INTEGRATED LIVELIHOOD SUPPORT PROJECT (LOAN NO - 856-IN)



Annual Outcome Survey 2018



Central Project Coordination Unit (CPCU), Uttarakhand Gramya Vikas Samiti (UGVS), Project Society Watershed Management Directorate (PSWMD), Uttarakhand Pravatiya Aaajivika Samvardhan Company (UPASaC)









Table of Contents

Abbreviations	i
Executive Summary of Annual Outcome Survey 2018	i
Background of Annual Outcome Survey	1
Methodology of Annual Outcome Survey 2018 for ILSP	6
Sample Frame and Sampling	6
Methods, Sources and Data Collection Tools	6
Data Entry and Analysis	11
Details of the Sample of AOS – 2018	13
Findings of Annual Outcome Survey 2018	18
1. Targeting in the project - Coverage of Households	18
2. Participation of Members in Project Activities	19
3. Livelihood Promotion	23
4. Food Security	26
5. Ownership of land, property rights and utilization of land	28
6. Agricultural Production and Irrigation	29
7. Access to Market:	32
8. Access to Rural Financial Services:	37
9. Enterprise Development:	40
10. Convergence:	41
11. Improvement in the condition of Houses	44
12. Irrigation through LDPE Tank:	44

	•	13. Drudgery Reduction	46
	•	14. Chain linked fencing	47
	•	15. Fodder Development	48
	•	16. Farm Machinery Bank	50
	•	17. Reduction in Migration	51
	•	18. Information Dissemination / Knowledge Management	52
	•	19. Average Income Scenario	52
	•	20. Results of interventions through UPASaC	53
Con	clus	sions of Annual Outcome Survey 2018	56
	•	1. Main Conclusion	56
	•	2. Results of the Focus Group Discussion at the level of LCs on overall benefits	57
	•	3. Overall Conclusion of AOS from HH Survey and FGDs	60
	•	4. Key learning/ lessons for future based on the HH survey	60
	•	5. Suggestions of members from FGDs of LCs	61
Ann	exu	re	62
	•	Annexure 1 - Key Highlights of the Results (% of HHs)	62
	•	Annexure 2 – Results Chain of Irrigation Infrastructures:	63
	•	Annexure 3 – Results Chain of Off Season Vegetables :	64
	•	Annexure 4 – Results Chain of Fallow Land Utilization for Fodder and Fruits :	65
	•	Annexure 5 – Results Chain of Access to Market :	66
	•	Annexure 6 – Farm Based Activities (Results Chain):	67
	•	Annexure 7 – Some Photographs of AOS 2018:	68

Abbreviations

AOS Annual Outcome Survey

CPCU Central Project Coordination Unit
CSR Corporate Social Responsibility

FGD Focus Group Discussion

FSIP Food Security Implementation Plan

GoUK Government of Uttarakhand

HH Households

KVKs Krishi Vigyan Kendras

MGNREGA Mahatma Gandhi National Rural Employment Guarantee Act

IFAD International Fund for Agriculture Development

ILSP Integrated Livelihood Support Project

LCs Livelihood Collectives

LDPE Low Density Polyethylene

PGs Producer Groups

PSWMD Project Society Watershed Management Directorate

PwDs People with Disabilities

NABARD National Bank for Agriculture and Rural Development

SHGs Self Help Groups

SRCs Self Reliant Cooperatives

SC Scheduled Caste
ST Scheduled Tribe

UGVS Uttarakhand Gramya Vikas Samiti

UPASaC Uttarakhand Parvatiya Aajeevika Samvardhan Company

Executive Summary of Annual Outcome Survey 2018

Background

The Annual Outcome Survey (AOS) of ILSP for the year 2018 is conducted for measuring the outcome level results and effectiveness of project in the implementation processes and also extrapolate certain learning to strengthen the project planning, service delivery and systems. The primary objective of the Annual Outcome Survey was to gather information on project outcomes at the household level.

The Purpose of AOS – 2018 for ILSP was to verify that the project adequately reaches the households it is expected to serve, particularly those most disadvantaged socioeconomically. Further, through the survey was used as an effective tool for gathering information about the reach and quality of these services directly from the users. The purpose was also to gather feedback on the usefulness and quality of outputs. The Annual outcome survey was also used to estimate the actual number of households participating in project activities. AOS-2018 was also used to collect information on indicators to measure the extent to which the project is meeting its objectives.

Coverage of three components of the project in AOS 2018

The survey covered all the three agencies that are responsible for three important components of the project - Uttarakhand Gramya Vikas Samiti (UGVS) for Food Security and Livelihood Enhancement; Project Society for Watershed Management Directorate (PSWMD) for Participatory Watershed Development; and Uttarakhand Parvatiya Aajeevika Sanvardhan Company (UPASaC) for Livelihood Financing.

Methodology of AOS 2018 for ILSP

A multistage sampling was applied for the survey. All the ILSP districts were selected and covered for the study. The sample frame of the Annual Outcome Survey incorporates selection of villages, Livelihood Collectives, Producer Groups and Beneficiary Households as well as Control Group Households.

Villages from the project areas were selected from High Hill (3 villages), Mid Hill (3 villages), Valley (3 villages). These villages were those wherein majority of Households have been benefited from the project activities during Calendar Year 2018. From Project villages - 360 Households of Component -1 (15 HH per block) and 301 Households from Component - 2 were selected. From control villages - 144 households from component 1 and 105 households from component 2 were selected for the study. Sample selection was done by using stratified random sampling method. Under the survey, attempts were made to select a variety of households. Besides general category households, it was ensured that following variety of households are also covered under the survey. In order to train the Coordinators and Enumerators for carrying out AOS in target area (block / unit/districts), two training cum field-testing survey exercises were organized at Pauri (for Garhwal region) and Almora (for Kumaon region).

In addition to the survey, 27 LCs (20 from component -1, 7 from component -2) were covered under the study from all the districts of the ILSP. Around 80% women and 20% men participated in the Focus Group Discussions (FGDs) including office bearers and staff of LCs. Besides Focus Group Discussion in 27 Livelihood Collectives, 31 Producer Groups and Vulnerable Producer Groups were also covered in the Annual Outcome Survey – 2018 of ILSP. 75% respondents were women in the ILSP project beneficiary sample and 53% in control group sample.

Key Findings of AOS 2018

- 100% sample households taken up in AOS 2018 were members of Producer groups / vulnerable producer groups. 94% were shareholders of Livelihood Collectives.
- 95% project beneficiaries were involved (during 2018) in the farm or non-farm livelihood activities as well as watershed development activities.
- In all, 99% households reported that they interact with project staff and get the desired information about the project activities, technical information, market information, information of various governmental schemes and other relevant information.
- In all, 96% project households participated in formation of Food Security Improvement Plan (FSIP).
- 97% project households (shareholders) participated into Annual General Meeting (AGM) of livelihood Collectives (LC).
- 95% project households reported about having more than one source of income.
- About 49% project households reported that their income has increased by more than 10% compared to the income of previous year.

- In comparison to 2017, the average monthly income has increased by 9% and 7% in the component -1 and 2 respectively.
- In 2018, 60% project households reported to be having an average monthly expenditure between Rs. 2000 to Rs. 5000, whereas 48% project households in 2016 were falling into this expenditure range.
- 98% of the surveyed project beneficiary households have reported no food shortage and only 2% households reported minor food shortage for less than 1.4 weeks in a year.
- In all, 68% project households reported that the quality and type of food consumed by the households has further improved in the last 12 months due to project initiatives.
- It was revealed that 99% project households have their own productive land as an asset for their livelihood.
- 66% of project farmers have increased crop productivity
- 74% cultivators reported increase in production due to the use of irrigation system.
- 88% households have adopted project promoted improved agriculture production technologies in their farming practices
- 64% in component -1 and 59% in component -2 project households adopt improved health care services for the livestock (such as vaccination and deworming etc.).
- 75% households reported that the sale of agriculture crop produce is increased due to project activities i.e. small collection centers, collection centers, outlet, grading, packaging and sale through livelihood collectives.
- Marketing of produce through LCs varies from product to product and also from particular LC to other LC. It ranges from 40% to 70% produce being sold through Livelihood Collectives. It also varies from product to product.
- 73% households have reported that the price of their produce has increased more than 10% due to storing the produce in small collection centers and selling the produce at the right time.
- About 81% households reported that access to financial services has improved over the last 12 months mainly due to project support.
- 98% of the PG members do regular savings as well as regular meeting, which is a good sign for their sustainability and linkage with NRLM in future
- The survey results regarding owning enterprises in project villages reveals that only 14% have established SMEs.

- 65% project households have reported that they benefit from new technology through convergence.
- 72% projects households report that project facilitate the linkage of other departments, which improves the convergence.
- 48% households have reported that through convergence on an average an amount of Rs. 3483 is saved / earned.
- 74% project households having semi-improved and improved houses.
- On an average 5.25 nali cultivated land area is irrigated through LDPE tanks.
- 11% households are using the drip irrigation with the LDPE tanks.
- 12% households using polyhouse with the LDPE tanks. The polyhouse provided by Agriculture and Horticulture department.
- 78.5% of project respondents reported that they were aware of drudgery reduction tools and 76% project respondents reported that project has helped in providing drudgery reduction tools directly.
- 39% project households are using chain link fencing, on the rent basis from LCs.
- 32% project households have participated in fodder development activity under livelihood collective on average 3 nali land has been used by the member for fodder crops.
- Each LC has planted fodder crops in the 5 ha of community waste land. The fodder is now available three to four times in a year.
- 47% sample households from component -1 have taken equipments from livelihood collectives for their agricultural activities. On average Rs. 2465 has been reduced from agriculture activities in a season.
- 11% households also reported that members in the village have done reverse migration.
- Out of the total, 91% project households are getting project related information through Livelihood Facilitators and other technical agency staff. 89% project households getting agriculture related information from Agri staff of technical agency and also KVKs.

The results of FGDs revealed that agriculture technical support, animal husbandry, chain linked fencing, irrigation water tanks/ LDPEs, Farm Machinery Bank, Fodder grass and trees promotion, and convergence initiatives have provided maximum benefits to the farmers.

Distribution of surplus in different forms such as dividend and bonus is one of the positive trends that are emerging in ILSP. Some of the SRCs are providing dividends on the share capital of members and bonus as per their bylaws and guidelines issued by ILSP HO regarding.

All the LCs and their members report that the support of the project has reduced the cost of production and management of their livelihood activities. Availability of seeds and manures at reduced rates through the LCs has reduced the input costs including the transport cost that was incurred by the farmers earlier.

Chain linked fencing, water tanks, farm machinery bank and small collection centers have reduced the wastage/ damage of crop and also facilitated in enhancing the production.

Animal Feed at the reduced cost (Kapila Animal Feed) Calcium and other animal feeds on reduced rates has enhanced surplus in the dairy activity

One of the unintended outcomes of the project is that the expenditures of households have reduced due to providing of consumer goods by SRCs at the reduced rates than market. Members informed that the reduction varies from 10% to even 40% in the household expenditure.

Overall Conclusion of AOS from HH Survey and FGDs

ILSP has proved to be a successful model for sustainable livelihoods of rural people of mountain region and resulted into impacting their lives due to following reason -

- Business planning, appropriate inputs and financial support for the same, Technical support on production, Fencing and support for irrigation has resulted into more production, less losses of crop and less expenditure on production. This has provided more income and surplus to the households.
- Support in storage, marketing and Value Addition has resulted into getting better price and avoid any distress sale by the farmers. This has also given more surpluses to the households.
- Financial Literacy, Promotion of Savings through Production Groups, Share Capital and Micro Finance Services has enhanced financial capability. One of the important factors is that share capital assistance to LCs on behalf of farmers provided social and economic security to the farmers. Interest subvention has helped farmers to reduce loan burden. Farmers will continue to get dividends in the old age if LCs/ Cooperatives continue to be in profits.

- The project has also covered youth by providing skills training and thereby generating employment opportunities in the form of wage, job and selfemployment for youth.
- Women participation in the project was high which has led to empowerment and gender mainstreaming.
- Convergence contributed in the income enhancement of households as well as in reduction of expenditure.

Suggestion for future based on the HH survey

Based on household level survey and also focus group discussions, following suggestions and actions for the future are suggested by the stakeholders of ILSP-

- Effective use of water sources is directly linked to up scaling the livelihood activities especially farm based value chains. LDPE tanks have made positive difference especially in the horticulture; however, there is a need of integrating LDPE tank with drip, sprinkler and poly houses.
- · A standardized procurement and sale price policy should be promoted in the project depending upon the grade and quality of produce.
- To ensure optimum and effective utilization of chain link fencing and fodder development activity, there is a need of standard guidelines.
- The Farm Machinery Bank is one of the most effective tools for households, but there is a need for capacity enhancement for the regular maintenance of equipments.
- Insurance activity i.e. crop insurance, cattle insurance require more focus.
- There can be up scaling of activities beyond federations based on the growth center model.
- Promotion of Floriculture, Contract Farming, Water lifting pumps for the hilly areas lands, Small canals from the main canals / rivers up to the lands of the farmers, Promotion of Bee keeping, Poultry and Fisheries and promotion of Small enterprises are required for promotion of livelihoods in Uttarakhand.

Background of Annual Outcome Survey

An Annual Outcome Survey (AOS) is a project monitoring and evaluation (M&E) tool to measuring the outcome level results, assess the efficiency of its targeting strategy, provide early indication of its success or failure, and extrapolate certain learning to strengthen the project planning, services delivery and systems.

As per IFAD Guidelines, Annual Outcome Survey (AOS) is conducted every year for measuring the outcome level results and effectiveness of project in the implementation processes and also extrapolate certain learning to strengthen the project planning, service delivery and systems.

Objectives of Annual Outcome Survey

- Regular reporting on positive or negative outcomes of activities at the household Level
- Assessment of targeting efficacy
- Early indication of project success or failure
- Timely information on performance so that corrective actions may be taken, if Required

Scope of AOS

Annual outcome surveys are most effective when their scope is well defined. Since they are intended to be short and quick, they are best used as a complement to other, more detailed or more complete monitoring and evaluation tools. Typically, Annual Outcome Survey may have following four objectives. For ILSP - AOS 2018, the same objectives were also opted:

- To reveal the link between a project's outputs and its overall development objectives
- To collect output data that is usually not recorded via other monitoring tools
- To measure if the project is meeting its objectives
- To assess the quality of implementation processes including targeting, participation and service provision

Linking output to project objectives

The primary objective of the Annual Outcome Survey was to gather information on project outcomes at the household level. Conceptually, an outcome is the response and change in the behavior, or indeed in the knowledge and practice, of project households as a result of project activities and outputs. Higher-level outcomes that do not include a change in behavior can also result from project interventions.

Purpose of AOS

Targeting information - Annual outcome surveys can be used to verify that the project adequately reaches the households it is expected to serve, particularly those most disadvantaged socio-economically.

Reach and quality of community services - Services delivered by community organizations or community resources persons may not be accurately recorded by the service providers. Annual outcome surveys are an effective tool for gathering information about the reach and quality of these services directly from the users.

Usefulness and quality of outputs- The AOS methodology is well-suited to gather feedback on the usefulness and quality of outputs.

Level of participation per household- Annual outcome survey is used to estimate the actual number of households participating in project activities. The sample survey will indicate the extent to which households participate in more than one intervention, while others are missing out.

An early indicator of a project's success or failure to reach its objectives- Annual outcome survey is also used to collect information on indicators to measure the extent to which the project is meeting its objectives. Although this is normally the function of larger impact studies at baseline and completion, AOS are useful in generating early evidence of progress towards objectives and in showing whether project interventions are leading to the intended changes.

About Annual Outcome Survey ILSP - 2018

Status of ILSP project

After the successful implementation of Uttarakhand Livelihoods Improvement Project for the Himalayas (ULIPH), Government of Uttarakhand with support from the International Fund for Agriculture Development (IFAD) has been implementing a follow-up project. the Integrated Livelihood Support Project (ILSP) since July 2013. The As per the IFAD Executive Board approval of the ILSP project on 1st November 2011, the project is expected to be completed on 31st March 2019 with loan closing on 30th September 2019, however it has got extension of two more years from IFAD and Government of India, based on the need and good performance of the project.

ILSP is a poverty alleviation programme being implemented in Uttarakhand in 44 blocks of 11 hill districts (Almora, Bageshwar, Chamoli, Tehri, Uttarkashi, Rudraprayag, Dehradun, Pauri, Champawat, Pithoragarh and Nainital). The overall objective (goal) of ILSP is to reduce poverty in hill districts of Uttarakhand. This would be achieved via the more immediate development objective to "enable rural households to take up sustainable livelihood opportunities integrated with the wider economy".

The strategy behind ILSP has been to adopt a two pronged approach to building livelihoods in hill districts. The first approach is to support and develop the food production systems which remain the main means of support for most households. The second main thrust of the project was to generate cash incomes by supporting non-farm livelihoods, especially community involvement in rural tourism, and vocational training.

ILSP is financed by an IFAD Loan of SDR 56.7 million (USD 89.9 million as estimated at the time of loan negotiation which currently works out only USD 79.7 million), together with USD 48.0 million contribution from the Government of Uttarakhand (GoUK), USD 10.9 million contribution from beneficiaries, and USD 109.9 million as loans from banks and other financial institutions.

Coverage of three components of the project in AOS 2018

The project has three components - Food Security and Livelihood Enhancement; Participatory Watershed Development; and Livelihood Financing. These three components are implemented through three different institutions -

- Uttarakhand Gramya Vikas Samiti (UGVS) Food Security and Livelihood Enhancement
- Project Society for Watershed Management Directorate (PSWMD) Participatory Watershed Development; and

• Uttarakhand Parvatiya Aajeevika Sanvardhan Company (UPASaC) - Livelihood Financing

Component -1: Food Security & Livelihood Enhancement implemented by UGVS -

This is being implemented by UGVS and is mainly covering the following activities;

- a) Organizing the producer groups (PGs & VPGs) and federating them into Livelihood collectives
- b) Extending support in crop and livestock production for food security, and developing high value cash crops and other products (such as rural tourism, etc.) to provide cash incomes to rural households through PGs/ VPGs and LCs
- c) Providing Technical services and physical infrastructures for market access to producers
- d) Innovative linkage with various institutions for testing and dissemination of innovative technologies and approaches for improving food security, livelihoods and access to markets.
- e) Improving access to employment in the non-farm sector by supporting vocational training linked to job placement.

These activities were envisaged to cover around 106000 households in selected 37 development blocks of the nine districts i.e. Almora (10), Bageshwar (3), Chamoli (6), Tehri (5), Uttarkashi (5), Rudraprayag (2), Pithoragarh (3), Pauri (1) and Dehradun (2).

Component -2: Project Society Watershed Management Directorate (PSWMD) -

It has major focus on protecting and improving the productive potential of the natural resources in selected watersheds, alongside the promotion of sustainable agriculture, preserving bio-diversity and increasing the income of the community in the selected areas. The component is target to cover a total of around 20,000 HHs in 7 blocks of 3 districts. It is complementing the watershed development programmes in Uttarakhand, and takes into account availability of required WMD institutional capacity in the selected project districts. Like UGVS, under this component also, Producer Groups and Livelihood Collectives are being formed and livelihoods are promoted.

Component - 3: It is being implemented by Uttarakhand Parvatiya Aajeevika Sanvardhan Company (UPASaC) and the major activities under this component include:

- Banking support capacity building, support to banks and local financial institutions to opening new branches in the project area
- Loan at reasonable rates/ Venture financing with banks to the business enterprises emerging under the project area as per the business plan of the ventures.
- Risk management piloting and scaling up of insurance services such as weather, cattle, health insurance.
- Financial inclusion initiatives training to LC to be bank agents as Business Correspondent/ Business facilitator, product literacy training etc.
- Provision of development finance to LCs/federations as viability gap funding to promote the agribusiness activities.

The component-3 is targeted to cover complete ILSP area. Therefore the area of UPASaC activity is both in UGVS and PSWMD area of implementation.

In the Annual Outcome Survey of ILSP-2018 all the three components have been covered. Since UPASaC is catering to the same federations/Livelihood Collectives and Producer Groups therefore the questions related to the outputs and outcomes of financing by UPASaC were incorporated in the questionnaires for the Household and also in FGD Checklist.

Methodology of Annual Outcome Survey 2018 for ILSP

Sample Frame and Sampling

The sampling frame provides a clear picture of the unit of analysis for the study. A multistage sampling was applied for the survey.

- All the ILSP districts were selected and covered for the study
- The Sample frame of the Annual Outcome Survey incorporates selection of villages, Livelihood Collectives, Producer Groups and Beneficiary Households as well as Control Group Households

Districts covering UGVS and Watershed Area of the project **Coverage of Livelihood Collectives Coverage of Villages and Producer Groups / Vulnerable Producer Groups** Members of Producer Groups/ Beneficiaries HHs and **Control Group HHs**

Fig. 1 Sample Frame for Annual Outcome Survey

Methods, Sources and Data Collection Tools

Under the survey, multiple methods, sources and tools were used. The information on various outcome and output indicators of the project was collected using different sources of evidences, using different methods and data collection tools.

From the districts selected for the study, Second level institutions-Livelihood Collectives were selected for the study. Livelihood Collectives and Producer Groups to be studied were selected from each district. Member Households of Produce Groups/ Beneficiaries

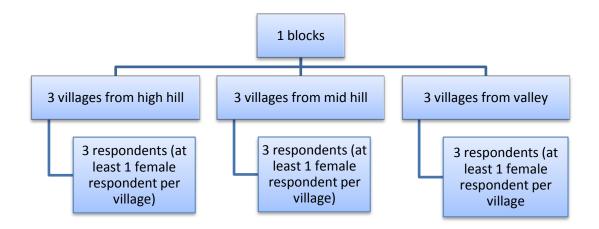
were studied in terms of income and profit margin and services received by the households.

Selection of Livelihood Collectives for the Study

Under the AOS, a variety of Livelihood Collectives having single or multiple activities were selected for the study. It was ensured that LC covered in AOS covers one or more of the following activities -

- Livelihood Collectives having high business turnover and profits, Medium and Low business turnover and profits
- Providing Input / Output services to households
- Farm Machinery Bank activity Custom Service center
- Chain Link Fencing support to communities
- Fodder Development Activity
- LC having Collection Center and Small Collection Center or both
- Facilitates credit and Insurance service to communities
- Take Home Ration business
- Rural Non-Farm Sector (Consumer business activity)
- Multipurpose processing hub/ Single product processing units
- Primary School and Distance education activities (linking with Open Universities),
- Dairy, promoting collective farming of MAPs and horticulture produces, promoting poultry, running of Farmer markets / Kisan Outlets,
- Running of tent house, TV/ Mobile recharge activity and other services
- Home stay/ Eco-Tourism activity
- Production of Brass copper products
- Handloom or weaving activity
- Transport jeep/ vehicle (for own business and for giving on rent) and
- Sanitary Napkins Work (CSR)
- Other Business activities

The AOS- 2018 covered LCs engaged in various sub-sectors such as agriculture, agri. allied and non-farm sector.



Village Selection Criteria

Selection of sample Project Villages - Villages from the project areas were selected from High Hill (3 villages), Mid Hill (3 villages), Valley (3 villages). These villages were those wherein majority of Households have been benefited from the project activities during Calendar Year 2018.

Selection of the beneficiary households - Sample Size

- Households from Project villages 360 Component -1 (15 HH per block) + 301 (around 43 per Unit) Component - 2
- Households from control villages 144 (Component 1) + 105 (Component 2)

Sample selection was done by using stratified random sampling method as all villages (high hills, mid hills and valleys) being covered by the project have reasonable identical socio-economic conditions in each of the three categories, but villages may were different in terms of percentage of vulnerable or disadvantaged people. approved ILSP village list was referred for sample selection. Within the three categories of villages mentioned above, stratification (classification of villages) was also been done in term of vulnerability level. From each stratum, random sample were drawn using random sampling (lottery method). Once villages were stratified, a lottery method was used for random selection of households from project villages and non-project villages also called control groups, after villages were stratified.

Coverage of selected Producer Group/ Vulnerable Producer Groups associated with the sample Livelihood Collectives – Within each Livelihood Collectives a variety of Producer Groups and Vulnerable Producer Groups were covered especially in terms of Microfinance services provided to the members and services provided to the members.

Variety of Households

All households were selected randomly from the list of target households using stratified random sampling method. The team selected the sample HHs per village in the presence of village functionaries and villagers.

Under the survey, attempts were made to select a variety of households. Besides general category households, it was ensured that following variety of households are also covered under the survey -

Households received variety of services - Households benefited from Farm Machinery Bank or Chain Link Fencing or Fodder Development Activity, Small Collection Center Activity, Micro Irrigation i.e. LDPE Tanks, Micro Irrigation i.e. LDPE Tanks with Poly-house, Fish Farming, Sprinkler etc., Crop Insurance and other types of support received from the project.

Vulnerable category HHs – VPGs members, PwDs, Women Headed households, Widows, SC/ST category households etc.

Households received benefit of Vocational training - Households got support under vocational training programme of the project and youth of the households that have received skills development training

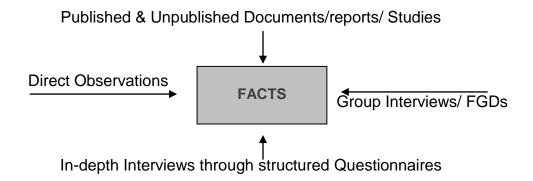
The strategy of collecting information from a variety of households has helped in disaggregated information.

Data Collection – Secondary and Primary sources of data

For the AOS data collection, a combination of methods and sources shall be used. The source of data was both secondary as well as primary. The primary data was collected through different sources of evidence such as direct observation, Focus Group Discussions, in-depth interview & documentation like progress reports, annual reports, other written reports of events etc. Thus the facts collected from different sources were used in a converging manner to define the "facts" of the case. The proposed qualitative

survey has relied on the integration of data from a variety of methods and sources of information adopting a general principle known as Triangulation.

Convergence of Multiple Sources of Evidences



Triangulation: After the collection of data from the different set of respondents, triangulation methodology was used for ensuring greater credibility and validity of the data made available.

Defining a questionnaire's time span

The Annual Outcome Survey was aimed to gather data about changes that have taken place over the previous 12 months, so they serve as indicators of the project's recent performance. Results from one year is compared with previous years. However, for some indicators it was useful to gather data on changes since the start of the project.

Measuring change

Wherever possible, quantified data, such as land area, number of animals, volume of production and yield of crops or value of sales was obtained.

Team Formation and Training

In the preparation to conducting Annual Outcome Survey -2018 (AOS) through external consultant, the questionnaires and tools were finalized based on the results of previous years' AOS including the recommendations given by the IFAD Supervision Team.

A team of project staff was formed for facilitation in questionnaire finalization, sample area selection, project orientation and field monitoring. Enumerators, who were having experience in the social and economic aspects of the rural sector and also experience of working at the grassroots level, were identified and hired by the project.

In order to train the Coordinators and Enumerators for carrying out AOS in target area (block / unit/districts), two training cum field-testing survey exercises were organized at Pauri (for Garhwal region) and Almora (for Kumaon region). The training was organised with the help of external consultant. Project also ensured the participation of Deputy Project Director, Unit officers from PSWMD and management team from UGVS, UPASaC and CPCU in the training workshop for guiding the Enumerators.

In these two workshops of three days, two days were dedicated to provide understanding of the Framework of the Annual Outcome Survey, Schedules/questionnaires and checklists. One day was dedicated for pilot testing of the tools of the survey. After the pilot testing of questionnaires/ Schedules is done, modifications were made in the tools of data collection.

Implementation of AOS - Data Collection

Enumerators completed the data collection under the guidance of coordinators nominated by the project divisional offices. The team of enumerators visited the villages on the predefined date and time to do the survey.

Data Entry and Analysis

A data entry programme in Epi-Info 7 was created for survey schedule. Epi-info is an interactive data entry system that allows validation, accuracy and check of consistency of data as it is being inputted. The next step after inputting of the data was to do analysis of data using SPSS.

Broad aspects covered in the survey:

- Targeting of Household under the project
- Participation in Project activities
- Livelihoods promotion initiatives
- Food Security

- Land Tenure
- Agricultural Production and irrigation
- Access to Markets
- Access to Rural Financial Services
- Enterprise Development, Training
- Convergence Linkages
- Condition of House- Changes after the project support
- Irrigation through LDPE tank
- Drudgery Reduction
- Reduction in Migration and reverse migration

Page 12 Nov-19

Details of the Sample of AOS - 2018

Table A:-Survey Sample (District, Block and Village) – Component 1

District	Block	Project Villages	Hous ehold s	Control Villages	Hou seho Ids
	Choukhutiya	Adigaon Kanodiya, Rithachau raampur, Kharktaya, Jathaua, Aseti	15	Simalkhet, Papoli, Ramnagaon, Peichuni	6
	Bhikiyasain	Vaigad, Pantgoan, Muniya Chura, Tani, Patash, Nanisera	15	Baman Chauna, Pali, Rikhadi, Dabar, Jhatkot, Dholnani	6
	Hawalbagh	Syahi Devi, Matela, Bhakar, Pakhura, Kanalbunga, Mahatgoun	15	Dall, Chataipant, Jur Kafun, Jakh Katchana, Mani, Lat	6
Almora	Sult	Jakh, Seema Rishtana, Mijhora, dungri, Nagtale, Sriswari	15	khumar, kunhil, Bangidhar, Bhawali, Camkana, Bhyari	6
	Syaldeh	Bharsoli, Chakkar Gaon, pathar khola, Gudlekh, Surmoli, Masod	15	Gumani, Gumani	6
	Tarikhet	Jaiti, Thapla, Badhan khet, Uprari, Tipola, Papne Kothar	15	Jyadi, Tharad, kalakhet, Tipilashera, korad, muleshwar	6
	Dwarahat Ka	Dudholi, Manbajuna, Kaula, Bhataura, Setinaugaon, Chayali	15	Shimoli, Bhaisoli, Kusnyaari, Binta, Matela	6
	Tharali	Patla, Kera, Deval, Dewalgwad, Chidinga State, Bursol	15	JalChoara, Dungri, Sunon Malla, Dungri, Tharali, Sunon Talla	6
Chamoli	Tharali (H)	Kasbinager, Talwari Stat, Devrara, Lolti, Bainoli, Sera Vijaypur	15	Bhatiyana, Dharbarm, Maita, Nail, Pastoli, Kulsari	6
	Pokhari	Pogtha, Devar, Thalabair, Bingar, Jilasu, Soogi	15	BinaTalla, Khal, Chopda, Izzer Jhiloti, Rano	6
Tehri	Chamba	Chopriyal Gaon, DuwaKoti, Bidkot,	15	Bhedudi, Bagi (Mathyan Gaon), Bagi (B. Puram),	6

		Dargi, Pata, Nail		Jadedhar Gaon, Chaati, Pursol Gaon	
	Jaunpur	Maid, Andalaga Bait, Dunda, Naudhar, Manjh Gaon, Jad Gaon	15	Bhaim, Pidogi, Almas, Dangala, Busti, Jamthyal Gaon	6
Uttarkashi	Bhatwari	Raithal, Gorshali, Mustik saur, Kankradi Pata, Silyan	15	Maneri, Jamak, Naitala, Ganeshpur, Tioth, Kansain	6
	Munakot	Naghar-Majheda, Bhateri, Gethigadaa	15	Madanmale, Khatedaa, Kharktadi	6
Pithoragarh	Pithoragarh (Bin)	Jagatad, Jujurali, Talli- Sar	15	Masu, Toli, Roragaun	6
	Kanalichina	Dungari, Hinkot, Sooni	15	Vishnukhal, Swalisera, Thalgaun	6
	Augustmuni	Bhanaj, Patiyun, Dammar	15	Dobha, Hat, Chonra	6
Rudraparyag	Augustmuni (H)	Dankot, Bantoli, Fatehpur	15	Sargadi, Chhentikhal, Khankara	6
	Jakholi	Luthiyang, Ghariyana, Ratanpur	15	Bachwad, Tela, Bhanga	6
Dehradun	Chakrata	Lohari, Jadi, Silwara, Kanda, Atal, Anu	15	Thana, Punahphokri, Amrad (Jhabrad), Dungri, Sainj (Kwanu), Bhog	6
Demadun	Kalsi	Makhti, Nagou, Icchala, Phatau, Kherwa, Simog	15	Kourva, Sainsa, Naraya, Boha, Bhanjara, Ubreau	6
Bageshwar	Garur	NakuriMalli, Mathuron, Chaurson	15	Harinagari, Patali, MajarChaura	6
	Garur (H)	Majkot, Galai, Ghirtoli	15	Chatiyani, Sirkot, Petalakot	6
Pauri*	Kaljikhal	Naudiyalgaon, Agrora, Panchali, Thanul Bunga, Bilkhet	15	Asgarh, Churedgaon, Ghandiyal, Dangi, Chopra, Sarora	6
9 districts	21 blocks (covering 24 areas)	133 Villages	360	123 Villages	144

Page 14 Nov-19

Table B: Survey Sample (District, Block and Villages wise) - Component 2

District	Block	Project Villages	Households	Control Villages	Households
Pauri*	Pabo,	Kotli, Seeku, Kalun, Chamgaun, Maroda, Paboli	43	Kanderi, Barsudi	15
	Ekeshwar	Sanyu, Dharkot, MasoThapliyal	43	Bas, Badoli	15
Nainital	Betalghat,	Pankatara, Basgaon, Budhlakhote, Halso, Joshikola, Tiwarigaon	43	Niglat	15
	Ramgarh	Supi, Bohrakot, Gangarkot, Manarsa, Chhara	43	Shyamkhet, Simrar, Kamoli (Dhokane)	15
	Pati,	Kanakot, Goushni, Sundungra, Thuwammuni	43	Manar	15
Champawat	Champawat,	Narsinghdanda, Koyati, Khalkhadiya	43	Goli	15
	Barakot	Naumana, Pamda, Chulagaon	43	Okhlanj	15
3 districts 7 blocks 31 Villages		301	11 Villages	105	
11 districts	28 blocks	164 Villages	661	134 Villages	249

^{*} District Pauri is common project area for both of the components. Village selection was based on High, Mid and Low hill criteria.

Page 15 Nov-19

^{* *} In 5 new areas (blocks- Tarikhet, Dwarahaat, Part of Augustmuni, Garur and Tharali), the implementation was started from September 2017. Those areas were also covered into the sample of AOS 2018.

District wise Coverage of Livelihood Collectives under the AOS through FGDs

In all, 27 LCs (20 from component -1, 7 from component -2) were covered under the study from all the districts of the ILSP. Around 80% women and 20 % men participated in the Focus Group Discussions (FGDs) including office bearers and staff of LCs.

List of Livelihood Collectives

District	Block	LC N	ame
	Bhikiyasain	1.	Lakshaya SRC
	Sult	2.	Raja Ji Aajivika SRC
	Hawalbagh	3.	Ujjwal SRC
Almora	Choukhutiya	4.	Ram Ganga SRC
	Syaldeh	5.	Jay Maa Kalika Aajivika SRC
	Dwarahat	6.	Shivalay SRC
	Tarikhet	7.	Sher Chogaon SRC
Bageshwar	Garur	8.	Baijnath Aajivika SRC
bagesiiwai	Garur (H)	9.	Jay Maa Bhagwati Aajivika SRC
Dehradun	Chakrata	10.	Jan Sakti SRC
Denradun	Kalsi	11.	Visayal Khat Aajivika Bahuuddesiya SRC
	Augustmuni	12.	Bhimsen Aajivika SRC
Rudraprayag	Jakholi	13.	Lata Baba Aajivika SRC
	Augustmuni (H)	14.	Sanjivani SRC
Tehri	Jaunpur	15.	Sur Singh Devta SRC
Tenn	Chamba	16.	Surkanda SRC
Uttarkashi	Bhatwari	17.	Jagannath Devta SRC
	Munakot	18.	Manmahesh Aajivika SRC
Pithoragarh	Kanalichina	19.	Dwaj Ghati SRC
	Bin	20.	Gurung Ghati SRC
Pauri	Kaljikhal	21.	Jyoti Aajivika SRC
Champawat	Barakot	22.	Kaal Chakr Devta Aajivika SRC
Champawat	Chanpawat	23.	Maa Durge Aajivika SRC
Nainital	Betal Ghat	24.	Maa Ambe Aajivika SRC
ivaiiillai	Betal Ghat	25.	Maa Bhagwati Aajivika SRC

Page 16 Nov-19

	Ramgarh	26.	Khushi Aajivika SRC
Pauri	Maroda, Pauri	27.	Moliyar Aajivika SRC

Besides Focus Group Discussion in 27 Livelihood Collectives, 31 Producer Groups and Vulnerable Producer Groups were also covered in the Annual Outcome Survey - 2018 of ILSP.

Findings of Annual Outcome Survey 2018

The findings of the Annual Outcome Survey are primarily based on the household level survey, however in order to triangulate the results of the Household level survey, Focus group discussions at LC and PGs/ VPGs level were also conducted and results are incorporated in this report. The results of the FGDs are also to provide qualitative information about the results of the project. The findings of the AOS -2018 on various parameters are as under -

1. Targeting in the project - Coverage of Households

In the survey, members of PG/VPGs were the key respondents. 100% sample households taken up in AOS 2018 were members of Producer groups / vulnerable producer groups. It was observed that 94% were shareholders of Livelihood Collectives.

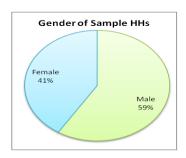


Table 1.1:- Gender wise classification of Sample Households (% of HHs) covered

Gender	Component 1		Component 2		Comp. 1 & 2	
	Project	Control	Project	Control	Project	Control
Men (%)	51	65	67	69	59	67
Women (%)	49	35	33	31	41	33
Total	100%	100%	100%	100%	100%	100%
n =	360	144	301	105	661	249

Table 1.1 shows that 41% of the Sample Households in the project and 33% in Control Group sample were women headed households.

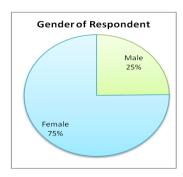
Table 1.2:- Gender wise coverage of Respondents (% of HHs)

Gender	Component 1		Component 2		Comp. 1 & 2	
	Project	Control	Project	Control	Project	Control
Men	13	42	36	52	25	47
Women	87	58	64	48	75	53

Total	100%	100%	100%	100%	100%	100%
n =	360	144	301	105	661	249

Table 1.2 shows that in the sample of the survey, 75% respondents were women in the ILSP project beneficiary sample and 53% in control group sample.

The average family size of the sample household found to be 5. All the respondents from sample households found to be interacting regularly in their groups and participating regularly in the group meetings.



2. Participation of Members in Project Activities

Table 2.1:- Participation of households during Last 12 months (% of HHs)

	Component 1	Component 2	Comp. 1 & 2
Participation in Project activities during last 12 months	98	92	95
Participation in PG/VPG Meetings	99	99	99
Participation in Training/ Workshop / Exposure	72	71	71
Households contact with project staff (i.e. field staff)	99	99	99
Households report that their participation in project activities has impacted their living conditions	100	100	100
Households Satisfied with Project activities	100	100	100

In the sample households, 95% project beneficiaries were involved (during 2018) in the farm or non-farm livelihood activities as well as watershed development activities. In the sample households, 99% project beneficiaries reported that they have knowledge of the project and are actively participating in monthly group meetings. The issues of discussion in the regular monthly group meetings have been on group savings, inter loaning, livelihood activities i.e. farm or non-farm and convergence, etc.

Participation in Training/ Workshop / Exposure Visits: Analysis of the data revealed that 71% households interviewed for AOS were those who have been participating in different trainings, workshops and exposure visits. Project beneficiaries have participated in SARAS Fair, Hilans Krishi Mela, Buyer-Seller workshops, Banking and Risk Insurance workshops, convergence meetings and other events at districts, state levels and national levels. Participation in these capacity building activities has provided them opportunity to capitalize new information, showcase their rural farm and non-farm products and explore new business opportunities. For different sectors i.e. agriculture, horticulture, livelihood, banking etc. project has facilitated for training cum exposures to GBPUAT, KVKs, VPKAS, Agriculture Mandies, and also visits to other successful federations within the project. These training cum exposure visits have provided new ideas to the members, motivation to do innovative livelihood activities so as to improve their livelihoods.

Interaction with project staff: In all, 99% households reported that they interact with project staff (i.e. Project officials, Staff of technical agency (TA), staff of livelihood collectives (LCs)) and get the desired information about the project activities, technical information, market information, information of various governmental schemes and other relevant information.

ILSP has organized divisional level events i.e. Hilans Agriculture Fair (Krishi Mela) with the support of District Authorities to create awareness amongst farmers on various aspects of farming and also about policies and Schemes /programmes for promoting agriculture. Entrepreneurs, developmental experts, scientists and other stakeholders also participated in these Melas. It has provided them opportunities for the exchange of ideas/technologies/innovations and experiences with various stakeholders i.e. rural households, PGs/VPGs/SHGs, federations / livelihood collectives, NGOs, Private Firms, Agencies, Government Depts., Boards, Universities, KVKs, Banks, Insurance Companies and others. More than 110,000 farmers have participated in these fairs to update themselves about current trends, technologies and innovations in the field of agriculture, horticulture and allied activities.

Most of the members of the groups are clear about the purpose of the formation of PGs/VPGs. As per them the objective of the groups are – to work together for the economic stability, awareness and empowerment of women, functioning of group like a family, Collectivization and capacity building of famers, increase in production of farm and non-farm produce, processing to come out with value added products. Additionally,

groups are to plan collectively and also arrange finance for the activities. (FGDs with PG members)

Interaction of PGs with Livelihood Collectives - Multiple and diversified activities of Livelihood Collectives has made 98% PGs to interact with LCs regularly and avail business related services for their members. (FGDs with LC office bearers and staff)

Satisfaction with Project Activities and Services: Out of the total sample households, 100% households are satisfied with project interventions/activities and believe that these have been contributing incrementally in improving their livelihoods and living conditions. AOS revealed the following -

- Project has successfully facilitated their beneficiaries to the know-how of agriculture like seed treatment, line sowing, use of improved and quality seeds, and other technical aspects from sowing to post harvesting activities.
- Chain Link Fencing has proved to be one of the key initiatives for the households that helped in reducing crop losses from wild and grazing animals.
- Small Collection centers in the villages have proved to be very effective for the members of the groups and LCs to store their produce and avoid any distress sales of the produce.
- In livestock sector, project provided technical inputs on proper management of animals, feed and fodder management for the cattle, vaccination as well as backward and forward linkages.
- Through micro-irrigation and water conservation activities, project households were able to get more production of their crops. This was useful especially in cultivating off-season vegetables.
- Farmers found 'Haat Bazaars' very useful for the sale of their agriculture produce especially for those who are involved in off-Season vegetables.
- Project households reported that the project activities have been contributing well for addressing the problems related to environment and climate change. As a result of wasteland development programs i.e. fodder development and use of fallow land, fodder tree and fruit tree were planted and project households were able to get fodder for their livestock which was not available otherwise. This has also reduced the drudgery of the women who used to go far for getting fodder.

- Project households got more benefits through convergence from different line departments. Through convergence, project households were highly benefited from Farm Machinery Bank, Polyhouse, Compost Pits, Vaccination and Medicine, Quality Inputs, Seeds and Planting Materials, Street Roads, Solar Lights, Trainings, etc.
- One of the major benefits for project households was marketing arrangement for their produce. Households are selling their produce through different marketing channels provided under the project and getting better prices for their produce.

Participation of Members in Planning Process / AGMs : Component -1 (Project, n = 360)

- In all, 96% project households participated in formation of Food Security Improvement Plan (FSIP). The groups update their FSIP as per their need in consultation with the Technical agency.
- Out of the total, 97% project households (shareholders) participated into Annual General Meeting (AGM) of livelihood Collectives (LC). (As per AOS 2017 report, this participation was 95% and in AOS 2016 it was 85%. In general, every LC is conducting its AGM once in a year. This shows that members are conscious about participating in the LC activities.
- 100% households are satisfied with project interventions/activities and believe that these have been contributing incrementally in improving their living conditions.

Focus Group Discussion at the level of Producer Groups/ Vulnerable Producer Groups also revealed that majority of the Groups (98%) found to be preparing FSIPs, which has helped farmers to learn from each other and also plan together.

Participation of Members in Planning Process / GPWDPs: Component -2 (Project, n = 301)

- In all, 93% project households participate in the Participatory Monitoring Evaluation (PME) process.
- 100% households participate in preparation of Gram Panchayat Watershed Development Plan/ Annual Work Plan.
- 100% households are satisfied with project interventions/activities and believe that the project activities have been incrementally improving their living conditions.

- Out of the total, 80% project households participate in water conservation activities and 100% households reported that water availability has increased. In all, 80% households indicate that water availability has increased more than 5%. (During AOS 2017, 68.6% households indicate water availability has increased by more than 5%).
- In all, 85% of the project households reported that due to increased water availability, their irrigated area has enhanced by 5% or more.
- 100% households are satisfied with project interventions/activities and believe that these have been contributing incrementally in improving their living conditions.

3. Livelihood Promotion

Out of the total, 95% project households reported about having more than one source of income. Income from agricultural activities is primary source for the project households. Out of the total, 51% project households reported income from agriculture activities as their primary source. About 49% project households reported that their income has increased by more than 10% compared to the income of previous year. They reported that this is due to the project interventions in the area of farm and non-farm livelihoods promotion.

Table 3.1:- Main Source of Income (% of HHs)

	Component 1		Component 2		Comp. 1 & Comp. 2	
	Project	Control	Project	Control	Project	Control
Agriculture and sales of crops	52	34	51	27	51	31
Salaries, wages (Job and wage engagement)	18	11	16	18	17	15
Other Daily Labor	19	15	16	24	18	20
Pension	6	6	7	15	7	11

Out of the total, 97% project households in component -1 and 92% project households in component -2 have more than one income source. The other source includes

livestock, enterprise, handicraft, weaving, natural resources, salaries, wage employee, daily labour, pension and agriculture.

Table 3.3:- Average Monthly Income (Rs)

	Component 1		Component 2		Comp. 1 & Comp. 2	
	Project	Control	Project	Control	Project	Control
Average Monthly Income (in AOS 2018)	13885	12021	11018	10044	12452	11033
n	360	144	301	105	661	249

^{*} Average Monthly income in component- 1 area was Rs. 9559 in 2016, Rs 12745 in 2017 and in component- 2 area it was Rs. 7514 in 2016, Rs 10312 in 2017. (As per AOS 2016 and AOS 2017)

In comparison to 2017, the average monthly income has increased by 9% and 7% in the component -1 and 2 respectively.

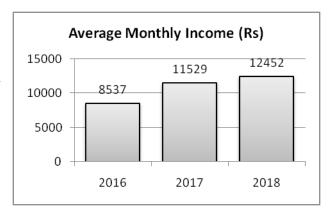


Table 3.4:- Average Monthly Income Range (% of HHs)

	Component 1 (2018)	Component 2	Comp 1 & Comp 2	
Less than Rs 10000	41	44	43	
Rs. 10000 to Rs 20000	45	43	44	
Rs. 20000 to Rs 30000	7	6	7	
More than Rs 30000	3	1	2	
n	360	301	661	

Component 1 -

* In 2018, 41% project households belong to the income range of less than Rs. 10000 (56% project households in 2017 and 80% project households in 2016 were falling in this income range). This indicates that due to income increase 39% project households were able to shift themselves in higher income range after 2016.

- * 45% project households in 2018 were in the income range of Rs 10000 to Rs 20000. (This was 15% project households in 2016, 35% project households in 2017). This indicates that households' income has increased by 30%).
- * 7% project households in 2018 were in the income slot of Rs. 20000 to Rs.30000 (This was 4% project households in 2016, 5% project households in 2017). This indicates that households' income has increased.

Component 2 -

- * In 2018, 44% project households were in income range of less than Rs 10000 (72% project households in 2017 and 87% project households in 2016 were in this income range). This indicates that due to income increase, 43% project households shifted to higher income range.
- * 43% project households belong to the income range of Rs 10000 to Rs 20000. (9% project households in 2016, 21% project households in 2017 were in this income range). This indicates 34% households' income has increased.
- * 6% project households in 2018 belong to the income range of Rs 20000 to Rs 30000. (2% project households in 2016, 5% project households in 2017 were in this income range). This indicates that households' income has increased.

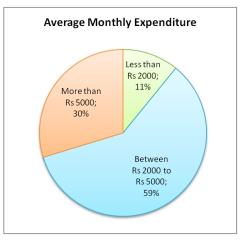
Besides this income, an additional average monthly income ranging from Rs. 3000 to Rs. 8400 is being contributed to the households by the migrants / family members working outside.

Table 3.5:- Average Monthly Expenditure (% of HHs)

	Component 1		Component 2		Comp. 1 & Comp. 2	
	Project	Control	Project	Control	Project	Control
Less than Rs 2000	5	10	16	24	11	17
Between Rs 2000 to Rs 5000	66	55	53	43	60	49
More than Rs 5000	29	34	31	33	30	34

Average Monthly Expenditure - In 2018, 60% project households reported to be having an average monthly expenditure between Rs. 2000 to Rs. 5000, where as 48% project households in 2016 were falling into this expenditure range. This indicates that due to income increase, households" capacity to do expenditure has also increased.

In the project areas, women are spending on an average 5 hours per day in management of economic activities- primarily agriculture and livestock activities.



In controlled areas, the time spent by women is 5.5 hours per day.

This clearly shows that there was a greater impact of the project interventions in the project areas. Due to project interventions, income level has improved and Households are also able to do more expenditure. It is also reflected that due to project interventions in primary sectors like agriculture, horticulture, livestock etc. short-term employment in allied sectors has also improved and cash inflow at the family level from the primary activities has been increased. Expenditure was taken as proxy indicator to validate the fact that incomes of the members have increased or not.

4. Food Security

Ensuring food security of the poor households in the remote villages was one of the key objectives of the project. The Tables below provide clear picture about the changes in the food security level.

Table 4.1:- Food Security (% of HHs)

	Component 1		Component 2		Comp. 1 & Comp. 2	
	Project	Control	Project	Control	Project	Control
% of Households having no food shortage during last 12 months	98	90	98	96	98	93
Duration of food shortage in weeks	1.2	2	1.6	2	1.4	2

As per the survey, <u>98% of the surveyed project</u> beneficiary households have reported no food shortage and only 2% households reported minor food shortage for less than 1.4 weeks in a year. It was also reported that on an average, food was available for 5 months from households' own production. The data shows a positive scenario related to food security.

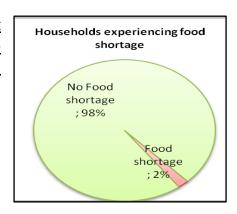


Table 4.2- Change in food security situation in comparison of last year (% of HHs)

	Component 1		Component 2		Comp. 1 & Comp. 2	
	Project	Control	Project Control		Project	Control
Improved	63	31	67	37	65	34
Same	37	64	32	61	35	63

Improvement in the food security situation is reported compared to the last year due to following project activities such as convergence, package of practices, extension services, irrigation facilities, crop protection through fencing, improved farming equipments, scientific farming, awareness of quality aspects etc. Production of vegetables and other crops is increased due to project interventions. Improved practices in livestock sector has increased milk yield.



As per Beena Devi (respondent), (Thaneshwar Mahadev VPG, Kaljikhal), before project intervention they have limited food production which was not sufficient for her family. After project intervention, they have surplus production of vegetables and through LC they are able to sale their vegetables in market.

Table 4.3- Change in quality & type of food consumed in comparison of last year (% of HHs)

	Component 1		Component 2		Comp. 1 & Comp. 2	
	Project	Control	Project Control		Project	Control
Improved quality & type of food	68	32	67	40	68	36

In all, 68% project households reported that the quality and type of food consumed by the households has further improved in the last 12 months due to project initiatives. Households include more fresh vegetables in their menu from their own production, which they were generally purchasing from the market earlier. They have included eggs, Non-Vegetarian food/meat, Milk products, Fruits and other items in their meal. The change in the quality of food taken by the members of PGs/VPGs shows that due to project interventions, their purchasing power is enhanced and they are able to spend on more nutritious food.

5. Ownership of land, property rights and utilization of land

Land is the only productive asset for the livelihoods of the poor and ownership over land is a crucial for secured livelihoods.

Table 5.1 - % of Households having ownership of land

	Component 1		Component 2		Comp. 1 & Comp. 2	
	Project	Control	Project Control		Project	Control
Own Productive Land	99	99	98	99	99	99
Have Property rights on land	98	98	99	95	99	97
Very Secure Property rights on land	91	92	93	92	92	92

It was revealed that 99% project households have their own productive land as an asset for their livelihood. 99% of project households have secure property rights on their land. The average land holding in component -1 is 13 nali (0.26 ha) and in component -2, 14

nali (0.28 ha). In both the components, project households are also doing farming on cultivable land of other households.

6. Agricultural Production and Irrigation

Table 6.1 - Cultivating land and purpose (% of HHs)

	Component 1		Component 2		Comp. 1 & Comp. 2	
	Project	Control	Project	Control	Project	Control
HHs cultivate land for own consumption and marketing of the surplus	96	94	98	91	97	93
HHs report crop productivity increase	63	22	69	23	66	23
Production area increased	68	24	65 29		67	27
HHs using irrigation system	64	45	83	33	74	39
HHs have livestock	93	85	92	88	93	87

As reported earlier the primary livelihood activity of beneficiaries is agriculture. The sample shows that 97% of the project households are engaged in cultivation activity both for their own consumption (food security) and also for selling the surplus for income generation.

It was revealed that 66% of project farmers have increased crop productivity. It is higher than the last year's increase (47% more, from AOS 2017). Further, 73% households reported that the production has increased more than 10% in case of vegetables cultivation i.e. potato, tomato, cabbage, cauliflowers, pea, leafy vegetables and spices i.e. turmeric, onion, garlic, etc.

Accessibility of irrigation facility in project area is better compared to control group villages (due to project intervention on irrigation system). One of the factors contributing in increased agriculture production is - use of irrigation systems. 74% cultivators reported increase in production due to the use of irrigation system. It is important to note that 20% project households from component -1 and 13% project households from component -2 are cultivating on an average 3.5 nali land as tenant farmers.

Technical Guidance from the project - Technical guidance especially the line sowing method has helped the farmers to do farming in a systematic manner (Prerna PG Devrapani, Sult: Saraswati Producer Group, Habeli, Jaunpur). Similarly technical guidance on dairy and also arrangement of advanced feed and fodder as well as arrangement of medicines has helped dairy sector to grow. Scientific agriculture and irrigation arrangements have resulted into improvement in quantity and quality of production. (Agastya Producer Group, Talsari, Augustmuni) (FGDs with PG/VPG members)

Table 6.2 – Adoption of new Agriculture Production Technology Promoted by Project (% of HHs)

	Component 1	Component 2
Use of Improved Crop Variety	76	75
Use of Improved Farm Techniques	53	70
Erosion Control	9	48
Small Area Irrigation	21	58
Soil Moisture Retaining Techniques	3	27
Improved Water use efficiency Techniques	-	83

Out of the total sample, 88% households have adopted project promoted improved agriculture production technologies in their farming practices. The most preferred technology promoted by project is line sowing, improved crop variety, improved seeds, improved farm techniques and equipments, vermi compost, cropping techniques, soil moisture conservation techniques etc.

Table 6.3 – Adoption of new Livestock Production Technology Promoted by Project (% of HHs)

	Component 1	Component 2
Improved health care such as Vaccination & De-worming	64	59
Feeding Trough	11	50
Fodder Crops	35	67
Use of Concrete feeds (fodder mini kit - mixture of different fodder)	40	59
Improved livestock housing	30	30
Mangers (a long trough from which cattle feed)	23	33

Out of the total sample, 93% project households are having their own livestock i.e. Local breed Cow, Improved breed Cow, Buffaloes, Poultry, Goat and Sheep. 64% in

component -1 and 59% in component -2 project households adopt improved health care services for the livestock (such as vaccination and de-worming etc.).

In the project area, 164 Para vets were trained through ULDB who provide health care services through Integrated Livestock Development Centers. 37 Pashu Sakhies and 4 Community Livestock Managers are providing services to the Goat farmers. Livelihood Collectives have also started concrete feed and fodder as a business model and providing it to the community on cost basis.

Summary Component - 1 (Project, n = 360)

- Farmers are getting an Average income of Rs. 32782 from livestock (sale of animals and by-products i.e. milk, ghee, curd, eggs) in a year. Households are using milk in their daily meals and selling surplus milk in the market. (Average income was Rs 32330 in AOS 2017 and Rs 27849 in AOS 2016).
- Out of the total, 51% of project households (26% in 2017) grow tree crops (fruit tree i.e. Apple, Citrus, Mango, Walnut, Guava, etc. fodder plants i.e. Mulberry, Bhemal, Kachnar, Kadheek, etc.) and get an average income of Rs. 9998 from these crops. There is new plantation of different tree crops during 2017 - 2018 through LCs by use of fallow land and fodder development activities. Production from these plantation will starts after 3 years.
- Out of the total, 87% project households are cultivating vegetables (on average 5 nali cultivable land). Irrigation facilities, Poly house, Shade net house, Mulching Sheets, Fencing, good quality seeds and planting materials, package of practices and marketing facilities have increased the production of vegetables and area under cultivation. Average annual income from vegetables has been Rs. 13573 (which was Rs. 11320 in AOS 2017 and Rs 9094 in AOS 2016).
- Out of the total, 96% project households are growing traditional crops on average 5 nali cultivated land. Average Rs. 5150 income from the sale of traditional crops i.e. wheat, rice, manduwa, oats, pulses, amaranths and others is reported. Project facilitates the community through package of practices; improved seed variety, fencing, farm machinery bank, and marketing facilities to increase the production.

Summary Component - 2 (Project, n = 301)

More than 2 nali fallow/barren lands have been brought under cultivation by 32% households (23% in AOS 2017).

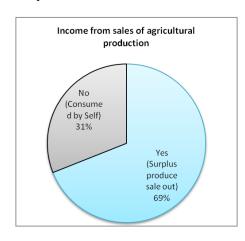
- 83% households adopt water efficiency, 27% adopt Soil Erosion control techniques promoted by project.
- Average income from livestock is Rs. 34698 (sale of animals and by-products i.e. milk, ghee, curd, eggs) in a year. Households are using milk in their daily meal and the surplus milk is sold in the market. (Average income was Rs 34498 in AOS 2017).
- Average land holding under spice crops was 2 nali and average income has been Rs. 2410 from spices in a year (It was Rs 2313 in AOS 2017, Rs 1770 in AOS 2016).
- Average land holding under vegetables was 3 nali and average income Rs. 11027 from vegetables in a year (which was Rs. 10608 in AOS 2017, Rs. 7068 in AOS 2016).

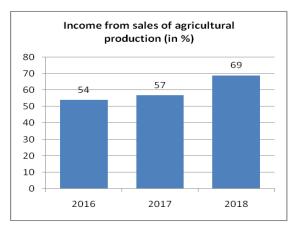
7. Access to Market:

Table 7.1 – Income from sale of agriculture produce (% of HHs)

	Component 1		Component 2		Comp. 1 & Comp. 2	
	Project	Control	Project Control		Project	Control
Income from sales of agricultural production	72	38	66	29	69	34

In all, 69% of project households and 34% of control groups have reported the income from sales of agricultural production. (Project 57% and control 30% in AOS 2017; Project 54% and control 28% in AOS 2016).





It is important to note that 75% households reported that the sale of agriculture crop produce is increased due to project activities i.e. small collection centers, collection centers, outlet, grading, packaging and sale through livelihood collectives.

	Component 1	Component 2
Sale to the Final Consumer	18	29
Local Agent and Village Level Collectors	16	31
Wholesalers or traders	17	14
Cooperatives (LC)	96	63

Out of the total, 96% of project households (from component 1), 63% of project households (from component 2) selling their produce collectively through LCs and 81% households (component 1) and 64% households (component 2) reported that they get more prices compared to last year.

Marketing of produce through LCs - On the issue of selling of produce by the members through livelihood collectives, a mixed scenario was observed through FGDs. It was revealed that marketing of produce through LCs varies from product to product and also from particular LC to other LC. It ranges from 40% to 70% produce being sold through Livelihood Collectives. It also varies from product to product. For example -Laxmi PG Sirkot, Garur, Bageshwar sells 20% paddy and 50% ginger and turmeric through LC. Jata Beshwanar SHG of Bin Block Pithoragarh sells 50% of members' aawala through its LC. (FGDs with members of Producer Groups/ Vulnerable Producer Groups)

In order to validate the facts regarding the marketing of farmers' produce through LCs, FGDs were conducted at the LC's level. Following facts were reveled -

- Some of the LCs like Ujjawal SRC of Dhamas, Hawalbagh targeted for a business of 1 Crore in 2018-19. However, they were able to do business worth 85 lakh wherein Take Home Ration, Animal feed and Consumer goods sale are few important activities.
- SRC like Janshakti SRC, Attal Village, Chakrata marketed Tomatoes of farmers worth INR 22 Lakh directly without the middlemen. This has reduced the role of middle men to 40% (Janshakti SRC, Attal Village, Chakrata). LC like Visayal khat SRC. Gram Koti has done a business of INR 20 Lakh and after deducting 3-4% service charges remaining amount was paid to farmers by SRC. These vegetables

marketed by SRC include Tomatoes, Beans, Ginger etc. SRCs like Surkunda Chamba has procured and marketed most of the vegetables such as potatoes (150 Qn), Green Peas (40 Qn), Cauliflower (5 Qn) and Beans (5 Qn). SRCs like Kalchakra Devta Barakot, Champawat provided services of marketing of vegetables to 40% farmer members of PGs. (FGDs with LCs)

Sample SRCs and their linkages

FGDs with LCs also revealed important information about direct linkages of LCs with market players. The Matrix given below provides an example of the linkages and also progress of LCs towards operational sustainability.

Table 7.3 - LC and Business Linkages

S.No.	Self Reliant Cooperative	Organizations linked for Business
1.	Lakchya SRC, Bhatrojkhan, Bhikiyasen, Almora	With Aanchal Dairy – Linkage for Milk Nai Disha SRC – Turmeric and Chilly Marketed
2.	Jai Ma Kalika SRC Gudlekh, Syaldeh, Almora	Bio Dynamic Farm For Vikas Samiti, Dehradun
3.	Shivalaya SRC, Kafada	With Umanga Company Pvt. Ltd. for Kapila Animal Feed. Other SRCs for various business transactions
4.	Sher Chougaon SRC Bhamsiyu, Bhikiyasen	Tea Purchase – Manjuri Plantations Ltd. Haldwani, Moharsingh, Asharam , Haldwani
5.	Janshakti SRC, Attal, Chakrata	Mandi Samiti, Dehradun ,Vikas Nagar,Azadpur Delhi, Sahiya etc. Farmers were benefited due to sale of produce through LC and they saved 8% mandi aadat on produce.
6.	Visayal Khat SRC, Koti, Kalsi, Dehradun	Mandi Samiti, Dehradun ,Vikas Nagar,Azadpur Delhi, Sahiya etc. Farmers were benefited due to sale of produce through LC and they saved 8% mandi aadat on produce.
7.	Bhimsen SRC, Bhiri	Kedarnath Mandir Samiti, Horticulture Department, Agriculture Department
8.	Sur Singh Devta SRC	H.R. Traders Rishikesh, Sushila Enterprises Vessel wiretech Rishikesh
9.	Surkanda SRC	Bhagwabn Singh & Company, Manali for Potato seeds, Ajay Seeds Company for Seeds of peas, SRC Chamba, Sur Singh SRC Chamba, Devbhumi SRC
10.	MaDurge SRC, Sifti, Champawat	Lohaghat Mandi, Haldwani Mandi, Ma Dunagiri SRC, Dwarahat

Input supply - Focus Group Discussions at the level of LCs revealed that in all the LCs, Farmers are benefited from the activity of the agriculture inputs (seed), supply of vegetables seeds (Surkanda SRC, Chamba, Manmahesh SRC, Munakot and Kalcharka Devta SRC Barakot Champawat). This has improved the quality of production. Similarly, Animal Feed supply has also benefitted members. About 50% members were benefitted to get good quality seed, animal feed and fertilizers. (Munakot SRC) (Based on FGDs with LCs)

Collection Center/ Small Collection Center (Village Level Storage Center):

More than 550 small collection centers constructed and operationalized at the village levels. These are primary storage and grading center before the produce is stored in big collection centers. These centers are also used for the village level meetings.

In component -1, 50% project households reported that they are using these centers on an average 3 times in a month for following activities - storage of farm produce, value addition (grading), storage of farm machinery bank, aggregation points for seed, produce, dairy and other produces. 73% households have reported that the price of their produce has increased more than 10% due to storing the produce in small collection centers and selling the produce at the right time.

In component - 2, 25% project households reported that they are using these centers on an average once time in a month for following activities – storage of farm produce, value addition (grading), aggregation points for seed, produce, dairy and other activities. 58% households are reported that the price of their produce has increased by more than 10% due to small collection center.

Value addition is an important activity that can be used by PGs/LCs to acquire and retain customers, create brand awareness, and establish one's place in the marketplace.

Focus Group Discussions at the level of LCs revealed the following facts about utilization and benefits of collection centers -

Most of the collection centers and small collection centers are being utilized well for keeping a range of produce of farmers. While Bajnath SRC, Teet Bazar used the collection center for Paddy (100 Qn), Soyabean (10 Qn), Ginger (20 Qn) and Garlic (20 Qn), Sur Singh Devta SRC used it for millets and pulses (200 Qn), Manmahesh SRC for Mandua, Soyabeans, Turmeric etc. (46 Qn), Ma Durga SRC for vegetables and

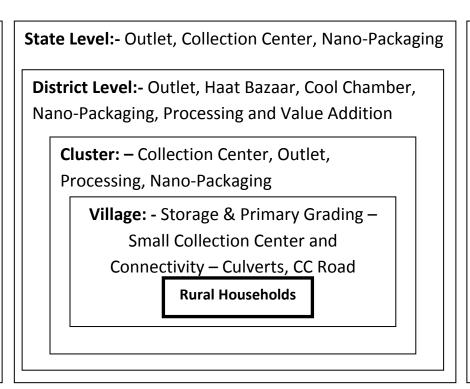
Tejpatta (40 Qn). Majority of the LCs are also using the collection centers for grading and packaging of produce.

Small collection centers are also found to be very useful by the members. While some LCs use small collection centers for keeping the vegetables like Tomatoes, Onion, Green Pea etc. for short period before taking the produce to collection centers (Rajaji SRC, Visayal khat SRC), many other use it for Storing tea, Animal Feed Medicines for livestock (Sanjeevini SRC, Manmahesh SRC). Manmahesh SRC keeps 30-50 Qn. animal feed per month. This has helped LCs to provide inputs to the farmers on time and also protect the produce of farmers. (Based on FGDs with LCs)

Small Collection centers have helped the groups to store produce for short period safely so as to avoid distress sale. (Kali Mayya Talihaat, Garud used the center for storing 100 kg Potatoes, paddy 800 kg, ginger 80 kg; Saraswati PG, Habeli, Jaunpur keep 10-15 Qn. of vegetable like potatoes, peas, cauliflower etc.) (FGDs – PGs /VPGs)

Arrangement of backward and forward linkages

Quality Standards, Uniform Packaging, Branding, Promotion, Market Tie-up



Direct Market, Through PG/VPG and LC **Collective Market under HILANS Brand**

* In the year 2017 and 2018, ILSP contributed major role into market access through infrastructure development, value addition, branding of products and market tie-ups. Whereas the infrastructure development, collection center cum office at cluster level for LC, small collection center at village level, and rural road access (Culverts) helped farmers in shorting, grading, processing, transport, storage and supplying rural produce to market.

In addition to this, ILSP has initiated kisan outlets at cluster, districts and state levels. The Department of Rural Development has provided Saras Centers to the livelihood collectives on 30 years lease. It has reduced the rent and operative cost of LC. It is being used as selling point for marketing rural produce.

Project promoted rural products under the **HILANS** brand. The HILANS brand is being use by ILSP and USRLM for marketing of rural produce. All LCs are using the same brand.

For standardized packaging, project provided nano-packaging units at each outlet, which includes Bend Sealer, Weighing Machine, Foot Sealer, Manual Sealing Machine, Hot Air Gun, Cap Sealing Machine, Box Sealing Machine, Bar Code Machine etc. equipments.

Through buyer-seller events, advance tie-up with the buyers and LCs project has given advantage to the households for selling their produce.

8. Access to Rural Financial Services:

Rural financial services at village level are playing major role in scaling up of various livelihood interventions and their sustainability. Small loan especially on-time loan for consumption or income generating activities has a great impact over the sustainable livelihood of rural households. UPASaC is facilitating bank linkage to the households, PGs/VPGs, LCs/federations.

Table 8.1 - Financial Services

	Component 1		Component 2		Comp. 1 & Comp. 2	
	Project	Control	Project	Control	Project	Control
% of HHs have bank account	100	100	100	100	100	100
% of HHs have monthly saving	100	90	100	100	100	95
% of HHs saving into PGs/VPGs/SHG	99	-	96	-	98	-
% of HHs - Monthly Saving in PG/VPG is Rs 20/member	3	-	23	-	13	-
% of HHs - Monthly Saving in PG/VPG is Rs 50/member	37	-	36	-	37	-
% of HHs - Monthly Saving in PG/VPG is Rs 100/member	52	-	33	-	43	-
% of HHs - Monthly Saving in PG/VPG is more than Rs 100/member	7	-	8	-	8	-
% of HHs taken loans	33	20	18	14	26	17
Average Amount (Rs) of Loan	41657	37964	50854	48692	46256	43325
% of HHs taken loan for Income Generating Activities	56	41	49	44	53	43
% of HHs repaid loan amount	40	31	21	17	31	24
% of HHs reported better access of financial services	95	49	67	58	81	54
% of HHs reported project help in access to financial services	94	-	73	-	84	-

In the survey, results regarding access to financial services in project villages revealed the following -

About 81% households reported that access to financial services has improved over the last 12 months mainly due to project support.

In response to the main use of loans, 53% in project and 43% in the control group reported that income generation was the foremost purpose. Average amount of credit availed by project beneficiaries was INR 46256. The credit repayment scenario shows that 31% project households have fully paid their loans. It is encouraging to know that

the families are also accessing the credit for self-consumption, income generating activity, housing, education and other investment purposes also.

Table 8.2:- Monthly Savings in PGs/VPGs (sample households)

	AOS 2016	AOS 2017	AOS 2018
% of HHs savings into PGs/VPGs/SHG	71	94	98
% of HHs - Monthly Savings in PG/VPG is Rs 20/member	15	5.8	13
% of HHs - Monthly Savings in PG/VPG is Rs 50/member	47	34.2	37
% of HHs - Monthly Savings in PG/VPG is Rs 100/member	30	44.7	43
% of HHs - Monthly Savings in PG/VPG is more than Rs 100/member	7	15.2	8

Data shows that 98% of the PG members do regular savings as well as regular meeting, which is a good sign for their sustainability and linkage with NRLM in future. In general, all groups organize their monthly meeting before 10th of every month.

Bank Linkage

UPASaC has also supported in getting the crop insurance done with the help of agriculture department. Members suggested that standard of practices or claim settlement booklet should be published to communicate about crop insurance claim settlement to more and more farmers.

Some LCs have also facilitated farmers in getting their livestock insured with the help of UPASaC, ULDB and Animal Husbandry Dept.

Table 8.3:- LCs & CCL/TL (source – FGDs with LCs)

Livelihood Collective	Term Loan / CCL for Business Activities
Ujjwal SRC, Hawalbagh	SRC using CCL for Take home Ration activity
Lata Baba SRC, Jakholi	SRC use the CCL and established Agriculture Tool Manufacturing Unit
Moliyar SEC, Pauri	SRC use the CCL for Farm Machinery Bank

FGDs of Producer groups revealed that 100% groups of ILSP are doing regular monthly meeting discussing a range of issues like credit, seed purchase, water harvesting,

marketing, Tech. Agriculture issues. (Neetu PG, Lelta, Kalsi, Dehradun). While 98% of the groups do monthly savings ranging from INR 50 to INR 100 per member, some PGs have more than INR 100 as the regular savings. This is a good indicator of economic progress of the members. Groups have yet to start voluntary saving practice which is now practices by selected SHGs in the country. NABARD permits SHGs to take voluntary savings after it was piloted in some SHGs. (NABARD Annual report mentioning Voluntary savings Pilots and revised circular of SHG bank linkage programme)

The Scenario of inter loaning found to be very encouraging wherein members have been taking loans from their SHGs mainly for the productive purposes. There are cases wherein all the members have taken loans from their SHG for some productive purposes mainly for livestock purchase. Some of the members also take emergency loans (LVSS PG, SALD, Uttarkashi) (FGDs with PGs/VPGs)

9. Enterprise Development:

Table 9.1 – Having Non-farm enterprise (% of HHs)

	Component 1	Component 2
Have non-farm enterprise	14	13

The project has supported members of PGs in establishing and expanding small and medium scale enterprises (weaving, shop, hotel, transport, tent house etc.). The survey results regarding owning enterprises in project villages reveals that only 14% have established SMEs.

Table 9.2 – Training for enterprise development (% of HHs)

	Component 1	Component 2
Project Households got training	35	22
After training starts self-employment	11	17

In component -1, 35% project households reported that they have received training from vocational training agencies. In Component -2, 22 % project households reported that they have received training for entrepreneurship development. On an average, they earn Rs. 4588 per month from their employment activities.

* Project is being promoting short-term courses in agri-horti and allied activities, and weaving under the vocational training sub-component. Most of trainees have adopted self-employment and started their own business. More than 17000 rural households got the trainings from project or outside project area under the vocational training subcomponent.

One of the examples, from Bhatwari block of district Uttarkashi is that Mr. Jai Prakash Thapliyal, has taken training on Dairy farming under VT program and adopted Dairy Business by getting a small loan from the bank and now the household is earning around Rs. 15000 per month from this activity. Further he is trying to avail subsidy loan under NABARD-Dairy Scheme and looking for up- scaling the dairy business.

10. Convergence:

With the support of district administration under the District Implementation and Coordination Committee, an effective convergence has been initiated in last two years. In Component -1, 100% and in component -2, 88% project households have reported that they were benefited from new technologies promoted by Govt Agencies (Boards, Line Dept, KVK, Technical Institutions, Agriculture University, etc.). Regular convergence meeting / workshops at blocks, districts, state level and regular follow up has increased the benefits of the households.

Table 10.1 - Activities under Convergence (reported by sample households)

Department / Scheme	Key Benefits in Kind	Benefits in terms of Knowledge (Technical Knowhow and Capacity Building)
MGNERGA / RD	100 days Employment, Indira Awas, Toilet, CC Road, Wall Construction, Cow shed, Railing, Check Dam, Pusta Nirman, Agriculture Land Preparation, Compost Pit, Naala Construction, Poultry Shade, Cement Tank	
Agriculture Department	Agriculture Equipments, Power Weeder, Tractor, Compost Pit, Crop Seed, Fodder Seed, Planting Materials, PM Kisan Nidhi, Soil Testing, Organic Pesticides, Fungicides, Fertilizer, Mulching Seat, Crop insurance	During Krishak Gosthi, Scheme Information, Sowing Techniques (i.e. Seed Treatment, Line Sowing), Composting, etc.

Horticulture Department	Improved Seed and Planting Materials, Medicinal, Polyhouse, Spray Machine, Mulching Seat	Sowing, Planting, Graphing etc.
Animal Husbandry	Vaccination, Medicine, Fodder Seed (Jai, Maize, Other Fodder), Chaff Cutter, Manger, Animal Insurance, Poultry, Artificial Insemination, Health Camps	Livestock healthcare, Feed & Fodder Management, Milk Production
Dairy Development	Insurance, Marketing of Milk, Dairy Development, Animal Feed and Fodder, Nutrition, Manger,	Scheme Information, Aanchal Dairy, Animal Nutrition & Healthcare, Fodder Management
Cooperative Department	Loan	_
Other	Trenching under Namami Gange, Electricity, KVKs, Solar Light, Toilet from SWAJAL, Polyhouse from BAIF	Training from Govt Dept, NGOs

^{*} Department of Agriculture provided 186 Farm Machinery Banks to ILSP supported livelihood collectives with 80% subsidy and providing 200 more FMB to LCs after observing effective use of FMB.

- 65% project households have reported that they benefit from new technology through convergence.
- 72% projects households report that project facilitate the linkage of other departments, which improves the convergence.
- 48% households have reported that through convergence on an average an amount of Rs. 3483 is saved / earned.

FGDs with Producer Groups revealed that all group members are benefited through convergence from different line departments and schemes i.e. Agriculture, horticulture, Animal Husbandry, MGNERGA, KVKs and others. (Examples - Members from Laxmi VPG, Garur has received training and seeds from KVK Kafligari. Members of LVSS PG, Bhatwari got seeds and compost pits from Agriculture Department, Animal Health

^{*} Through project, each PGs/VPGs and LCs, prepare convergence plan for MGNERGA. Project provides the list of Haat Bazaar, Collection Centers to MGNEGA for up gradation and for creating extra facilities.

^{*} Project has also facilitated different departments for the implementation of schemes / activities through livelihood collectives or groups. Like PM-KISAN Scheme, project facilitates district administration and providing the list of all beneficiaries, so that project households can get benefits of the scheme.

Camps by ITBP. Project Agencies as well as Livelihood Collectives are helping in the effective convergence. (FGDs with PG/VPG Members)

Benefits of Convergence initiatives (FGDs with LCs)

Project has proactively provided convergence benefits to the farmers and members of LCs by having linkages with various departments like horticulture, Animal Husbandry, Agriculture, women and child development, health department, rural development department and their schemes. Focus Group Discussions in various SRCs revealed the following benefits of convergences availed by different SRCs -

Table 10.2 - LCs & Convergence

Livelihood Collective	Benefits of the Convergences
Jai Ma Bhagwati SRC	Agriculture Department provided seeds under their schemes organic pits are being created under promotion of traditional agriculture development scheme of Agriculture department
Lata Baba SRC	Under MGNREGA, concrete roads, cow sheds and drinking water sources repair work is done for the benefit of the SRC members
Surkunda SRC	Farm Machinery bank benefits provided to the farmers through Agriculture department Horticulture Department Supported for Mulching initiatives
Manmahesh SRC	Vegetable Saplings at subsidized cost and Seeds distribution through Horticulture department. With MGNREGA – vermin compost pits, goat rearing sheds/ fencing, farm machinery bank etc.
Kalchakra Devta SRC	From Horticulture – Poly houses and support for trimming of fruit trees were provided Fisheries department provided fish seed Agriculture department supported to provide seeds Animal Husbandry department supported in crop insurance, dairy training, vaccination of animals, and AI activities
Ma Ambe SRC	Under MGNREGA, support for concrete roads, check dam, cow sheds was received by the members of LC. Horticulture department provided Tejpatta trees
Mauliyar SRC	Under MGNREGA, support for fencing the Orchids of Walnuts

Members of LCs communicated several other benefits from convergences such as drudgery reduction, information about poultry, composting, agri implements, medicines for livestock etc. due to technical guidance people are not putting raw cow dung and using prepared compost only. Agriculture department is providing seeds and pesticides (Jai Ma Bhagwati SRC, Sirkot). Members are getting 80% subsidy benefits available on Farm machinery and implements and subsidy on crop insurance, livestock insurance

and fertilizer (Janshakti SRC, Attal, Chakrata). For 'Pradhan Mantri Krishi Samman Nidhi' more than 450 farmers have done registration in the area of Janshakti SRC.

11. Improvement in the condition of Houses

The change in the physical condition of houses is an indicator of cash inflows in the houses. Interviews at the level of households reveal the following facts -

- 74% project households having semi-improved and improved houses.
- 25% project households improved their house in the last 12 months.
- 63% project households reported water supply or sanitation has improved in the last 12 months.
- 100% project households reported that they have proper sanitation facility.

12. Irrigation through LDPE Tank:

Table 12.1 - % of HHs related to irrigation

Table 12.1 – % of nns related to irrigation		
	Component 1	Component 2
Any LDPE tank constructed through Project	55	42
Water Source of LDPE tank		
Rain Water	23	57
Natural Drinking Water	36	38
Other (i.e. natural spring)	42	5
Annual Use of LDPE Tank		
One Time	6	15
Two Time	26	35
Three Time	33	17
More than three time	35	33
Increase in Production		
• Small (<10%)	24	47
• Medium (10-20%)	67	43
• Large (>20%)	9	10
Average Area (in nali) irrigated through LDPE Tank	6	4.5
Satisfy with this Irrigation System	100	100

LDPE tank is one of the minor irrigation activities under ILSP. The positive results of such intervention have assisted the households in adding the area of cultivation. They have also reported increase in the production especially in horticulture. The capacity of each LDPE tank is 13.5 Cub.m. and 20 Cub.m. In component -2, under the watershed development plan, there are multiple activities under irrigation i.e. Irrigation Channel, Village Pond, Irrigation Lank, Roof Water harvesting Tank, LDPE tanks etc. for improving irrigation facilities.

The use of LDPE tank is primarily for off-season vegetables i.e. Green Leafy Vegetables, Cabbage, Capsicum, Tomato, Onion, Pea, Chilly etc. and Spices.

100% project households reported increase in production due to LDPE tanks and in addition, 6% of sample households reported that they use LDPE tank for fish production also. Support has been provided by Department of Fisheries through convergence.

- On an average 5.25 nali cultivated land area is irrigated through LDPE tanks.
- 11% households are using the drip irrigation with the LDPE tanks.
- 12% households using polyhouse with the LDPE tanks. The polyhouse provided by Agriculture and Horticulture department.

Focus Group Discussion at the level of LCs/ SRCs reveals that most of the LCs are benefited from the LDPE tanks. SRCs like Surkanda, Chamba created 36 LDPE tanks. since 2015. While irrigation has increased the production of crops, farmers started growing new crops like Japanese Paddy, vegetables including Broccoli. Glimpses of collective farming and collective marketing as well as use of drip irrigation, utilising the schemes of government are also seen. (Visayal Khat SRC, Koti, Kalsi).

Due to LDPE tanks, 10 months in a year are utilized to produce green vegetables providing better income to the farmers. About 200 Nali land has come under irrigation due to LDPE tanks (Sur Singh Devta SRC, Jaunpur). In some of the SRCs, while area under irrigation is increased, fisheries is also taken up as an additional livelihood activity (KalChakra Devta SRC, Barakot, Champawat)

Further, out of the 31 FDGs conducted for PGs, 20 informed that about having LPDE Tanks - In most of the cases wherein LDPE tank is given, members are able to do vegetable cultivation which was not possible earlier. Members grow potatoes, Tomatoes, green peas, coriander onion, capsicum, cauliflower and other off season vegetables. (Example - LVSS PG, Sald, Uttarkashi, Sursingh PG, Chawalkhet, Chamba, Saraswati PG, Habeli, Jaunpur). The key change due to LDPE tanks include –

increase in total production, no. of crops produced during the year, utilization of unutilized fallow land, taking up of new crops etc.

13. Drudgery Reduction

Table 13.1 – Reason of adopting drudgery reduction tools (% of HHs)

	Component 1	Component 2	Comp 1 & Comp 2
% of HHs adopt due to Easy to Implement	2	6	4
% of HHs adopt due to Time Saving	29	30	30
% of HHs adopt due to Reducing drudgery	10	8	9
% of HHs adopt due to all above reasons	59	55	57

In the context of Uttarakhand, women are the major contributors in implementing economic activities especially in the fields of agri-horti / livestock sector besides their intense household responsibilities. Project has introduced and scaled up drudgery reduction activities by promoting friendly cultivation and allied tools to which women have responded with greater participation. 78.5% of project respondents reported that they were aware of drudgery reduction tools and 76% project respondents reported that project has helped in providing drudgery reduction tools directly.

Table 13.2 – Using Technology/Tools (% of HHs)

	Component 1	Component 2
Sickle	80	59
Watering Can	57	17
Milk Can	49	7
Power Weeder	61	15
Power Tiller	6	13
Spray Machine	57	42
Light Trap	4	5
Thresher	6	2
Chaff Cutter	7	23
Compost Pit	11	38

Improved Sickle is being used for fodder cutting for livestock. It is being used by 80% respondents in component -1 and 59% respondents in component -2. Project

households get Power Weeder, Power Tiller, and Spray Machine under the farm machinery bank of agriculture department.

Table 13.3 – Time per day (approx) saved through the tools/equipment (% of HHs)

	Component 1	Component 2	Comp 1 & Comp 2
Approximate 30 minutes	23	9	16
30 to 60 minutes	16	30	23
1 to 2 hours	37	46	42
2 hours and above	24	15	20

Table 13.3 indicates these tools have contributed to saving time of users in economical activities related to agriculture and allied value chain.

Focus Group Discussion with the members of PGs/VPGs revealed that a variety of farm machinery is taken by PGs from LCs such as thresher, brush cutter, power weeder and other machinery and implements. The key benefits recorded include enhancement of capacity of production, reduction in management of time, reduction in cost of production and drudgery. (Churmal devta VPG, Bhatedi, Bin, Pithoragarh; Saraswati PG, Habeli, Jaunpur; Nitu PG, Lelta, Kalsi, Dehradun; and Jata Beshwanar SHG of Bin Block Pithoragarh) (FGDs with PGs/VPGs)

14. Chain linked fencing

Project provides chain linked fencing to each livelihood collective. Livelihood collectives have used the fencing to run custom service activity by renting it out to the members. Households have fenced their cultivated land using the chain linked fence. The fence protects their crops and they got complete crop yields without losses. The chain link fencing has more demand in the fields now.

39% project households are using chain link fencing, on the rent basis from LCs.

Table 14.1 – Crop saved from Wild and Grazing animal (% of HHs)

	Component 1	Component 2	Comp 1 & Comp 2
Less than 10%	16	22	19
10% to 20%	31	54	43
20% to 50%	29	24	27
More than 50%	24	-	12

FGDs with LCs revealed that most of the members of LCs informed about the benefits availed by them out of the fencing initiative of the project. In some of the SRCs like Surkandas SRC, Chamba 3510 meter fencing was purchased and provided to the members. While the crops are protected from wild animals, members started growing various vegetables such as potatoes, green pea, beans, capsicum, chilies etc. The rates of giving fencing material on rent are not uniform and vary from one LC to the other.

In one of the SRCs on an average 260 Nali land in villages is saved from wild animals by putting fencing by the farmers. After the fencing 80% losses of crops due to wild animals is saved (Surkanda SRC, Chamba). In another SRC, 90-100% crop safety is achieved from the destruction by wild animals. (Source – FGDs with LCs)

To validate the facts further, FGDs with Producer Groups revealed the fact that the initiative of Chain linked fencing has helped farmers to reduce damages of their food grains, millets, vegetable and Horticulture crops from a variety of wild animals. Different groups have taken fence from their LCs to provide it to the members. (Laxmi VPG Sirkot, Garur taken 180 meter, Kali Maaya SHG Talihat, Garur taken 375 meters for 200 nalis).

Benefits informed by the farmers and members of the groups reveals that 60-80% damages are reduced (In Saraswati PG, Habeli, Jaunpur 60% reduction in damages and in Jata Beshwanar SHG of Bin Block Pithoragarh 80% reduction in damages whereas in 1sht devta PG Sundungra, Champawat 30% damage reduction is recorded).

Members have started taking up vegetable crops after the fencing arrangement are done. These vegetable crops include potatoes, peas, coriander, onion, cauliflower etc. There are several horticulture produce like lemon, papaya, awala etc. which are now grown after fencing is done.

15. Fodder Development

Project does the fodder development activity through LCs. Each LC has planted fodder crops in the 5 ha of community waste land. After the crop matures, LC sells the fodder to the community / members. Fodder crops i.e. Napier, Barseem, Dolni, Jai, Maize, Bhemal, Kachnar, Mulberry etc. are planted.

- 32% project households have participated in fodder development activity under livelihood collective on average 3 nali land has been used by the member for fodder crops.
- The green fodder is available for average 5 months.

Focus group Discussion at the level of LCs revealed that with the help of project, fodder crops like Napier grass, Barseem, Chari, Maize, Jai, Mulberry, Bheemal, Kachnar etc. were promoted in 5 Hectare community waste land by an SRC to benefit 112 dairy farmers. (Manmahesh SRC, Munakot). In Dhwaj ghati SRC Kanalichina 50 farmers from 15 groups were benefited due to fodder crop promotion. Production and quality has improved.

Fallow Land Development for Fodder

One of the important results of project interventions undertaken by the Livelihood Collectives has been utilization of fallow land for fodder cultivation. This has resulted into availability of fodder for livestock and also reduction of drudgery for the women. Following are some of the Examples emerged after FGDs-

Table 15.1 – LC and Fodder Developement

Livelihood Collective	Results of Fodder Development
Rajaji SRC, Harda, Sult	Initiative of planting Napier grass on 250 Nali benefitted 62 per cent farmers. 30% of the Fallow land was utilized for fodder trees. In 70-80 nali land fodder trees were grown benefiting 200 people.
Ramganga, SRC Chaukhutiya	Initiative of planting Napier grass on 250 Nali benefitted 65 per cent farmers
Bajnath SRC, Teet Bazar Garur	Fodder development in 4 hectare by planting Bhimal, Napier etc. In 2 hectare fallow land Napier was planted. 85% members were benefited.
Jai Ma Bhagwati SRC, Sirkot	Fodder development in 5 hectare of land with plantation of 1100 fodder trees of various variety
Manmahesh SRC Munakot	Napier grass was planted in 5 hectare benefiting 112 people
Ujjwal SRC, Thamus, Hawalbagh	120 nali fallow land was utilized for fodder grass and trees. 220 households were benefited.
Janshakti SRC, Village Attal, Chakrata	About 5 Hectare (250 Nali) fallow land was utilized for napier grass and several trees of fodder and also fruits like mangoes, apple, pears etc. 16 Households were benefited.
Surkanda SRC,Chamba	200 nali fallow land was utilized for potatoes and gree pea cultivation with the support of the project. In all 180 households were benefited.

Gurung Ghati SRC,Bin	25 Nal	i fallow	land	was	utilized	for	farming	promoting	vegetable
	growing	and tra	ditiona	al crop	os. In all,	20 I	nousehol	ds were ben	efited.

(Source – Results of the FGDs with LCs)

Women are especially benefited out of this activity as their drudgery to go long distance for fodder and also time spent on the activity has reduced. This time is utilized for other activities.

The fodder is now available three to four times in a year. The sale of fodder is done through SRC benefitting the farmers in getting the fodder timely and also after SRC gets profits dividend are also provided to the farmers. In the present context few SRCs are giving dividends to the members. (FGDs with LCs)

16. Farm Machinery Bank

Department of Agriculture provides Farm Machinery Bank (under Sub-mission of Agriculture Mechanization Scheme) to ILSP supported livelihood collectives with 80% subsidy. The farm machinery bank reduces drudgery of farmers and cost of cultivation. It provides work opportunity to 2 skilled workers in each LC. LCs are having an average income of Rs. 5000 per month. 47% sample households from component -1 have taken equipments from livelihood collectives for their agricultural activities. On average Rs. 2465 has been reduced from agriculture activities in a season.

Table 16.1 – Daily Time saved through Farm Machinery Bank (% of HHs)

Hours	% of Households
1 hour in a day	6
2 hour in a day	26
3 hour in a day	24
4 hour in a day	27
5 hour in a day	10
6 hour in a day	7

Data in Table 16.1 shows that through FMBs, households are able to save their time from agriculture activities, which they utilize in managing other activities i.e. other activities like dairy, education of children, weaving (sweater for their children).

There are different equipments under the farm machinery bank. Project households have used more of Power Weeder, Power Tiller, Thresher, Spray Machine, Brush Cutter and tractors.

Adoption of Farm Machinery Bank scheme by the federations /LCs is an important initiative. The use of such machinery has enhanced efficiency, reduced drudgery and time of the households.

Farm Machinery bank is benefiting the farmers in several ways. It has reduced the cost of production and also time taken to complete a task. Tilling of one nali land by using ox was costing INR 800 to the farmer whereas now it can be done in INR 500 only. (FGDs at LCs)

17. Reduction in Migration

Project activities are generating multiple livelihood opportunities in the area. The backward and forward linkages in different activities support sustainable livelihood. During the survey, 7% project households reported that their family members especially youth are leaving private jobs and coming back to villages. They have opted for selfemployment. Similarly, 11% households also reported that other members in the village have also done reverse migration.

A big example from the Pithoragarh district is that 21 youths have done reverse migration from different companies and cities. They left their jobs and now doing poultry business in the villages. All these people are from the families of group members. Project facilitates them to get proper training and provide inputs, and market linkages. Now they are earning more than their salaries in private jobs. Similar examples are found in different districts i.e. Chamoli, Tehri, Pauri, and Uttarkashi.

Focus Group Discussion at the level of Livelihood Collectives revealed the following facts from Field -

- There has been reduction in migration due to the support of ILSP. About 50-60 % families continued to do agriculture and not migrated (Ramganga SRC Chaukhutiya)
- Various activities like promotion of poultry, fencing, irrigation tanks, Farm Machinery bank has facilitated the farmers and therefore about 50 prospective families of migration have stayed back doing agriculture activities. (Man Mahesh SRC Munakot)
- Krishi Implements production unit of Lata Baba SRC Sumadi has provided job to two unemployed persons
- Canteen and dairy activity of Jagannath Devta SRC has motivated youth from Mumbai to do reverse migration

18. Information Dissemination / Knowledge Management -

Project facilitates in providing information on different activities/themes through the staff of technical agencies and livelihood collectives by using print materials and mobile based information.

Table 18.1 – Households getting Information (% of HHs)

	Component 1	Component 2	Comp 1 & Comp 2
Project related Activities	92	89	91
Agricultural Activities	93	85	89
Market Information	94	84	89
Using mobile technology i.e. information on YouTube, Other informative Mobile Application, Telephonic Call	65	49	57

Out of the total, 91% project households are getting project related information through Livelihood Facilitators and other technical agency staff. 89% project households getting agriculture related information from Agri. staff of technical agency and also KVKs. Market information is also disseminated by technical agency (TA) staff. 57% project households are getting information from YouTube, other mobile applications and also through direct call to toll free numbers provided by the project. They are regularly receiving project Newsletter, brochures and other literatures.

19. Average Income Scenario

An analysis of the average annual income of the project beneficiaries through varies activities reveals that following scenario -

Table C – Component 1: Average Annual Income from different sources (AOS 2018)

S.N.	Particulars	Amt in INR
1.	Average Income from Traditional Crops	5150
2.	Average Income from Tree Crops	9998
3.	Average Income from Vegetables	13573
4.	Average Income from Livestock	32782

Table D - Component 2: Average Income from different source (in a year as per AOS 2018)

S.N.	Particulars	Amt in INR
1.	Average Income from Traditional Crops	4959
2.	Average Income from Spices	2410
3.	Average Income from Vegetables	11027
4.	Average Income from Livestock	34698

20. Results of interventions through UPASaC

UPASaC has been playing an important role in promoting the livelihood initiatives by facilitating the Livelihood Collectives for Term Loan and CCL. During 2017-18 and 2018-19, UPASaC facilitated LCs for different economic activities such as Farm Machinery Bank, Canteen, Vehicle, Bakery Unit, Rice Seller, Spices Grinding unit (Masala Chakki), Feed and Fodder Unit and other business activities. A total amount of INR 6.55 crore CCL and TL is facilitated by UPASaC. Similarly, during 2018-19, 6545 households were facilitated for Kisan Credit Card worth INR 31.91 crore (Cumulative 14026 households, INR 65.93 crore). During 2018-19, 837 Groups and 61 LCs have availed Cash Credit Limit worth INR 8.78 crore (Cumulative - 2968 groups and 118 LCs availed Rs 20.52 crore). During the same period, 17 groups and 46 LCs availed Term Loan worth Rs 11.34 crore (Cumulative - 17 groups and 46 LCs availed Rs 22.98 crore).

Good Examples of CCL & TL - Chandan Ganga SRC, Rudraprayag used its CCL of Rs.7.00 lakh for purchasing a transport vehicle. The LC earned a profit of INR 58681. Lata baba SRC, Rudraprayag used INR 7.00 Lakh of its CCL for making of agricultural tools and earned a profit of INR 2.24 lakh (LC repaid Rs 5.10 lakh). Vikas SRC Almora used INR 4.50 lakh for animal feed marketing activity (Kapila Pashu Aahar). Ujjwal SRC Almora used Term Loan of INR 7 Lakh for the purchase of a Commercial vehicle which is being used by Agriculture Dept. for running "Mobile Agri. Clinic". Ganga Maiya SRC, Uttarkashi utilized CCL amount of INR 4.50 Lakh running 'Ok Kissan Canteen' and 'Indira Amma Canteen'. Kailasu SRC, Uttarkashi utilized CCL amount of Rs 3.50 Lakh for "Café on the Wave (floating Restaurant)".

UPASaC is working in close coordination with banks, NABARD, Line Departments for the training, financing and insurance. This has resulted into 27 personal loans under DEDS scheme of NABARD, 4 proposals of Rs. 55 Lakh loan from MSME.

The facilitation for finance by the project helps in establishing different farm and nonfarm enterprises and also taking new initiatives. 55 LCs used CCL/TL for farm machinery bank, 22 LCs used CCL/TL for Vehicle, 11 LCs used CCL/TL for their agri business up-scaling plan, 44 LCs used CCL/TL for Rice Seller Unit, Processing unit, Spice Unit, Oil Extraction Unit, etc. The total amount of these CCL and TL is Rs 7.82 crore.

The cumulative business of these LCs/Federations is Rs 73.78 crore in farm and nonfarm based activities (in which 21 crore - 28% business was done in 18-19).

Risk Mitigation (Insurance) Support by UPASaC

UPASaC played a facilitative role in this process and cover Agriculture insurance (PMFBY) in the collaboration with AIC, Cattle Insurance (ULDB) and health insurance (PMSBY & PMJJBY) with the help of banks. 1% incentive is being paid to cooperatives on total premium.

During 2018-19, 300 households were supported for livestock insurance (Insured Amount value INR 1.63 lakh, Premium INR 2.98 Lakh) through LCs. Out of the total availed livestock insurance, 23 households got Claim Settlement amounting to INR 7.14 lakh for 18 Cows, 1 buffalo, 7 goats and 8 mules.

During 2018-19, 6201 households supported for crop insurance (Insured Amount - INR 4115.80 Lakh; Premium INR 183.07 Lakh) through LCs. Out of the total, 2629 households got their claims settled for Apple and other crops amounting to INR 225.21 lakh. During 2018-19, 2605 households supported for Health insurance (Insured Amount - INR 5445.00 Lakh: Premium INR 7.42 Lakh) through LCs. Due to 16 Insurance workshops organized by UPASaC for building capacities of 3921 participants, people were made aware to demand their insurance claims. Moreover, 36 trainings of LCs on insurance claim settlement process were organized wherein 1141 Board members from 119 LCs were trained resulted into facilitation for the claim settlements.

Based on the results of FGDs conducted at producer groups it was validated that ILSP was able to support farmers in getting their crop insured by coordinating with Agriculture department. (Sursingh PG, Chawal Khet, Chamba, Ishta Devta, Sundungra, Champawat, LVSS PG Sald, Uttarkashi). Project has been supporting in Livestock

insurance through coordination of Animal Husbandry department and ULDB (Ajanta PG, Bin, Pithoragarh; Lakshmi Bakri Palan VPG, Bajedi; Saraswati PG, Habeli, Jaunpur - 5 members got horses, mules and buffaloes insured with the help of the project) (FGDs at PG/VPG level)

Financial Literacy

UPASaC educated project households about banking products like savings, bank accounts, fixed deposit accounts, Sukanya Samriddhi Accounts, Gold bonds and also about loan products like KCC, CCL, Term Loan, Mudra Loan, Gold Loans and other Govt. schemes etc. This has resulted into building financial capabilities of members. 126 trainings cum workshops benefitted more than 5000 households.

Interest subvention benefits

UPASaC is also providing interest subvention benefits to Producer Groups. If banks extend credit @ 12% per annum, UPASaC gives 5% interest subvention benefit to the producer groups. In this case, borrower gets credit at 7% instead of 12%. The interest subvention is reducing the financial burden on producer groups and livelihood collectives. 70 LCs were benefited from interest subvention.

Conclusions of Annual Outcome Survey 2018

1. Main Conclusion

Following are the main conclusions of the Annual Outcome Survey-2018 -

- Impact on the lives of the Households: 100% project households have reported that their participation in project activities has impacted their lives.
- Food Security: 98% project households have reported no food shortage during last 12 months, therefore the project was able to provide food security to most of the households.
- Quality of Food Consumed: 68% project households have reported consumption of improved quality and types of food.
- Increased productivity: 66% project households report crop productivity has increased
- Expansion of Cultivable area: 67% project households have expended their production area due to the irrigation initiatives and technical guidance.
- Livestock sector development: 93% project households have their livestock and dairy value chain is incrementally progressing.
- Better Prices to Farmers: 58% project households are reported that the price of their produce has increased more than 10% due to use of small collection center.
- Income from Agriculture: 69% project households report income from sales of agriculture production
- LDPE Utilization for irrigation: Average irrigated land area through LDPE tanks is 5.25 nali and primary use of this water source was for the purpose of horticulture. 34% households use LDPE tanks more than 3 times in a year.
- Chain Linked fencing reduced losses: 39% project households reported that chain link fencing save their crops by 20% to 100% from wild and grazing animals.

- Fodder Development enhanced availability of fodder and also utilization of unutilized land: 32% project households have participated in fodder development activity with LCs and the green fodder is available for 5 months on an average.
- Farm Machinery bank reduced cost of cultivation: 47% project households taken FMB and on average Rs. 2465 has been reduced from their cost of cultivation. 44% project households save more than 4 hours due to FMB.
- Reverse Migration: 7% project households have reported that there is some reverse migration due to project.
- Regular savings and enhancement of savings Amount: 100% project households have monthly savings and the amount has increased compared to last year. 98% project households were regularly saving with PGs/VPGs
- Credit Services: The project has provided necessary financial services and the average credit received by the beneficiaries is to the tune of INR 46256. 53% project households taken loan for income generating activities and 31% households fully repaid their credit on time.
- High Advantage of Convergence: The project households have benefited by accessing various schemes through the convergence with various government promoted programs. The knowledge among the beneficiaries about various schemes has enhanced. 48% households have reported that through convergence an average benefit of Rs. 3483 is gained.

2. Results of the Focus Group Discussion at the level of LCs on overall benefits

LCs found to be having 4 different committees for different purposes such as procurement committee, account committee, arbitration committee, committee etc.

• Due to project intervention the cost of transaction has reduced for the farmers as they are able to sell at the village level itself thereby saving the cost of transport and storage.

- Production of food grains, millets and vegetables by the farmers has increased due to good quality seeds availability, line sowing, package of practices etc. which was propagated under the project. Farmers are now selling through LCs. (Jai Ma Bhagwati SRC, Sirkot, Garud, Bageshwar; Jagannath Devtha SRC, Bhatwari, Uttarkashi)
- After the support of the project, four villages in the area of Sur singh devta SRC, Jaunpur started goat rearing activity and 70% families also do Dairy activity. Production of Milk is increased due to project interventions.
- Villages under Surkanda SRC Chamba do agri allied activity like dairy and also non-farm activities like selling of consumer goods, Dev bhog Prasad initiatives, Doop batti production and also production of juices. Technical training provided under the project has resulted into increased production, quality improvement and reduction of production and transaction costs for the farmers.
- The dairy activity has enhanced due to intervention of project as the SRC is attached to Aanchal Dairy. (Kalchakra Devta SRC, Naumana, Barakot, Champawat)

Key activities that has benefited maximum to the farmers

The results of FGDs revealed that agriculture technical support, animal husbandry, chain linked fencing, irrigation water tanks/ LDPEs, Farm Machinery Bank, Fodder grass and trees promotion, and convergence initiatives have provided maximum benefits to the farmers.

Other benefits from the project that members recognize

Learned savings and interacting with banks, women confidence level enhanced, awareness about scheme of government enhanced, food security, Drudgery reduction, reduction in production and transaction costs related to agriculture activities taken up by the members. Example quoted about schemes like Aayushman Bharat and Pradhan Mantri Krishak Samman Nidhi.

The activities of vegetable production, Poultry and dairy have enhanced nutritional food availability as members use the produce for marketing and also for their own consumption (FGDs – Ma Ambey SRC; Bajnath SRC Teet Bazar)

(Bajnath SRC Teet Bazar; Gurung Ghati SRC; Ma Ambey SRC; Sukanda SRC; Mauliyar SRC)

Innovative activities

- Small Rice Mill (Bajnath SRC, Teet Bazar)
- Mushroom and Strawberry cultivation (Two producer Groups of Janshakti SRC)
- Milk Parlour and Kisan Canteen (Jagannath SRC)
- Poultry, masala Grinding, juice center (Manmahesh SRC)
- Food Processing unit for juice making (Dhwaj SRC)
- Devbhog Prasad , Juice and Chatni making (Surkanda SRC)

Distribution of Surplus by SRCs

Distribution of surplus in different forms such as dividend and bonus is one of the positive trends that are emerging in ILSP. FGDs have revealed that SRCs are providing dividends (50% of the surplus to all share holders) and bonus (30% of the distributable surplus as per the transactions done by the member) as per their bylaws and guidelines issued by ILSP HO regarding. Remaining of the surplus (Normally, 20% of the total surplus) is kept for important activities of the LCs. (Based on FGDs with LCs)

Reduction in the cost of production and transactions

All the LCs and their members report that the support of the project has reduced the cost of production and management of their livelihood activities.

- Availability of seeds and manures at reduced rates through the LCs has reduced the input costs including the transport cost that was incurred by the farmers earlier. Example – Ginger seed from Horticulture was provided @INR 30 per kg whereas it is INR 70 in the market (FGD in Jai ma Bhagwati SRC); Reduction is transport cost due to supply of seed at the door steps(FGD in Dhwaj SRC)
- Chain linked fencing, water tanks, farm machinery bank and small collection centers have reduced the wastage/ damage of crop and also facilitated in enhancing the production.

(Examples from Baijnath SRC Teet Bazar; Sanjeevini SRC Chandrapuri; Manmahesh SRC)

 Animal Feed at the reduced cost (Kapila Animal Feed) Calcium and other animal feeds on reduced rates has enhanced surplus in the dairy activity (Manmahesh SRC)

Reduction in Household Expenditure due to providing of consumer goods - One of the unintended outcomes of the project is that the expenditures of households have reduced due to providing of consumer goods by SRCs at the reduced rates than market. Members informed that the reduction varies from 10% to even 40% in the household expenditure. (FGDs conducted at LC level)

3. Overall Conclusion of AOS from HH Survey and FGDs

ILSP has proved to be a successful model for sustainable livelihoods of rural people of mountain region and resulted into impacting their lives due to following reason -

- Business planning, appropriate inputs and financial support for the same, Technical support on production, Fencing and support for irrigation has resulted into more production, less losses of crop and less expenditure on production. This has provided more income and surplus to the households.
- Support in storage, marketing and Value Addition has resulted into getting better price and avoid any distress sale by the farmers. This has also given more surpluses to the households.
- Financial Literacy, Promotion of Savings through Production Groups, Share Capital and Micro Finance Services has enhanced financial capability. One of the important factors is that share capital assistance to LCs on behalf of farmers provided social and economic security to the farmers. Interest subvention has helped farmers to reduce loan burden. Farmers will continue to get dividends in the old age if LCs/ Cooperatives continue to be in profits.
- The project has also covered youth by providing skills training and thereby generating employment opportunities in the form of wage, job and selfemployment for youth.
- Women participation in the project was high which has led to empowerment and gender mainstreaming.
- Convergence contributed in the income enhancement of households as well as in reduction of expenditure.

4. Key learning/lessons for future based on the HH survey

 Effective use of water sources is directly linked to up scaling the livelihood activities especially farm based value chains. LDPE tanks have made positive

difference especially in the horticulture; however, there is a need of integrating LDPE tank with drip, sprinkler and poly house.

- A standardized procurement and sale price policy should be promoted in the project depending upon the grade and quality of produce
- To ensure optimum and effective utilization of chain link fencing and fodder development activity, there is a need of standard guidelines.
- The Farm Machinery Bank is one of the most effective tools for households, but there is a need for capacity enhancement for the regular maintenance of equipments.
- Insurance activity i.e. crop insurance, cattle insurance require more focus
- There is multiple activities at large scale and results of these activities need thematic surveys.
- There can be up scaling of activities beyond federations based on the growth center model

5. Suggestions of members from FGDs of LCs

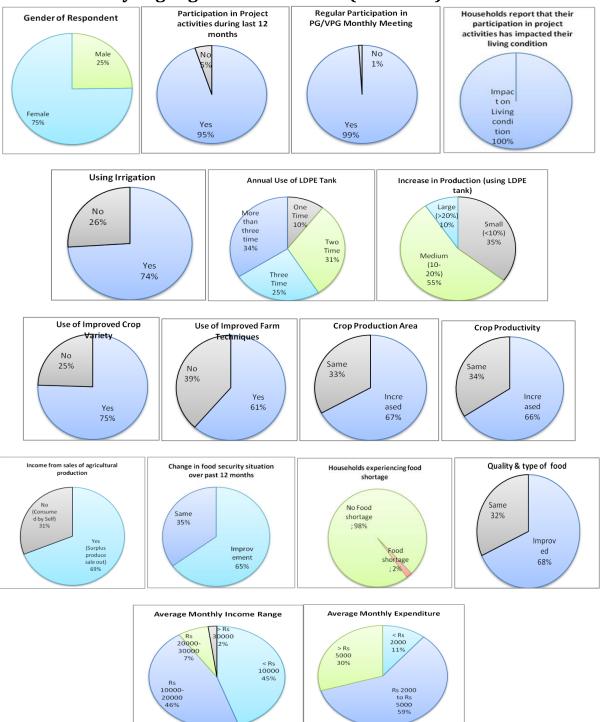
The records and accounts of LCs are to be maintained in the most appropriate manner which requires capacity building of the staff and also members.

New areas of livelihood promotion suggested

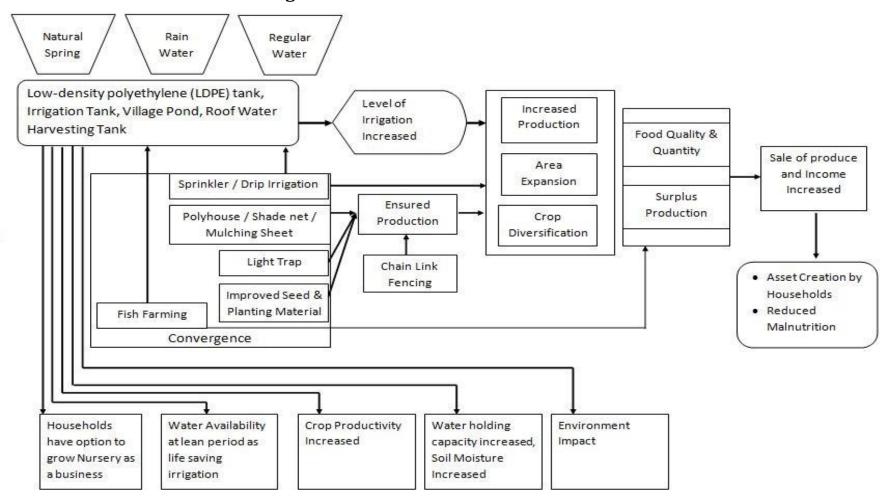
- Promotion of Floriculture
- Contract Farming
- Water lifting pumps for the hilly areas lands
- Small canal from the main canals / rivers up to the lands of the farmers
- Promotion of Bee keeping, Poultry and Fisheries
- Small enterprise promotion

Annexure

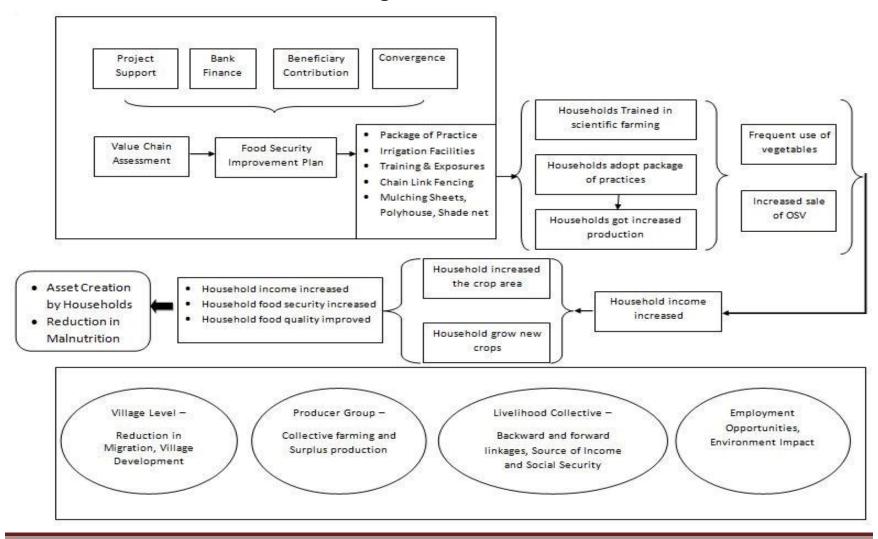
Annexure 1 - Key Highlights of the Results (% of HHs)



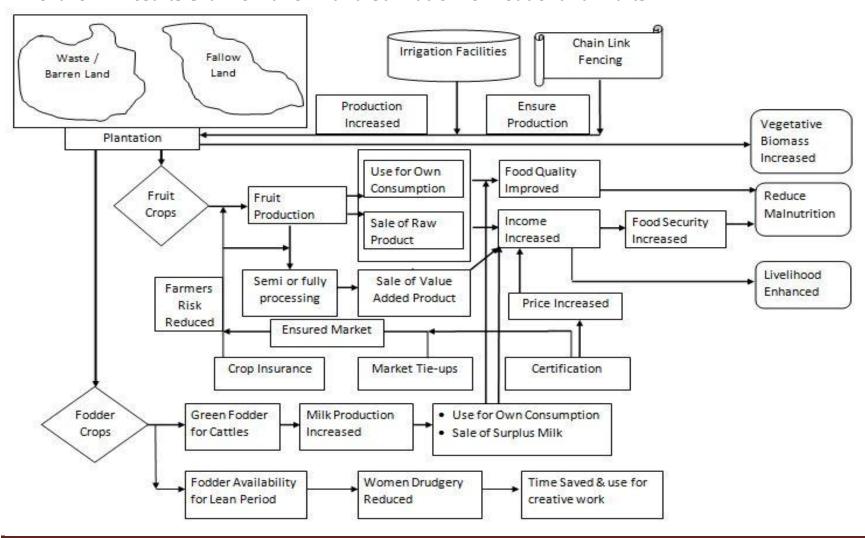
Annexure 2 - Results Chain of Irrigation Infrastructures:-



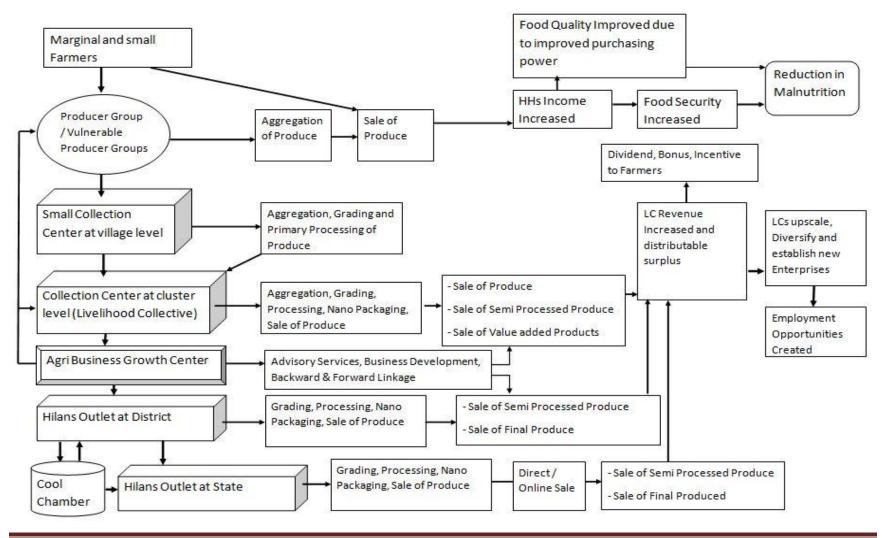
Annexure 3 - Results Chain of Off Season Vegetables:-



Annexure 4 - Results Chain of Fallow Land Utilization for Fodder and Fruits:-

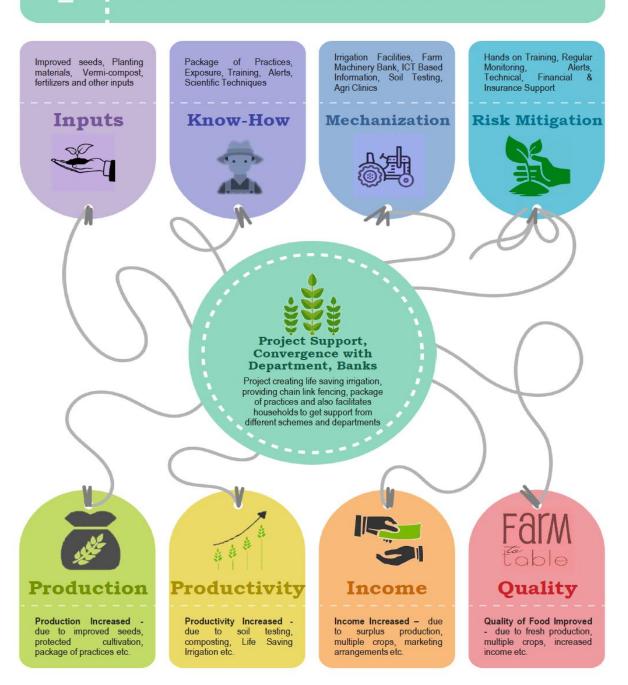


Annexure 5 - Results Chain of Access to Market :-



Annexure 6 - Farm Based Activities (Results Chain):-

Farm Based Activities



Annexure 7 - Some Photographs of AOS 2018:-



