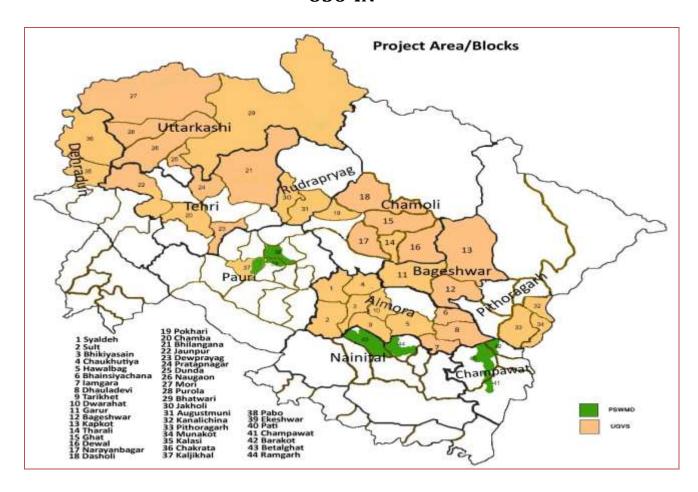
INTEGRATED LIVELIHOODS SUPPORT PROJECT

(ILSP)

856-IN



ANNUAL OUTCOME SURVEY 2017

Central Project Coordination Unit (CPCU), 216, Panditwari, Phase II, Dehradun

PROJECT AT A GLANCE

International Fund for Agricultural Development (IFAD) assisted Government of Uttarakhand Integrated Livelihoods Support Project (ILSP) in 11 hilly districts of Uttarakhand.

District: -Almora, Bageshwar, Nainital, Champawat, Pithoragarh, Chamoli, Tehri, Uttrakashi, Pauri, Dehradun, and Rudraprayag.

The programme envisages targeting of about 126000 households in 44 blocks from 11 hill districts and the main focus is on supporting producer organizations (PGs/VPGs/LCs) with affordable and accessible technologies to produce and upscale their produce and market the produces at competitive prices as well as strengthen their food security and livelihoods beyond the project life. The project is being implemented by three Project Implementing Agencies (PIAs) which are the Uttarakhand Gramya Vikas Samiti (UGVS), Project Society Watershed Management Directorate (PS-WMD) & Uttarakhand Parvatiya Aajeevika Sanvardhan Company (UPASaC).

The justification for ILSP is the need to stop the deterioration of the productive infrastructure, make farm labour more productive and farming more remunerative, and hence provide multiple incentives to identified beneficiaries to invest their time and resources in agriculture and non farm livelihood enterprises. Despite the disadvantages that agriculture based livelihoods face in the hill areas, the state of Uttarakhand does have the advantage of cooler temperatures with varied higher altitudes, thereby allowing production of off-season vegetables (OSV) and temperate fruits. The horticultural sector is less developed in Uttarakhand than in the other hill states, so there are considerable potentials for growth and other niche products such as spices, medicinal and aromatic plants and fruit nuts give competitive edge. Beside these, tourism is another area with high growth potential. However, more need to be done to ensure that local people fully participate in, and benefit from, these sectors. The population is fairly well educated, but the percentage of youth unemployment and underemployment is relatively high. Therefore, to create meaningful employment opportunities for the youth, structured vocational training will help the youth and their households..

On the whole, the project is to build sustainable households that are productive in farm and non farm livelihood engagements and link it up with markets that find them favourable economic returns for their toiled works.

ANNUAL OUTCOME SURVEY 2017

As per IFAD Guideline, 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. Through AOS, it is envisaged that the awareness of project activities among the controlled group also get better understanding of their own "Efforts for progressive Change".

The main objectives of carrying out Annual Outcome Survey were to:

- Measure social and economic changes happening at the household level in terms of livelihoods, food security, cash flows and use of appropriate technologies, during the project life;
- Assess efficiency in service deliveries and beneficiaries level of participation;
- Provide evidence of project success or failure; and
- Capture and make available timely and quality information to various stakeholders to undertake corrective actions, effective planning and channeling of resources where needed most.

Team Formation and Training:-

In the preparation to conducting 2017 Annual Outcome Survey (AOS) through external consultant, the questionnaires and tools were finalize based on the outcome of previous years AOS including the recommendation given by the IFAD Supervision Team. A team of project staff was formed for facilitation i.e. questionnaire finalisation, sample area selection, project orientation and field monitoring. 60 enumerators were identified & hired who were experienced in the social and economic aspects of the rural sector and also actively engaged at the grass root.

To train the enumerators and coordinators for carrying out AOS in target area (block / unit/districts), two training cum field-testing survey exercises were organized at centralized point at Pauri for Garhwal region on 20th to 22nd February 2018, and in Almora for Kumaon region on 25th to 27th February 2018). The participation of Deputy Project Director, Unit officers from PSWMD and management team from UGVS and CPCU had shared their experiences with participants at the training workshop.

In these two three days' workshop, the day one was dedicated to understanding the questionnaires in detail including the linkages between certain questions to cross check the authenticity of the respondents answers, interview conducting techniques, questionnaire filling up

processes, on site quick cross checking of data and information, and motivating the beneficiaries during the interview time to engage them actively.

In day two of the training, a field testing survey exercise was also organised in village Matela of Hawalbagh block and Majhera village of Betalghat block in Kumaon; and Dhari, Gahndiyal village of Kaljikahl block and Seeko village of Pabo block in Garhwal.

In day three of training, there were extensive discussions on all the questionnaires and related interview processes both before the field-testing and also upon completion of the field-testing. The training was concluded by preparation of block/unit wise action plan of AOS that included allocation of villages by enumerators and their Coordinators, time schedule for starting and completion of data collection, frequency of reporting progress by the Coordinators, and steps to clarify points as and when the need is encountered during the survey.

The Coordinators from DMU and PSWMD staff were engaged to identify the villages as per the three distinct strata of the sample i.e. villages up hill, villages mid hill and the village in the valley both in the category of beneficiaries and the controlled group. A timetable was also set up from start to the end of the AOS data/information collection.

An online system of "WhatsApp" group was also put in place by the HO team for randomly stock taking the progress and addressing problems that may arise during the data and information gathering.

Sample Selection:-

The sample size (n) = 593 households from Project villages and 207 Households from control villages were selected. Sample selection was done by systematic cluster 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 and an approved ILSP village list was referred to for sample selection. A lottery method was used for random selection of households from project villages and non-project villages also called control group in this AOS. All households were selected randomly from the list of target households; the team selected 2 to 6 HHs per village in the presence of village functionaries & villagers.

A total of 800 households were covered by the survey; out of which 593 households were drawn from listed target households in 96 villages within project clusters, and 207 Controlled group households were selected from 75 villages in all the 11 project districts.

Data Collection:-

Enumerators completed the data collection of coordinators nominated by the project divisional offices. The team of enumerators visited the villages on the predefined date and

conducted interviews as per the defined sample of 171 villages from a total of 800 HH i.e. 593 project beneficiaries and 207 control group households, having 2 to 6 HHs from each village.

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 point to inputting of the data leads to analysis using SPSS.

The following key indicators were measured as part of the survey:

- ➤ Household Identification
- Participation in Project activities
- > Livelihoods
- ➤ Food Security
- ➤ Land Tenure
- ➤ Agricultural Production and irrigation
- Access to Markets
- ➤ Access to Rural Financial Services
- ➤ Enterprise Development, Training
- ➤ Convergence Linkages
- ➤ Housing
- ➤ Irrigation through LDPE tank
- Drudgery Reduction

As suggested by IFAD Supervision Mission (SM) on Sept. 2017, the AOS questionnaire included question of "LDPE irrigation tanks" and "Drudgery reduction activities".

Sample Area:-

 $\begin{tabular}{ll} \textbf{Table A:-Survey sample (District, Block and Village)} - \textbf{Component 1} \\ \end{tabular}$

District	Block	Project Villages	Households	Control Villages	Households
	Choukhutiya	Jaitha, Chana, Bhagoti	18	MallatajPur, MallatajPur, MallatajPur	6
	Bhikiyasain Bhelti, Muni Dhanoli		18	Khurudi, Khurudi, Khurudi	6
Almora	Hawalbagh	Mat, Barsimi, Matela	18	Latawal, Latawal, Latawal	6
	Sult	Kali gauon, Taradi, Reetha	12	Jallanai, Jallanai, Jallanai	6
	Syaldeh	SaraiKhet, BetanDhar, Gumsida	18	Gumani, Gumani, Gumani	6
Chamoli	Tharali	Kolpudi, Ratgaon, Parth, Kurand, Dewal Gwar, Tharali Gaon	18	Bhatiyana, Maal Bagwar, Harchan, Tungeswae, Sonla, Chonda	6
Tehri	Chamba	Dhungli, Gagna, Plash	18	Kudyial gaon, Swadi, Baaghi	6
renn	Jaunpur	Unyial gaon, Hatwal gaon, Mangh gaon	18	Thikk, Dangala, Jamthyial gaon	6
Uttarkashi	Bhatwari	Gajoli, Gyanja, Basunga	18	Sukki, Kansen, Jhala	6
Dish and a ab	Munakot	Badabey, Kuseri, Bishkholi	18	Toli, Dingra-Panturi, Gaina	6
Pithoragarh	Pithoragarh	Tadigaon, Tharkot, Bans	18	Bhunigaon, Masso, Majhera	6
Rudraparyag	Augustmuni	Bhanaj, Machkandi, Jalai Sursal, Patiyun , Dammar, Basti	18	Kimana (Dankot), Arkund, Barmadi, Phali Palasat , Phalai, Rayanshu	6
	Jakholi	Palakurali, Luthiyang, Mamni, Jakhni, Sumadi, Patuli	18	Ghathana, Dharkudi, Ponthi, Chora, Shison, Bandartoli	6
Dehradun	Chakrata	Lohari, Haja, Chatra, Shadiya	14	Thana, Maletha, Hanol, Banpur	5
Denradun	Kalsi	Lakhwar, Dhanpau, Mandoli, Parihar, Simog	17	Kamla, Kandi, Dumet, Badwala	7
Bageshwar	Garur	Gani Gaoun, Gawar Pajena, Manura Mafi	18	Salani, Galai, Thapal	6
Pauri	Kaljikhal	Nauli, Digrashu, Dungra, Mroda, Munga, Tagroli, Dhari, Agrotha, Naithana	Vauli, Digrashu, Dungra, Mroda, Munga, Gagroli, Dhari, Agrotha, Kw Jak Bal		6
9 districts	17 blocks		295		102

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

District	Block	Project Villages	Households	Control Villages	Households
Pauri	Pabo, Ekeshwar	Seeko, Maroda, Ulli, Chaid Malla, Kaloon, Ratkoti Pand, Mason Masetha, Mason Thapliyal, Saoson	Kaloon, Ratkoti Pand, Masetha, Mason 80 Kanderi, Melai, Ashari Thapyaali		30
Nainital	Betalghat, Ramgarh	Pankatara, Budhalakot, Majheda, Halso, Haldyani, Tiwarigaon, Chara, Sufi, Manarsa, Bohrakot, Gangarkot	81	Niglat, Shyamkhet, Simrar, Kamoli (Dhakone)	30
Champawat	Pati, Champawat, Barakot	Kanakot, Barmtola, Sundungra, Dasiyachmi, Narsinghdanda, Koyati, Nadola	137	Maner, Goli,	45
3 districts	7 blocks		298		105
11 districts	24 blocks	96 Villages	593	75 Villages	207

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

SURVEY FINDINGS

1. Household Identification

Table 1.1:- Gender of sampled household head (%)

Gender	Component 1		Component 2		Comp. 1 & 2	
	Project	Control	Project	Control	Project	Control
Male	46	61	38	39	42	50
Female	54	39	62	61	58	50
Total	100%	100%	100%	100%	100%	100%
n =	295	102	298	105	593	207

Table 1.1 shows, 58% of households in the project sample and 50% in control sample are female-headed households. In AOS of 2016, female headed household were 52% in project sampled households and 47% in controlled sample households.

Table 1.2:- Respondent' Gender (%)

Gender	Con	Component 1 C		Component 2		Comp. 1 & 2	
	Project	Control	Project	Control	Project	Control	
Male	19	46	37	44	28	45	
Female	81	54	63	56	72	55	
Total	100%	100%	100%	100%	100%	100%	
n =	295	102	298	105	593	207	

Table 1.2 shows, during survey 72% respondents are female in the project sample and 55% are in control sample.

Table 1.3:- Membership of PGs/VPGs of Sample Households

	Component 1	Component 2	Comp. 1 & 2
Member of PGs/VPGs	100%	95%	97%
n =	295	298	593

Table 1.3 shows in component 1, 100% sampled households are member of PG/VPG while in the project sample of component 2, only 283 (out of 298) households are member of PG/VPG. It is due to formation of PG/VPG was initiated in 2017 after selection of technical agencies and actual coverage of households (member of PG/VPG) around 70%.

2. Participation in Project Activities:

Table 2.1:- Participation of households

	Component 1	Component 2	Comp. 1 & 2
Participation in PG/VPG Meeting	99 %	99 %	99 %
Participation in Training/ Workshop / Exposure	76 %	72 %	74 %
Households contact with project staff (i.e. technical agency staff)	99 %	99 %	99 %
Households report that their participation in project activities has impacted their living condition	99 %	99 %	99 %

In both the components, 99% project beneficiaries reported that they have knowledge of the project and are actively participating in monthly group meetings. 74% households have benefited through kisan mela, convergence meeting, fairs conducted at different intervals and at various venues. 99% households reported that project staff (TA) frequently visits them. Members' participation in the training/workshops/exposure is 74% project households and it needs to be significantly increased as the critical success of both the project and its beneficiaries hinges on proactive participation of all members.

ILSP has organized divisional levels KISAN fair with the support of District administration, Agriculture Dept. and Horticulture Dept. Uttarakhand. The main objective of KISAN fair was creating awareness of need, importance, policies and programmes for promoting secondary agriculture among farmers, entrepreneurs, developmental experts, scientists and other stakeholders. And also providing an opportunity for exchange of ideas/technologies/innovations and experiences among various stakeholders. More than 16,000 farmers have participated in these KISAN fair to reach and updated themselves about current trends, technologies and innovations in the field of agriculture, horticulture and allied activities.

Summary Component 1 (Project, n = 295)

- 96% households participated in formulation of Food Security Improvement Plan (FSIP)
- 95% households' participation into Annual General Meeting (AGM) of livelihood collective (LC). *Last year this percentage was 85%.*
- 99% households are satisfied with project interventions/activities and believe that these have been contributing incrementally in improving their living conditions.
- In the project context, high percentage of beneficiaries' participation in preparing their own FSIP is linked to owning the process of planning for their own livelihood activities as well as creating a good knowledge base that, if continued beyond the life of the project, would take them to a systematic livelihood activities there by strengthening both household food security and the sale of excess commodities in the market systems.

Summary Component 2 (Project, n = 298)

- 98% households participate in the Participatory Monitoring Evaluation (PME) process.
- 95% households' participation into Gram Panchayat Watershed Development Plan/ Annual Work Plan.
- 99% households are satisfied with project interventions/activities and believe that the project activities have been incrementally improving their living conditions.
- 76.2% households participate in water conservation activities and 68.6% households indicate water availability has increased by more than 5%.

The satisfaction level of beneficiary communities is high. This reveals that infusion of resources including dissemination of good practices and beneficiaries' willingness to apply are having progressive trickle-down effects on the social and economic aspects of their households. The data shows that 99% in component 1 and 99% in Component 2 have reported positive impact in their living conditions.

3. Livelihoods:

90% project households from component 1 and 92% project households from component 2 have reported source of cash income. All project households have more than one source of cash income. Income from agricultural activities is primary and also secondary income source of households whereas 33.2% project households have reported income from agriculture activities as primary source.

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	45.4	31.4	21	12.4	33.2	21.9
Salaries, wages (employees)	17.3	17.6	24	26.7	20.6	22.1
Other Daily Labour	8.8	15.7	16	16.2	12.4	15.9
Pension	7.1	10.8	9	19	8.0	14.9

80.9% project households in component 1 and 89.6% project households in component 2 have more than one income source respectively. The other source includes livestock, enterprise, handicraft, weaving, natural resources, salaries, wage employee, daily labour, pension and agriculture also.

Table 3.3:- Average Monthly Income (Rs)

	Component 1		Compo	Component 2		Comp. 1 + Comp. 2	
	Project	Control	Project	Control	Project	Control	
Average Monthly Income (in AOS 2017)	12745 *	11867	10312 *	9740	11528	10803	
n =	295	102	298	105	593	207	

* Average Monthly income in project area was Rs. 9559 in component 1 and Rs. 7514 in component 2 (as per AOS 2016).

In comparison to 2016, an average monthly income increased to 33% in component 1 and 37% in component 2.

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

	Component 1	Component 2	Comp 1 + Comp 2
Less than Rs 10000	56 %	72 %	64 %
Rs 10000 to Rs 20000	35 %	21 %	28 %
Rs 20000 to Rs 30000	5 %	5 %	5 %
More than Rs 40000	4 %	2 %	3 %
n =	295	298	593

Component 1 -

Component 2 -

- * In 2017, 72% project households belonged to the income range of less than Rs 10000, where as 87% project households in 2016 were falling into this income range; which indicates due to income increase 15% project households shifted in higher income range.
- * 9% project households in 2016 and 21% project households in 2017 belong between Rs 10000 to Rs 20000 income ranges; which indicate households' income has increased.
- * 2% project households in 2016 and 5% project households in 2017 belong between Rs 20000 to Rs 30000 income ranges; which indicate households' income has increased.

Besides this income, an additional average monthly income range of Rs 3000 to Rs 5500 is contributed to the households from migration source.

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

^{*} In 2017, 56% project households belonged to the income range of less than Rs 10000, where as 80% project households in 2016 were falling into this income range; which indicates due to income increase 24% project households shifted in higher income range.

^{* 15%} project households in 2016 and 35% project households 2017 belong between Rs 10000 to Rs 20000 income ranges; which indicate households' income has increased.

^{* 4%} project households in 2016 and 5% project households in 2017 belong between Rs 20000 to Rs 30000 income ranges; which indicate households' income has increased.

^{* 1%} project households in 2016 and 4% project households in 2017 belong to more than Rs 40000 income range; which indicate households' income has increased.

	Component 1		Compo	Component 2		Comp. 1 + Comp. 2	
	Project	Control	Project	Control	Project	Control	
Less than Rs 2000	4.7	9.8	9.1	10.5	6.9	10.1	
Between Rs 2000 to Rs 5000	28.1	33.3	50.8	55.0	39.4	44.1	
More than Rs 5000	65.1	56.9	40.1	34.0	52.6	45.4	

The statistics of table 3.5 clearly indicate the average monthly expenditure of project households is more than that of the controlled households. In the AOS of 2016, 34% of the household had reported an expenditure of Rs. > 5000 and the number in the same category is reported to 65.1%.

In the project areas, women spend on an average 5.01 hours per day in economic activities, primarily agriculture & livestock and in controlled areas the time spent by women is 4.5 hours per day.

It clearly shows that there was a greater impact of the project interventions in the project areas which has improved their income level and also the expenditure. It is also reflected that due to project interventions in primary sectors like agriculture, horticulture, livestock etc. short term employment in allied sectors also have been improved and the cash flow at the family level from the primary activities have been increased.

* With the support of different line departments and boards ILSP has made various project interventions under the agriculture, horticulture & livestock i.e. Improved Seed, Vermi Compost Pit, Soil Testing, Agriculture Tools, Crop Insurance and Farm Machinery cum Custom hiring center, etc. Project households using and use to be with these improve crop variety, farming technique and irrigation system. The initiatives towards crop diversification have seen in Uttarakhasi where producer are diverting from Rajma to Lady Finger and producer getting more income.

4. Food Security

Ensuring food security of the poor households in the remote villages is one of the key objectives of the project.

Table 4.1:- No Food Shortage (% 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	97.3	93.1	98	98	97.6	95.5

As per survey, 97.6% of the surveyed project beneficiary households reported no food shortage and only 2.4% households reported minor food shortage of less than 1.1 weeks in a year. It was also reported that on average food was available for 5.5 months from household own production.

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	43.1	20.6	19.7	5.2	31.4	12.9
Same	31.9	44.1	80.3	93.5	56.1	68.8

31.4% project households reported that food security situation has improved as compared to last 12 months and this positive change was attributed to project interventions such as convergence, package of practices, extension services, and scientific farming, awareness of quality aspects etc.

5. Land Tenure:

Land is the only productive asset for the poor to earn food and income and ownership over land is a crucial factor for secured livelihoods.

Table 5.1 - % of Households

	Component 1		Compo	onent 2	Comp. 1 + Comp. 2	
	Project	Control	Project	Control	Project	Control
Own Productive Land	97%	97%	97%	99%	97%	98%
Have Property rights on land	94%	93%	95%	98%	94%	95%
Very Secure Property rights on land	91%	90%	90%	97%	90%	93%

97% project households have their own productive land asset. 90% of project households have very secure property rights on their land. The average land holding in component 1 is 13.17 nali (0.26 ha) and in component 2, 13.88 nali (0.27 ha).

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	96	95	97	82	96	88

consumption and sales						
HHs report crop productivity increase	54	21	36	11	45	16
HHs using irrigation system	52	23	53	21	52	22
HHs have livestock	91	79	88	70	89	74

As reported earlier that the primary livelihood activity of beneficiaries is agriculture, the sample shows that 96% of the project households are engaged in land cultivation both for income earning as well as for their food security. 45% of project farmers have reported crop productivity increased as compared to last year. Accessibility of irrigation facility in project area is better than to control (due to project intervention on irrigation system). 89% project households have livestock. One of the factors contributing in the production increase (54% respondent) can be attributed to 52% cultivators' use of irrigation system.

Table 6.2 – Adopt new Agriculture Production Technology Promoted by Project (% of hhs)

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	Component 1	Component 2
Use of Improved Crop Variety	78	70
Use of Improved Farm Techniques	25	43
Erosion Control	3	19
Small Area Irrigation	16	42
Soil Moisture Retaining Techniques	3	11
Improved Water use efficiency Techniques	-	19

72% households reported that they have adopted one or more technologies promoted by project. The most preferred technology promoted by project is line sowing, improved crop variety, improved seeds, improved farm technique, vermin compost, cropping techniques, Soil moisture conservation techniques etc.

Summary Component 1 (Project, n = 295)

- 78% households adopted improved crop variety in agriculture.
- 32% households adopted improved health care facilities for the livestock (such as vaccination and deworming) and 5.4% adopted fodder crop promoted by the project.
- Average Rs 32330 income from livestock (sale of animals and products) in a year (which was Rs 27849 in AOS 2016).
- Average Rs 11320 income from off-season vegetable in a year (which was Rs 9094 in AOS 2016).
- 26% households grow tree crops (i.e. Apple, citrus) and average Rs 29650 income from these crops in a year.

Summary Component 2 (Project, n = 298)

- 70% households adopted improved crop variety in agriculture.
- More than 2 nali fallow/barren lands have been brought under cultivation by 23% households.
- 19% households adopt water efficiency, 19% adopt Soil Erosion control techniques promoted by project.
- 61% households adopted improve health care facilities (such as vaccination and de-worming) and 48% adopted fodder crop promoted by project.
- Average Rs 34498 income from livestock (sale of animals and products) in a year.
- Average Rs 10608 income from off-season vegetable (horticulture) in a year (which was Rs 7068 in AOS 2016).
- Average Rs 2313 income from spices in a year (which was Rs 1770 in AOS 2016).

7. Access to Market:

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

	Component 1		Comp	onent 2	Comp. 1 + Comp. 2	
	Project	Control	Project	Control	Project	Control
Income from sales of agricultural production	73	32	41	28	57	30

57% of project households and 30% in control have reported the income from sales of agricultural production; in comparison to 2016 this percentage was 54 and 28 respectively. Livelihood collectives in component 2 are recently formed and moving towards business activities.

Table 7.2 – Whom you sell your farm produce (% of hhs)

	Component 1	Component 2
Final Consumer	11	36
Local Agent and Village Level Collectors	16	14
Wholesalers or traders	12	40
Cooperatives (LC)	42	3

With regard to selling the produce 42% project households (from component 1) sell their produce through livelihood collectives and 11% households sell to final consumer. In view of the budding LCs engagements in providing services to their members is a progressive step amidst many challenges among other factors that the markets impose both the members and the LCs.

In component 2, livelihood collectives are being newly formed (post Mid-Term recommendation), so only 3% households selling their produce through LC. 36% project households sell their produce directly to final consumer in component 2.

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

* In year 2017, 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, storage and supplying rural produce to market. On the other side, project promoted rural product under the HILANS brand. Addition to this ILSP has initiated kisan outlets in each districts and state level. The Department of Rural Development has provided Saras center to the livelihood collective formed under project for the period of 30 years lease to run their outlet, it has reducers the rent and operative cost of LC and also have the infrastructure for selling rural produce.

Access to Rural Financial Services:

Table 8.1 – Financial Service

	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	98	90	95	-	96.5	90
% of HHs saving into PGs/VPGs/SHG	100	-	88	-	94	-
% of HHs - Monthly Saving in PG/VPG is Rs 20/member	5.0	-	6.7	-	5.8	-
% of HHs - Monthly Saving in PG/VPG is Rs 50/member	29.7	-	38.7	-	34.2	-
% of HHs - Monthly Saving in PG/VPG is Rs 100/member	50	-	39.5	-	44.7	-
% of HHs - Monthly Saving in PG/VPG is more than Rs 100/member	15.3	-	15.1	-	15.2	-
% of HHs taken loans	44.1	19.6	15.4	12	29.7	15.8
Average Amount (Rs) of Loan	30677	35684	43367	106181	37022	70932
% of Loan HHs loan taken for Income Generating Activities	70	4	43	3	56.5	3.5

% of HHs repaid loan amount	47.1	52.6	14	27	30.5	39.8
% of HHs reported better access of financial services	96.4	37.7	60.5	33.3	78.4	35.5
% of HHs reported project help in access to financial services	94.9	-	60.8	-	77.8	-

In the survey results regarding access to financial services in project villages, only 78.4% households reported that access to financial services improved over the last 12 months mainly due to project support. In response to the main use of loans 56.5% in project and 3.5% in the control group reported that income generation was the foremost purpose. Average amount of credit in project availed was INR 37022. In control area the loan amount is higher than project due to loan taken for housing and social events (i.e. marriage). The credit repayment scenario shows that 30.5% 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, and other investment purposes also.

Table 8.2:- Monthly Saving in PG/VPG

	AOS 2016	AOS 2017
% of HHs saving into PGs/VPGs/SHG	71	94
% of HHs - Monthly Saving in PG/VPG is Rs 20/member	15	5.8
% of HHs - Monthly Saving in PG/VPG is Rs 50/member	47	34.2
% of HHs - Monthly Saving in PG/VPG is Rs 100/member	30	44.7
% of HHs - Monthly Saving in PG/VPG is more than Rs 100/member	7	15.2

^{*} Regarding PG/VPG monthly saving, household have increased monthly saving amount in comparison of 2016.

8. Enterprise Development:

Table 9.1 – having non-farm enterprise (% of HHs)

	Component 1		Component 2		Comp. 1 + Comp. 2	
	Project	Control	Project	Control	Project	Control
Have non-farm enterprise	23	21	13	13	18	17

The project has supported the beneficiaries in establishing and expanding small and medium scale enterprises (weaving, food processing, shop, hotel, transport, tent house etc.). The survey results regarding owning non-farm enterprises in project villages, only 18% have non-farm enterprise.

In component 1, 65.4 % project households reported that they have received training from vocational training agencies. In component 2, 32.9 % project households reported that they have received training for entrepreneurship development.

* Under the component 1, project has been promoting short term courses in agri-horti and allied activities under the vocational training sub-component. Most of trainees are adopting self-employment and starting their own business. One of the example, from Kaljikhal block, Oyster mushroom cultivation and its marketing was done by project household, who have received training under VT program. The household are being earning around Rs 7000 per month from this activity.

9. Convergence:

With the support of district administration under the District Implementation and Coordination Committee, an effective convergence has initiated. In component 1, 70% and In Component 2, 68% project households' report they benefited from new technologies promoted by Govt Agencies (Boards, Line Dept, KVK, Technical Institutions, Agriculture University, etc.). These technologies are such as agriculture tools and techniques, animal and crop insurance, soil testing, improve seed, organic seed, organic fertilizers, access to fishlings and etc. Technical Agency & Livelihood Collective staffs need more focus on providing information on various schemes with various government departments and also assist PGs/VPGs/LCs to factor such resources in their FSIP/AUP.

Adoption of Farm Machinery Bank scheme by the federation /LCs is an important initiatives; it may provide access to small and marginal farmers. The use of such machinery would boost efficiency over inputs, reduces drudgery, incrementally optimising.

* Department of Agriculture provides Farm Machinery Bank 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 and each LC having average income around Rs 5000 per month.

* As 74% project households adopt improve crop variety, households getting improve seed and plants from different schemes i.e. National Food Security Mission, Beej Gram Yojna, Horticulture Mission, NVI Vegetable Production etc. of agriculture, horticulture departments.

- * Vaccination, Cattle Insurance and fodder development program facilitate by Department of Animal Husbandry.
- 69% project households report that they benefit from new technology through convergence.
- 7% project households report that they save more than 2 hours time per day.

10. Housing:

- 30% project households report that they improved their house in the last 12 months.
- 48% project households report that they have improved water supply and sanitation in last 12 months.

11. Irrigation through LDPE Tank:

Table 12.1 – % of HHs

	Component 1	Component 2
Any LDPE tank constructed through Project	42.7	20
Water Source of LDPE tank		
Rain Water	24.7	45.5
Natural Drinking Water	23.7	50.9
• Other (i.e. natural spring)	51.6	3.6
Annual Use of LDPE Tank		
One Time	10.4	9.4
Two Time	37.5	30.2
• Three Time	15.5	15.1
More than three time	36.5	45.3
Increase in Production		
• Small (<10%)	31.5	47.9
• Medium (10-20%)	56.5	29.2
• Large (>20%)	12.0	22.9
Average Area (in nali) irrigated through LDPE Tank	5.72	4.41
Satisfy with this Irrigation System	90.6	78.2

This theme was not included in the AOS of 2016. ILSP provided support for minor irrigation activities through LDPE tanks. The positive effects of such intervention has assisted the households in adding the area of cultivation and also reported increase in the production especially in horticulture (Ref. Table 6.1). The capacity of each LDPE tank is 13.5 KL and the size is 5m Lx3m W x1.25m H. In component 2, number of LDPE tank is less than in component 1 due to there are other activities (i.e. Irrigation Channel, Village Pond, Irrigation Lank, Roof Water harvesting Tank, etc.) for irrigation and LDPE is one of them. The use of

LDPE tank is primarily for off-season vegetables i.e. Green Vegetables, Tomato, Onion, Pea, Chilly, Potato etc.

100% project households reported increase in production due to LDPE tanks and in addition, 2% of LDPE tanks are being used for fish production for an additional income.

The fishlings are provided by *Department of Fisheries* through convergence. On an average 5.72 Nali in component 1 and 4.40 Nali in Component 2 area irrigated through LDPE tanks.

12. 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	9.5	12.5	11.0
% of HHs adopt due to Time Saving	33.8	26.3	30.1
% of HHs adopt due to Reducing drudgery	15.4	15.0	15.2
% of HHs adopt due to all above reasons	41.3	46.3	43.8

This theme was not included in the AOS of 2016. In the context of Uttarakhand region, women are the major contributor in economic activities especially in the fields of agri-horti / livestock sector besides their intense household chores responsibilities. Project has scaled up drudgery reduction activities by promoting friendly cultivation and allied tools (see below table 13.2) to which women have responded with greater participation and appreciation. 71.5% of project respondents reported that they were aware of drudgery reduction tools and 65% project respondents report project has helped in providing drudgery reduction tools directly.

In component 1, 79 % and in component 2, 63% women are using drudgery reduction tool into their daily economic activities.

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

	Component 1	Component 2
Sickle	79 %	48 %
Watering Cane	29 %	47 %
Milk Cane	14 %	39 %
Power Weeder	8 %	-
Power Tiller	11 %	10 %
Spray Machine	35 %	18 %
Light Trap	3 %	1 %
Chaff Cutter	3 %	2 %
Compost Pit	7 %	22 %

Improved Sickle is used in daily fodder for livestock, which is used by 79% respondents in component 1 and 48% respondents in component 2.

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	20.5	40.0	30.25
30 to 60 minutes	40.0	35.6	37.80
1 to 2 hours	31.0	18.8	24.90
2 hours and above	8.5	5.6	7.05

Table 13.3 indicates these tools have contributed to saving time of users in economical activities related to agriculture and allied value chain. It is pertinent to note that time stated by the respondent in each of the time slot for both the component has been more of an approximate.

CONCLUSIONS:-

The Integrated Livelihoods Support Project is in its seventh year of implementation and the mid-term review of the project was conducted in April-May 2016. During the mid-term review, a team of experts had made a number of changes in the implementation mechanism that related to the project interventions for better results. The project has documented a number of success stories in the field of vegetable cultivation, water conservation and other livelihood activities, which the project will replicate in other project areas. Following are the main findings of the Annual Outcome Survey-2017 in the form of key performance indicators, on which future action planning will be based.

- 100% project households have heard about project
- 98% project households have no food shortage during last 12 months and those experienced food shortage is for a marginal time scale
- 97% project households have their own productive land
- Average land holding is 13.5 nalis (0.27 ha) per household in the project area
- 45% project households report crop productivity increased when compared to last 12 months
- 89% project households have their livestock and dairy value chain is incrementally progressing
- 57% project households report income from sales of agriculture production
- The project has provided the necessary intervention in the financial services and the average credit received by the beneficiaries is to the tune of INR 37022.
- 96% project households have a monthly saving and the amount has increased compare to last year

- 94% project households were regularly saving with PGs/VPGs
- 60% project households reported that monthly saving in PG/VPG is Rs 100 or more per month
- 30.5% project households have fully repaid their credit on time
- Average irrigated land area through LDPE tanks is 5.06 nali and primary use of this water source was for the purpose of horticulture.
- The project households have benefited by accessing various schemes through the convergence with various government promoted programs. The knowledge among the beneficiaries in this intervention has been valuable.

Table C – Component 1:- Average Income from different source (in a year as per AOS 2017)

S.N.	Particulars	Amt in INR
1.	Average Income from Traditional Crops	2301
2.	Average Income from Tree Crops	29650
3.	Average Income from Vegetables	11320
4.	Average Income from Livestock	32330
5.	Average Income from Non-farm Enterprise	55425

Table D – Component 2:- Average Income from different source (in a year as per AOS 2017)

S.N.	Particulars	Amt in INR
1.	Average Income from Traditional Crops	4804
2.	Average Income from Spices	2313
3.	Average Income from Vegetables	10608
4.	Average Income from other source	3996
5.	Average Income from Livestock	34498
6.	Average Income from Non-farm Enterprise	82752

To conclude, the project has thus far made positive progress in the lives of the beneficiaries. The respondents were very cooperative and enthusiastic in sharing the information and narrating their household experiences relating to the project intervention. The survey results in the form of women participation attributable to their empowerment and gender mainstreaming. The beneficiaries have noted an incremental increase in the household income, due to a number of factors attributable to technology and its application, access to inputs both financial and commodities, gradual adoption of post harvest practices and support being afforded in the marketing. The survey surely provides an encouraging impetus to the project stakeholders to build on the experiences and the progress to enhance the yields in the livelihoods, food security and in the life of the householders.

The survey provides the following learning to the stakeholders for concerted planning and actions in the remaining life of the project:

- 1. Take appropriate actions to enhance the participation among the beneficiaries especially in the intense preparation and meticulous application of FSIP/AUPs;
- 2. There is a greater need to improve the support from the project staff especially on the point 1 above and also linking beneficiaries for timely and effective convergences with government promoted programs, banks and financial institutions for seeking financial instruments for intensifying the livelihood activities;
- 3. Access to water sources is directly linked to up scaling the livelihood activities especially in the farm based value chains. LDPE tanks have made positive difference especially in the horticulture, however, more resources need to be spared and in faster time.
- 4. Food Production, food security and marketing are the critical project elements. There is a need for greater participation from the beneficiaries in terms of pro-activeness. The project would need to ensure that beneficiaries intensify the application of learnt technologies and are on their own pro-active in the marketing channels.
- 5. To ensure optimum utilization of project, convergence there is a need of more assistance to the community in the form of technical guidance by field staff (including technical agency, livelihood collective).
- 6. There is a need for capacity enhancement of LCs that can facilitate households in the area of convergence i.e. crop insurance, cattle insurance from different schemes and different marketing segments that can provide more value to households for their produce.
- 7. Women have been the primary and highly productive source in strengthening the livelihoods and better food security. Optimising on their time, efforts and enabling them conserve their physical and mental energies definitely have been reflected in the survey. The project would ensure to hold intense consultation with them and find appropriate solutions.

