of Jakoli block of Rudraprayag district. Low agricultural productivity coupled with heavy migration of men for jobs left women of the region burdened with farm maintenance and domestic chores. Besides, farming in the valley was largely an arduous job. Motivated to make farming less burdensome, Lata Baba SRC established the Agri-tool manufacturing unit with the financial support of Micro Small and Medium Enterprises (MSME) scheme of the Government of India in the year 2018.

The tools manufactured by Lata Baba SRC are not only innovative but also customised to the needs of the local farmers. Agriculture tools of Lata Baba SRC have made farming effortless. The farmers have been able to work faster and improved their output thereby making agriculture more lucrative. Guided by an experience master trainer, the agri-tools developed at the unit are purchased not just by the farmers but also procured by Agriculture Department, Forest Department and Horticulture Department, etc. Brief financial details of Lata Baba SRC are given below:

<b>Year</b>	<b>Turnover (Rs. in Lakh)</b>	<b>Net Profit (Rs. in Lakh)</b>	<b>Net Profit Margin (%)</b>
2016-17	0.56	0.11	19.64
2017-18	6.28	0.80	12.73
2018-19	13.53	2.51	18.55

Source: UPASaC

It is observed that Lata Baba was profitable due to its farmer friendly agri-tools.



### Case Study 5

#### Chamba Massoorie SRC – Specialist in Kisan outlets



**Kisan Outlet of Chamba Massoorie SRC, Tehri**

Chamba Massoorie Bagwani Ekikrit Aajeevika Swayat Sahkarita of Chamba block, Tehri district was formed in the year 2015. The SRC represents households from 19 villages, 74 PGs/VPs and 604 shareholders whose primary occupation is agriculture. Prior to setting up of the SRC, income from agriculture was very low for the local farmers. In order to enhance the farm income, LC facilitated market access to the farmers' produce. As such, it set up Kisan outlets in Uttarakhand under the brand 'Hilans' that provided good business opportunity to farmers to sell their products at remunerative prices. To make agriculture more productive and viable, the SRC promotes scientific based farming practices, with the active support of Agriculture department and the ILSP. The custom hiring of farm tools and equipment by the LC under farm machinery bank was instrumental in reducing the workload of the farmers and enhancing productivity of the land.

Another very important activity of the SRC is microfinance. The bank finance facilitated by UPASaC was used for internal lending among members in the LC. The microfinance activity of the LC inculcates disciplined financial behaviour among the members especially in repayment of loans. All the members of the LC save regularly. There is a significant improvement in the lives of the members of the SRC due to their engagement in income generating activities. The SRC transformed agriculture in Tehri region from subsistence to sustainable enterprise apart from



creating social, economic and political awareness among the PG members. Brief financial details of Chamba Massoorie SRC are reported below:

<b>Year</b>	<b>Turnover (Rs. in Lakh)</b>	<b>Net Profit (Rs. in Lakh)</b>	<b>Net Profit Margin (%)</b>
2016-17	2.77	0.21	7.58
2017-18	6.97	0.66	9.46
2018-19	10.52	1.24	11.78

Source: UPASaC

It is seen that the financials of Chamba Massoorie SRC witnessed continuous improvement due to its 'Farm to Fork' business model.

## APPENDIX II

### Mann-Whitney U Test

The Mann Whitney U test, sometimes called the Wilcoxon Rank Sum Test is a non-parametric test that is used to test whether two samples are likely to derive from the same population. The research hypothesis indicates that the populations are not equal as opposed to specifying directionality. The dependent variable for the test is of ordinal data type and the independent variable is categorical but with 2 levels.

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

pg_type	obs	rank sum	expected
Credit Linke	199	46539	44078.5
Non Credit L	243	51364	53824.5
combined	442	97903	97903

unadjusted variance 1785179.25

adjustment for ties -178321.43

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adjusted variance 1606857.82

Ho: income(pg\_type==Credit Linked) = income(pg\_type==Non Credit Linked)

z = 1.941

Prob > |z| = 0.0523

## APPENDIX III

### Chi-square Test

Chi-square is a non-parametric test that is used when there is a relationship between two categorical variables. The dependent variable for the test is categorical in nature (nominal data type) and the independent variable is also categorical but with 2 levels (Leeper, 2006).

### Fischer's Exact Test

The Fisher's exact test is an alternative test to chi-square test when one or more variable has an expected frequency of five or less (Leeper, 2006).

### Regular meeting of PG Members

pg_type	regular_meeting		Total
	No	Yes	
Credit Linked	2	203	205
Non Credit Linked	2	262	264
Total	4	465	469

Fisher's exact = 1.000  
1-sided Fisher's exact = 0.588

### Regular Saving of PG Members

pg_type	regular_saving		Total
	No	Yes	
Credit Linked	2	203	205
Non Credit Linked	1	263	264
Total	3	466	469

Fisher's exact = 0.583  
1-sided Fisher's exact = 0.406

### Regular Internal Lending of PG Members

pg_type	regular_int_lending		Total
	No	Yes	
Credit Linked	12	193	205
Non Credit Linked	26	238	264
Total	38	431	469

Pearson  $\chi^2(1) = 2.4732$  Pr = 0.116

### Regular Repayment of Loans of PG Members

pg_type	regular_repayment		Total
	No	Yes	
Credit Linked	4	200	204
Non Credit Linked	30	234	264
Total	34	434	468

Pearson  $\chi^2(1) = 15.1019$  Pr = 0.000

### Regular Record Keeping of PG Members

pg_type	regular_bookkeeping		Total
	No	Yes	
Credit Linked	21	183	204
Non Credit Linked	23	241	264
Total	44	424	468

Pearson  $\chi^2(1) = 0.3381$  Pr = 0.561

## Regular Rotation of Leadership Positions in PGs

pg_type	regular_rotation_leadership		Total
	No	Yes	
Credit Linked	57	146	203
Non Credit Linked	65	199	264
Total	122	345	467

Pearson chi2(1) = 0.7109 Pr = 0.399

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