



Government of Nepal

Ministry of Agriculture and Livestock Development High Value Agriculture Project in Hill and Mountain Areas (HVAP)

The HVAP Approach: Lessons From the Value Chain Project



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Implementing Partners



About HVAP

The High Value Agriculture Project in Hill and Mountain Areas has been designed within the context of the IFAD Country Strategic Opportunities Programme 2007-2012 and responds directly to key policy initiatives of the Government of Nepal as expressed in its Poverty Reduction Strategy. Both stress the importance of developing economic opportunities by poor farmers and producers in hill and mountain areas, the need to support private sector development within public/private partnerships, and the need to reduce gender, ethnic and caste- related disparities through greater inclusion of disadvantaged groups in development.

The Ministry of Agriculture and Livestock Development (MoALD) is the main executing agency of HVAP. The main implementing partners are The Netherlands Development Organization (SNV), and the Agro Enterprise Centre (AEC) of the Federation of Nepalese Chambers of Commerce and Industries (FNCCI). The day-to-day management, coordination and implementation is in the hands of a Project Management Unit based in Birendranagar town of Surkhet district which is at the centre of the target area.

Key features of the project:

- Total budget: USD18.9 million
- Targeted beneficiaries: 13,500 households to increase their annual net income by Rs. 30,000 (approximately US\$300)
- Project implementation period: 6 February 2011 30 September 2018

The HVAP Approach: Lessons From the Value Chain Project

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FOREWORD

It is our pleasure to present the HVAP Approach: Lessons from Value Chain Development Project, a summary document of the processes and approaches that were adopted in the implementation of the High Value Agriculture Project in Hill and Mountain Areas (HVAP).

The HVAP was implemented from February, 2011 to September 2018, for the period of seven and a half years, in seven districts of province six and seven of the country (Achham, Jumla, Kalikot, Dailekh, Surkhet, Salyan and Jajarkot) by the Ministry of Agriculture and Livestock Development (MoALD) with financial assistance from International Fund for Agriculture Development (IFAD). The Netherlands Development Organization (SNV) and the Agro-Enterprise Center (AEC) of the Federation of Nepalese Chamber of Commerce and Industry (FNCCI) were the implementing partners.

We expect this document to be useful to follow for similar projects or programs, which will be implemented with a market-led, inclusive and value chain approach in the country and abroad. This will also be useful for the development partners, government and non-government organizations, private sector, researchers, students and other concerned stakeholders.

During the implementation of the value chain development programs through the HVAP, several techniques, tools and approaches have been tested, some self-generated and invented from the experiences gained, learning and sharing with the local communities, project partners, and stakeholders. These lessons were very useful and practical. The HVAP could also incorporate and include them as practical approaches, tools and techniques, which were key in successful implementation of the project.

It takes hard work and dedication of a lot of people to make a project such as HVAP a success. I am thankful to all of them who were involved in different roles and stages of the project. I would like to thank the honorable Ministers, Secretary, Joint-Secretaries and whole family of the Ministry of Agriculture and Livestock Development (MoALD) for guidance and directions during the project period. I would also like to thank chairpersons and members of the Project Steering Committee (PSC), Project Consultative and Coordination Group (PCCG) and HVAP Agribusiness Working Group of the project for their guidance and suggestions.

I would also like to thank the project implementing partners – Netherlands Development Organization (SNV) and Agro-Enterprise Center (AEC) for partnering with the HVAP and providing suggestions and comments in preparing this document. I am also thankful to all the project stakeholders at various levels who provided information, shared their learning and experiences and supported us during the project implementation.

I would like to thank the International Fund for Agricultural Development (IFAD), particularly its Director of Asia and the Pacific Region (APR), Country Program Manager, Country Program Coordinator, Supervision Mission and Implementation Support Mission teams for their guidance, supports and cooperation.

I would like to thank Mr. Heinz Greijn, Mr. Deepak Adhikari, Mr. Sanjeev Kumar Shrestha, Team Leader of SNV to HVAP and Mr. Krishna Thapa, M&E Expert of HVAP for harvesting the knowledge of the HVAP, assimilating them and producing the report in this form. I thank to entire Planning and M&E team of the HVAP for providing necessary information, data, and support while preparing this report. I finally would like to thank all the staff of the HVAP for their coordination, cooperation, comments and suggestions which helped make this report informative and useful.

Rajendra Prasad Bhari Project Manager, HVAP Surkhet, Nepal Sept, 2018

Acronyms and Abbreviations

AEC Agro-Enterprise Center
ASC Agriculture Service Centre

B2B Business to Business
B2S Business to Services

BDS Business Development Service

BLC Business Literacy Class

BPAP Business Plan Assessment Panel

DADO District Agriculture Development Office

DCCI District Chambers of Commerce and Industries

DLSO District Livestock Service Office

DFO District Forest Office
EOI Expression of Interest
JRM Joint Review Mission

JTA Junior Technical Assistant
LRP Local Resource Person
LSC Livestock Service Center
MAPs Medicinal as Aromatic Plants
MFI Micro Finance Institution

MoALD Ministry of Agriculture and Livestock Development

MSP Multi Stakeholder Platform

NTFP Non-Timber and Forest Product NGO Non-Government Organization

OSV Off Season Vegetables
PIF Poverty Inclusion Fund
PO Producers' Organization
PIU Project Implementation Unit
RAD Regional Agriculture Directorate

RLSD Regional Livestock Service Directorate

SNV The Netherlands Development Organization

ToT Training of Trainers

VAHW Village Animal Health Worker VAW Village Agriculture Worker

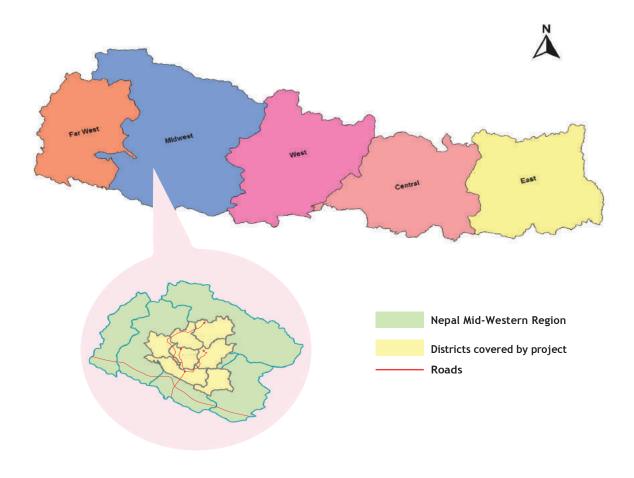
VC Value Chain

VCAP Value Chain Assessment Plan VCD Value Chain Development

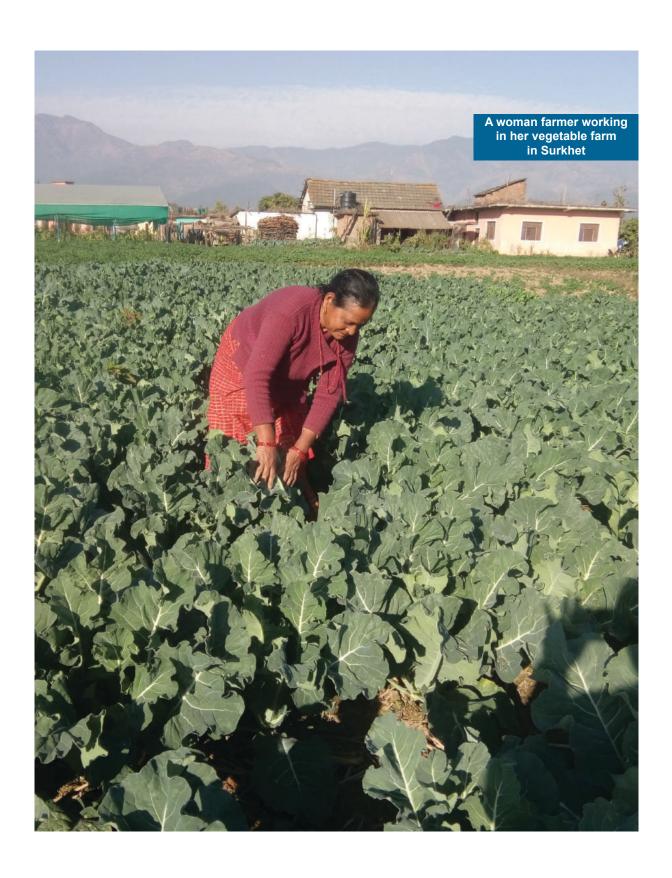
VCF Value Chain Fund VCT Value Chain Team

VDC Village Development Committee

District covered by HVAP







HVAP PRACTICE BRIEF 1

Inclusive Value Chain Development

The High Value Agricultural Project (HVAP) aims to achieve the reduction of poverty and vulnerability of women and men in hill and mountain areas of the Mid and Far Western Development Region of Nepal. This is done through including poor smallholders and landless people in carefully selected value chains that offer good market opportunities. However, not all value chains are conducive for integrating small farmers. Therefore, HVAP started with identifying the value chains that had the best potential to improve livelihoods of the target group. This first practice brief, in a series of five, explains how the value chains were selected and how the key actors were identified that spearhead the upgrading of the chain in an inclusive and market oriented way.

The people HVAP aims to include¹

The HVAP aims to help 13,500 households to increase their annual net income by Rs 30,000 (approximately US\$300). The project is located in the poorest region of the country and within that region, the project's hill and mountain districts are among the poorest. The project focuses on three North-South corridors which have ecological benefits for production and marketing: Surkhet-Chhinchu-Jajarkot road, the Surkhet-Jumla road and Surkhet-Dailekh road. These corridors connect seven districts including Achham, Dailekh, Jajarkot, Jumla, Kalikot, Salyan and Surkhet. The table below shows the baseline data concerning key poverty indicators of the population in these seven districts:

Baseline data of the population in seven districts

•	•						
	Surkhet	Salyan	Jajarkot	Dailekh	Achham	Kalikot	Jumla
Poverty rate ²	30.5%	28.8%	37.7%	35.8%	47.2%	57.9%	49%
Literacy rate	66.5%	48.5%	39.52%	48%	53.18%	38.5%	55.6%
School enrollment (Out of school children) ³	8.4%	11.9%	14.6%	12.7%	17.3%	13.9%	13.3%
Access to electricity ⁴ (household)	43.54%	14.53%	4.02%	13.57%	18.45%	11.62 %	29.31%
Access to pure drinking water ⁵ (household)	66.24%	60.31%	56.46%	53.87%	60.23%	58.97%	80.18%
Roads ⁶ (in Km)	844.05	741.7	481.21	895.63	754.44	190.69	290.66

The project focuses on the poorest people who tend to be excluded from development because they lack the power and voice for claimingbenefits and services. From the outset, it was decided that among the participants in all project activities, the proportion of women should not be less than 60% and proportion of Dalits, Janajatis and other marginalised groups shouldn't be less than 25%.

Poverty incidence in the Mid-Western Development Region: 44.8, Far Western: 41.0 and Nepal: 31.0

²Source: Small Area Estimation of Poverty 2013 by Central Bureau of Statistics

³Source: Global Initiative on Out-of-School Children, Nepal Country Study 2016. UNICEF

⁴Source: Access to Electricity, National Population and Housing Census 2011

⁵Source: Pure drinking water include tap/piped tubewell /hand pump, communal well etc. National Population and Housing Census 2011

⁶Including strategic roads, urban roads, district road network, village roads. Source: Statistics of Local Road Network (SLRN) 2016

Almost 90% of target group consists of subsistence farmers who were not, or only marginally, integrated

in value chains. The basic assumption underlying HVAP is that if these people can be included in value chains, they will have the opportunity to generate more income and achieve a better standard of living.

The selection of the value chains

In 2009, a team of experts from SNV and the Department of Agriculture conducted a study into 18 value chains (as stated in the Project Design) with market potential and with opportunities for the inclusion of small farmers. After start of the project in Feb, 2011, this resulted in a long list of 52 commodities in the Value chain prioritisation workshops which were held at the national and regional



A workshop on value chain prioritization held in Nepalgunj

level with representatives of producers, cooperatives, agribusiness organisations, government agencies and development partners operating in the region. After a critical analysis by the participants of these workshops, the long list was reduced to a shorter list of 22 value chains. Subsequently, the project staff conducted consultations with individual agribusinesses and companies in Nepalgunj and Kathmandu to find out the value chains they were interested in the most. This led to a final selection of seven value chains. The main criteria used to select the commodities were:



Participants of workshop on value chain prioritization conducting group excercises

- Market potential⁷
- Potential for economic growth, which means whether it can accelerate rural economic growth,
- Impact potential, which refers to the number of households that could be covered by choosing that commodity; and
- The social inclusion potential, which refers to the potential to also include the most marginalised households.

The commodities that emerged from this process were apple, ginger, goat, off-season vegetables, timur, turmeric and vegetable seeds. What these commodities have in common is that many of the small farmers were already involved in the gathering or cultivation of these products, but

mainly for subsistence purposes. At the same time, value chains for all these commodities did exist in Nepal, but with the involvement of only commercial farmers. The challenge for the HVAP was to find ways to also involve the small subsistence farmers in these chains. This had to be done in consultation and close collaboration with agribusinesses downstream the value chain.

⁷Including unfulfilled national demand, unfulfilled international demand (export), import substitution potential, high locational and seasonal advantage (niche value), market accessibility, high value /low volume and value added potential

The agribusiness companies constituted the entry point for the intervention because they are best informed about market opportunities. The approach for achieving this was captured in a value chain intervention plan which was developed in 2011.

Description of commodities and market opportunites

Brief description of each commodity and the market Value Chain opportunities Apple is a potential crop for import substitution and export promotion. It has great potential in terms of suitable agro-climatic conditions available in high hill districts such as Kalikot, Mugu, Jumla and Dolpa. Its import substituting potential is revealed by the fact that during 2007/08, apple fruits worth NR 500 million from China and about NR 400 million worth from India were imported. Besides table use, apples can be processed into dried apple chips, jam, jelly, cider or brandy, etc. Apple The major interventions include production and post-harvest management technology, link organic apple producers with organic markets and also bring new technical skills and knowledge into practice. Ginger is an important spice crop traditionally grown in the mid-hill areas of Nepal for cash income. The country produced 11.5% of world's total ginger production and became 4th largest producer in 2008. The production has made the country self-sufficient for domestic consumption. The major interventions were facilitating quality production and post-harvest handling, establishing collection and storage facilities, entrepreneurship development Ginger and business planning for producer group organisations, support in branding, export facilitation and market diversification. Goatkeeping is an integrated approach for majority of farmers and handy source of money in need and is being effective for poverty reduction and food security improvement. Goat meat is second largest consumed meat and contributes about one fifth of the total meat produced in the country. The major interventions include plantation of fodder trees and promotion Goat of hay and silage making practices to fulfil the feed requirement; support scientific shed management, breed improvement, promotion of viable transportation means, establishing collection centres with reconditioning scheme/facilities; training on improved rearing practices to facilitate larger scale of production including establishment of private and community-based goat resource centres.

Value Chain

Brief description of each commodity and the market opportunities



Off-season Vegetables

Off-season vegetables (OSV) have emerged as an important source of income and an effective means of poverty reduction with increased consumption and marketgrowth. The major off-season vegetables grown in the project areas are cauliflower, tomato, cabbage, peas and beans in terms of production and sales. Most of the production pockets in the areas are located along the roads within 1. 5 km distance from the road heads and only about 40% of the cultivated land is irrigated.

The interventions focused on commercial production, value addition, introduction of poly-house technology, promotion of irrigation technology, support in providing high yielding and improved varieties of vegetables, and technical support on production enhancement and post-harvest management, support marketing structures, establishment of marketing and technology information centres.



Timur

Timur, commonly known as Nepalese pepper, found mostly in open barren land and forest, has been as an integral source of income for women, landless and unemployed people in the project areas. About 850 to 1,100 MT of timur is collected annually in Nepal, where more than 80 % is exported in raw and processed form to Indian markets whereas oil in small volume to European markets.

The major interventions were sustainable harvesting, post-harvest management, marketing, financial and business services to enhance production, improve productivity and harvesting methods, value additions and quality improvement through grading, packaging and processing, and strengthen market linkages besides exploring new markets.



Turmeric

Turmeric is an essential spice for Nepalese households and listed as one of the top five major spice crops in Nepal. HVAP districts account 10% of the national production having major share from Salyan, Achham, Surkhet and Dailekh districts.

The interventions included piloting high curcumin content as well as high yielding varieties; development of seed production pockets; support to farmers on production and post-harvest handling, improved and efficient processing technology and upgradation of existing processors. In addition, the long term interventions included strengthening DCCI to facilitate contract arrangements and training on business planning and enterprise development, facilitate and support for Good Agriculture Practices (GAPs) and Good Manufacturing Practices (GMPs), and to establish infrastructures supporting markets.

Value Chain



Vegetable Seeds

Brief description of each commodity and the market opportunities

Vegetable seeds have been identified as a high value; low volume product that, if effectively implemented, can be used to address issues of both food security and self-sufficiency, as well as economic development of rural areas. It is estimated that over half of the commercially required improved vegetable seeds are met by in country production and rest are met mainly by import from India, Japan, Korea, Thailand and other countries. The demand for improved seeds is increasing every year due to increase in the area under fresh vegetables both for main season and off-season. The agro-climatic diversity of Nepal (ranging from tropical low lands in the south to high mountains in the north, to Himalayan elevation) has an advantage of producing different kinds of vegetable seeds. This advantage can be utilised to produce large amount of vegetable seeds for meeting internal demand and there lies a great prospective of exporting vegetable seeds of good quality in Bangladesh, India, Pakistan, Sri Lanka and other countries. The interventions focused on training on seed production, quality inspection and post-harvest management involving Anchor Company, support seed extraction/threshing and processing facilities. production and post-harvest management tools and equipment including irrigation, improved production - market connectivity.

The HVAP approach to making the value chains more inclusive

The intervention plan for upgrading the value chains in an inclusive way was based on a theory of change that can be summarised as follows: At activity level the HVAP approach consists of four sets of interventions:

- 1. Boosting the production of the selected commodities by the small farmers.
- 2. Establishing business linkages between the farmer groups and agribusiness down-stream the value chain, based on sound business cases for both parties.
- 3. Investing in the enabling environment and engaging actors that belong to the enabling environment.
- Taking measures to promote the participation of the most disadvantaged people, including women 4. and people who belong to groups such as the Dalits and the Janajatis.

It expected that this combination of interventions will lead to two outcomes:

- The selected value chains will be upgraded to a higher level of production by all chain actors in a sustainable way.
- The target group of small farmers will generate more income and they will be able to sustain and even increase that income. At impact level, this will ultimately lead to a better standard of living with increased access to household assets, a decrease in child malnutrition and increased food security.

This Theory of Constraints has based on a number of assumptions:

- First, in order to achieve sustainability, the production of commodities by target farmers must be market oriented. Therefore, the strategy is referred to as "market-led value chain development".
- Second, a value chain is seen as a system in which various stakeholders including suppliers of advice and inputs, farmers, traders, processors, manufacturers, wholesalers and exporters interact with each other. Furthermore, the chain is embedded in an enabling environment that is composed of financial institutions, research institutions and a government with its policies and

line ministries that provide services. All these actors need to be involved in one or another way to increase the competitiveness, and to achieve the inclusion of small subsistence farmers in the value chains.

- Third, depending on the perishability of the commodity the farmers selected as beneficiaries of this project need a minimum proximity to the road. This is a critical aspect of the HVAP approach and it is related to the mountainous geography. The road corridors are few, and they are only connected to each other at the centre. Many households live far away from the nearest road and farmers have to carry their produce to the road before it can be sold. This puts a limitation to the number of households that can be reached with a value chain intervention. Because the HVAP interventions take the road system as a point of departure, the project is called 'road-corridor based'.
- Fourth, because the transaction and transportation costs of dealing with individual farmers is too high for HVAP, traders and service providers can only work with farmers who are organised in groups.
- Fifth, farmer groups are not necessarily inclusive. In fact, the most marginalised are often also excluded from processes of group formation. Therefore, people who belong to the vulnerable groups including women, Dalits, Janajatis and other poor people require some extra project support in order to link them to groups.

The identification of the beneficiaries and key stakeholders

The identification and engagement of beneficiaries and other key stakeholders is done through an annual recurrent cycle of steps that is described below and in the other practice briefs. The first step consists of issuing a call for expressions of interest (EOI). The calls are announced through radio because that is the communication channel that reaches most people, including the poorest. Two, broad groups of value chain actors are addressed by the calls for EOIs:

- Private sector actors including companies, firms, cooperatives and individual service providers.
- Producer groups and producer cooperatives.

In the calls, both groups are invited to come up with proposals to invest in the value chain in a way those private sector actors, processers, producers, cooperatives and groups as well as people in the target districts will benefit. In the announcement of the call, the HVAP explains that the EOIs will be subjected to an assessment, and applicants who qualify will be invited to submit a business plan for co-investment. The business plan will, after approval, be eligible for co-investment by HVAP. Investments can cover "hardware" such as infrastructure and equipment, as well as "software" such as management, organisational and technical support, certification and other services. HVAP has separate windows for financing the private sector actors (Window 1 with a co-investment of maximum USD 100,000 per sub project) and producer groups and cooperatives (Window 2 with a co-investment of USD 20,000 per sub project).



Cabbages grown in a vegetable farm in Chhinchu, Surkhet

Window	Co-investment Fund	Eligibility Criteria	Grant Limit	Matching Fund Ratio
	Company/firm/service provider (institutional), cooperatives	Registered for 3 years and have 3 years relevant business experience	US\$ 100,000 for processing and marketing of agriculture products and US\$ 500,000 for one cold storage as exceptional case	50:50
W1 Company/firm/service provider (institutional), cooperatives		12 months business experience after registration with at least 3 years demonstrable experience in VC	US\$ 10,000	50:50
	Service provider (private individuals)	Certified as eligible for proposed service provision	US\$ 500 + US\$ 1000 for demonstration	50:50
W2	Producer groups/ cooperatives	Registered for one year with relevant government agency and have relevant experience	US\$ 20,000	85:15 or 50:50

The assessment of EOI

The EOIs submitted by farmer groups and private sector are assessed on the basis of four criteria.

- First, depending on the perishability of the commodity, the distance between the farm and the road should not exceed a specific number of hours for walking. Furthermore, the production has to be technically feasible in terms of conducive ecology, access to water and markets.
- Commercially viable, meaning profitable and meeting market demands.
- Open for inclusion for farmers that belong to the vulnerable groups (women, Dalits and Janajatis).
- Financial and managerial capabilities of the proponents.

To assess the EOIs, they are first subjected to a desk review. The desk review finds out if

- The proposal meets the above criteria.
- The proposed co-investment is linked with value chain priority as per intervention strategy and action plan and very likely to address the value chain constraints and grab the opportunities.
- Timeframe of the proposal does not go beyond HVAP project deadline.



The pile of EIOs received after the first call in 2012 resulted in 675 applications.

Subsequently, a team of experts including representation of VCD/business community, technical and Gender and Social Inclusion experts from PMU and representatives of partner NGOs, representatives from district line agencies (DADO, DLSO and DFO) and DCCI visits the groups for a field assessment and verification. Then, the team reviews if

- the proposed co-investment is linked with value chain priority as per intervention strategy and action plan and very likely to address the value chain constraints and grab the opportunities.
- there are several investment options which are technically and commercially viable.
- the proposed co-investment is replicable innovation or up-scaling/ replication of already proved innovations.

- proposal ensures the appropriateness of proposed grant and co-investment ratio.
- the grant applicant entity does have the management and financial capacity to implement the proposed co-investment.
- the co-investment should produce a significant and sustainable catalysing impact on inclusion of poor, women, Dalits and Janajatis.

Assessment of Business Plan

Once the business plan is received, the value chain team assesses the business plan focusing:

- Technical viability (score 20).
- Commercial viability (score 30).
- Management and financial capacity (score 20) and
- Impact (score 30).

The business plan has to receive a minimum of 60 scores to be eligible for project grant.

For VCF W1, the value chain team internally assess the business plan and submits it to Business Plan Assessment Panel (BPAP) for final assessment. The project formed a BPAP comprising 4 members from Private Sector Representative (business expert), Business Finance Expert, Agriculture or Livestock or Agro- Forestry Expert (as per nature of co-investment) and Impact Perspective Expert. Its mandate include:

- Review the business plan and evaluate them according to pre-set criteria as stated above.
- Recommend to PMU for approval of business plans securing at list 60% of the total score.
- If the independent BPAP considers the business plan meeting minimum criteria but needs some adjustments if required.

After the assessment report, the value chain teams prepare the contract to be signed by both parties: project and grantee for co-investment and implementation of the sub-project.

The implementation phase

The processing of the expressions of interest is followed by four steps that will be further explained in the practice brief 2-5.

Establishing business linkages (PB2)

HVAP brings farmer groups and all other relevant actors of each value chain together in multi-stakeholder platforms (MSPs). Practice brief 2 elaborates on the MSPs.

• Advising farmers on the development and implementation of business plans (PB 3) HVAP supports groups with technical, business and social services. These service providers can belong to the private sector, NGOs or government. HVAP aims at involving the service providers in a way that service provision will continue after the phasing out of HVAP. The strategy HVAP chose to accomplish this consists of developing the local market for demand and supply of services. This strategy is explained in practice brief 3 on the service market development.

Making the value chains inclusive (PB 4)

In the first call for expressions of interest, HVAP did not yet engage in group formation. In many of the VDCs, farmer groups did already exist as a result of interventions by government and development agencies in the past. In first instance, HVAP built on these already existing groups. However, many of these farmer groups did not yet include the most vulnerable people. Practice brief 4 explains the interventions focused on inclusion of the most marginalised households in groups.

Financing inclusive value chain development (PB 5)

Practice brief 5 elaborates on the financing strategies of HVAP including fund management and organisation (structure and processes) of HVAP for assessing and approving grant applications and managing the grants.



Vegetable collection center, Jungala, Salkot, Surkhet

Results

If the project will be successful in achieving the targeted outcome, 13.500 farm households will increase their income with at least Rs. 30,000 per year. The ex-ante costs effectiveness in terms of the average cost per 1 USD income increase in the targeted farming households will be higher than USD 4.67 (currency rate 2 December 2017 and USD 3.35 if the currency rate of 6 February 2011 is used when the project started). This implies that if the upgraded production level is sustainable, the payback period (not taking into account the time value of money) will be less than approximately 4.5 years. For making a more rigorous costs benefit analysis, more data would be required concerning other costs and benefits experienced by the targeted smallholders and by other project stakeholders such as agricultural input providers, traders, processors, wholesalers, and extension service providers.

By the end of July 2018, HVAP has been able to reach out to 15.965 farmer households. These households are members of one of the 456 groups and cooperatives that HVAP has linked up with buyers and suppliers. Out of these beneficiary households, 13,221 are able to make profit from sale of agriculture production and 5266 households have been able to increase their net income by Rs 30,000 or more. Out of these 5286, 12.5% were Dalit households, 12.7% Janajati households and 74.8% households belonging to other castes. Furthermore, 49% of the leadership positions of the groups and cooperatives were held by women.

No. of households with increased additional net income of NRs 30,000 by value chain and caste/ethnicity

Value Chain	Househo	lds (Well Bei	ng Ran	king)	Hous Caste	eholds (Social	House (Gend	eholds er)	Total HHs	Involved HHs	Beneficiary Households
	Extreme Poor	Moderately Poor	Near Poor	Non- Poor	Dalit	Janjati	Other Caste	Male	Female			
Apple	172	430	202	10	58	1	755	269	545	814	1821	2107
Ginger	33	58	26	17	6	28	100	52	82	134	1045	1455
Goat	426	565	364	158	254	202	1057	618	895	1513	3414	3760
Off season vegetable	578	785	528	282	242	289	1642	697	1476	2173	3836	4223
Timur	167	235	51	28	80	133	268	274	207	481	1407	2205
Turmeric	21	41	17	32	17	17	77	53	58	111	1326	1765
Vegetable Seeds	39	17	3	1	4	-	56	21	39	60	372	450
Total	1436	2131	1191	528	661	670	3955	1984	3302	5286	13221	15965
Percent in 30,000 earned HHs	27.2	40.3	22.5	10.0	12.5	12.7	74.8	37.5	62.5			
Percent in Involved HHs	10.9	16.1	9.0	4.0	5.0	5.1	29.9	15.0	25.0	40.0		
Percent in Beneficiary HHs	9.0	13.3	7.5	3.3	4.1	4.2	24.8	12.4	20.7	33.1		

Source: HVAP Annual Report 2017/18

Average baseline and after intervention net income in 7value chains (NRs.)

	Baseline	After Intervention (FY 2017/18)	Increased (by)	Increased (times)	Achieved % based on Target of NRs. 30,000	Involved HHs
Apple	13,314	47,065	33,751	2.5	113	1850
Ginger	7,007	21,153	14,145	2.0	47	1045
Goat	25,025	72,040	47,015	1.9	157	3428
osv	11,770	91,099	79,329	6.7	264	3865
Timur	5,203	37,367	32,165	6.2	107	1414
Turmeric	4,391	18,210	13,820	3.1	46	1383
Veg Seed	1,917	16,906	14,989	7.8	50	372
Average	13,280	59,335	46,055	3.5	154	13357

Source: HVAP Annual Report 2017/18

Impacts

From the 15,965 farmer households, HVAP took a sample of 900 households and assessed the changes in terms of household assets index, child nutrition and food security. The findings of this impact assessment, called the RIMS study (Result and Impact Management System) are included in the table below.

Impac	t ind	icators	and	values

Indicator	Unit	Benchmark (2012/13)	Completion (2017/18)	Achieved Percent	Remarks
Households with improvement in household assets ownership index		12.3	13.06	6	57 % HHs increased the household assets index
Underweight children - weight for age	% total	25.9	23	-11.20	
	% girls	25.9	22	-15.06	
	% boys	25.9	24	-7.34	
Chronic malnourished children - height for age	% total	47.1	44	-6.58	
	% girls	44.4	43.6	-1.80	
	% boys	49.5	45	-9.09	
Acute malnurished children - weight for height	% total	9.5	8.9	-6.32	
	% girls	8.5	7.9	-7.06	
	% boys	10.4	13	25.00	
Households experiencing one hungry season	%	53.7	44	-17.99	
Month duration of first hungry season	Number	4.3	4	-6.98	
Households experiencing two hungry seasons	%	36.0	34	-5.66	
Month duration of second hungry season	Number	3.4	3.8	11.76	
Female household members that can read	%	42.2	79	87.20	
Male household members that can read	%	69.0	87	26.09	
Ratio of women to men between 15 and 24 that can read	%	73.9	117	58.32	

Source: HVAP RIMS Survey 2017/18

Lessons learned

More evidence needed to establish a causal link between interventions and impact data

The data gathered for establishing changes in household assets, malnutrition and food security seem to suggest a correlation between the project intervention. However, in order to establish a causal link, more evidence would be required, including:

- Data need to be gathered from a control group of households not belonging to the 15965 households reached out to by the project
- The statistical significance of the changes needs to be established, for example, through trend analysis and the calculation of p-values
- Rival explanations for changes need to be explored.

Not all value chains have performed equally well

Among the seven commodities HVAP project considered, the value chains for ginger, turmeric, off season vegetables were the most well-established, or mature value chains. The vertical linkages (connecting actors up and down stream along the value chain), the horizontal linkages (connecting actors at the same level within the value chain in cooperatives of export associations) and the service markets are well developed. Farmers who engage in commercial production of these commodities have a good chance to increase their net income with Rs. 30000 or more. On the other hand, the farmers that focus

on the commodities such as timur and vegetable seeds are expected to be less successful, as these value chains are less well established. More time and efforts would be required to achieve for these value chains a similar level of maturity as for ginger, turmeric, off season vegetables. It seems that from a project perspective, the investments in the value chains for timur and vegetable seeds have been less cost effective than the investments made in ginger, turmeric, off season vegetables. A more in-depth cost effectiveness analysis, establishing which characteristics of these value chains can explain the differences in cost effectiveness, would be of great value for future projects. It would help to further develop methods for identifying commodities that have the best potential for inclusive value chain development.

Time line of HVAP

Year	Main events and activities
2010	Signed HVAP on 10 July 2010
2011	February – Start of the project May – Selection of seven value chains
2012	Analysis of Value chain, Strategic Interventions Development; Pocket Areas identification, First call for EOI
2013	Call for Proposal, Evaluation and Rewarding sub project
2014	Implementation - Mid Term review
2015	Implementation
2016	Implementation
2017	Implementation
2018	September - End of project



A Ginger Field in Surkhet



HVAP PRACTICE BRIEF 2

Multi Stakeholder Platforms (MSPs): Establishing Business Linkages

In practice brief 1 on inclusive value chain development, we explained how HVAP selected seven value chains that provide the best options to achieve the project goal of reducing poverty and vulnerability of the people in the target areas. HVAP also identified the key stakeholders that were expected to spearhead upgrading of the value chains through issuing a call for expressions of interest. Before the farmers and other actors can engage in development of detailed business plans, they have to be connected to each other to ensure that production is informed by market demands. This practice brief explains how HVAP facilitates the establishment of business linkages between farmers and other actors in the value chain.

After the first call for expressions of interest in 2012, HVAP had a good overview of the farmers and private sector actors who would play a key role in the upgrading of the value chains in an inclusive way. As part of the EOI, applicants had formulated proposals for co-investment in sub-projects. To ensure that the elaboration of these proposals into detailed business plans would be informed by market opportunities, the farmers had to be connected with actors that are most conversant with the market: the traders, the wholesalers, processors and exporters. Also, the suppliers of knowledge and inputs had to be involved to ensure that farmers would make use of the most appropriate technologies and practices. Therefore, the HVAP project brought together all stakeholders, thereby giving them the opportunity to get to know each other, to jointly explore the value chain opportunities and constraints, and to develop a shared vision for developing the value chains. With a view to the realisation of this shared vision, stakeholders also needed time to learn what to expect from each other, and to decide with whom to engage in a business relationship. For facilitating the establishment of these business linkages, HVAP has developed a multi stakeholder process that basically consists of three steps:

- Clustering.
- Organising of Multi Stakeholder Platform meetings.
- Facilitating B2B linkages.

Clustering

Clustering¹ of key stakeholders involves dividing all applicants of EOIs and other relevant stakeholders in groups of actors that are most likely to engage in business relationships with each other, because they have something in common. The first thing they need to have in common is of course focus on the same commodity. Second, geographic location is important. The target area has three main road corridors. The actors within a value chain that are active along the same road corridor are most likely to engage in business linkages with each other. A third important aspect that is taken into consideration in the clustering is the total volume of production. If the volume of a cluster is too small, buyers will not be interested in doing business, because of the disproportionate transaction and transportation costs.

¹ A cluster is a geographical concentration of interconnected producers, businesses, suppliers and associated institutions which creates direct and indirect synergies among them, resulting in market linkages (USAID, 2008)

Multi Stakeholder Platforms (MSPs)

For each value chain, HVAP organises multi-stakeholder platforms to which a wide variety of stakeholders including producers (one representative from each producer group or cooperative), suppliers of services and inputs, buyers, policy makers, practitioners, researchers, educators, governmental line departments, NGOs, donors, banks, MFIs, representatives of other projects and civil society organisations are invited.

During the multi stakeholder platform meetings, stakeholders are given ample opportunity to share their views on market opportunities and challenges, and on what they can contribute themselves and on what they expect others to contribute to the development of the chain. One important component of



Participants at a multi-stakeholder platform workshop on off season vegetables in Birendranagar, Surkhet

the multi-stakeholder meetings is exchanges between representatives of the farmer groups with suppliers and buyers. The World Café method is used to organise the exchanges. In short rounds of twenty minutes, small groups of farmer representatives meet suppliers in a café-type setting. After every short session, the farmer representatives move to another table to meet other buyers and suppliers. This process leads to producer representatives engaging in tentative business agreements with suppliers and buyers. Appointments are made when the suppliers and buyers meet with the whole group in-situ, to further discuss the terms of the deal and eventually sign a contract.

A second important output of the multi stakeholder platform meetings are plans for joint action to further develop the value chain. These plans also include public investments in infrastructure such as bridges, culverts, gravity ropeways or market places.

MSP leads to improved technology

As a veteran agriculture expert who quit a government job and opened his own business, Dilli Prasad Pande had met hundreds of farmers in the region. He has run Shital Agrovet, one of the largest agrovet enterprises in Birendranagar, Surkhet, for almost 20 years. He has participated in dozens of Multi Stakeholder Platform (MSP) meetings, in which

farmers, traders, agro-vets and others converge to exchange ideas and share experiences.

It was in one such meeting some years ago that Mr. Pande came across a technology that helped him modify his drip irrigation system. Two different irrigation systems were on display there: one Indian and other from Israel. Mr. Pande found out that the two systems were much more developed and better than his. He was keen to discover why because he also ran Shital Thopa Technology Industry, based in Kathmandu and in partnership with a relative. The factory produced agriculture devices such as watering cane and drip irrigation system.

Mr. Pande noticed that the Israeli system was superior to the one his factory produced. "It covered larger area and also had a filter to prevent water from clogging," he recalled. "The meeting not only exposed me to new technologies, but also inspired me to constantly look for new ideas to improve and upgrade my products."

Inspired by the Israeli system, he attached a filter to his drip irrigation system and increased its size. His factory began producing the system a year ago. "Farmers have very positive response about our improved technology," Pande, sitting at his busy agro-vet store along with his wife and son, said.



Dilli Prasad Pande

Many like Pande have benefited from their engagement during multi-stakeholder platform meetings. Thanks to High Value Agriculture Project, the experienced farming technician now provides international quality tools to his customers.

Facilitating B2B and B2S linkages



Participants at a workshop on agribusiness and facilitating contracts for producers' organization in Matela, Jajarkot.

After the multi-stakeholder platform meetings, the buyers and processors (B2B) and the suppliers of inputs and services (B2S) visit the farmer groups. These visits are organised as B2B and B2S workshops facilitated by the HVAP teams. During the workshop, the traders have the opportunity to meet the entire farmer group (at the platform meetings they have only met the farmer group representatives), see the farms, assess the opportunities and constraints and give advice on the planning of the production in terms of quality, quantities and time. The parties also discuss the terms of a contract including the types of services and inputs provided to the farmers. What is agreed, is captured in a memorandum of understanding between the agribusinesses and the farmer groups.

Subsequently HVAP organises contract facilitation workshops in which farmers are informed about the various contract options. The type of contract varies per value chain. Within a value chain parties have a choice of different types of contracts, each with their advantages and disadvantages, depending on the volume of business and the development of the market.



- Interaction between traders and producer organizations
- Interaction betweeen Producer Organizations (POs) and business service providers (technical, credit, input suppliers etc)
- Demand collection of agribusiness (product + volume + time + quality)
- Supply estimation (product + Volume + time + quality)
- Develop linkage between agribusiness and producer organization (who for whom, when, how much volume)
- Verbal contract between Agribusiness and POs



- Support o develop production plan of the POs
- Monitoring the POs production
 - Mobilize the human resource to implement the PO's plan



- Organize field visit for assurance of quality, product and volume and timing
- Organize field visit to link Business Development Service (BDS)
- If agribusiness and POs are satisfied then initiation for formal contract



- Contract done between agribusiness and POs for selling and buying of produces
- Demand based production started
- Supplied as per market demand
- Institutional linkages for services (business, technical, insurance, finance, etc.)

Results

The table below provides an overview of the events organised as part of the multi stakeholder processes for each value chain between the beginning of HVAP and end of 2016.

Value Chain	Number of clusters	Number of multi stakeholder platform meetings	Number of B2B workshops	Number of B2S workshops	Number of contract facilitation workshops
Apple	8	4	5	1	3
Ginger	4	5	15	1	4
Goat	12	7	12	2	1
Off Season Vegetables	21	12	30	3	14
Timur	4	4	3	1	3
Turmeric	8	6	10	1	2
Vegetable Seeds	4	3	2	1	1
Total	61	41	77	10	28

At outcome level, these events have resulted in value chain actors developing a joint vision concerning opportunities and challenges for the entire value chain. Stakeholders developed joint action plans with specific roles for the various actors including private sector, the government, NGOs and cooperatives. The multi stakeholder platform meetings have proven to be very important knowledge sharing events, not only for farmers but also for the service providers, traders and processors. Last but not the least, farmers engaged in B2B linkages and B2S linkages that were formalised in contracts representing a total value of Rs. 221 million (over US\$ 2.2 million). An overview of the contracts per value chain is given in the table below.

Value chain	Number of contracts	Total contract volume (MT)	Total contract value in Rs. in Million	Total contract value in US\$ '000
Apple	32	1141	58.27	582.7
Ginger	8	238	7.14	71.4
Goat	0	0	0	0
OSV	77	4051	117.54	1175.4
Timur	12	38.48	15.98	159.8
Turmeric	7	104.2	1.85	18.5
Vegetable Seeds	15	104.2	19.9	199
Total	151	5676.88	220.68	2206.8

Source: Annual Report 2017/2018

Note : There is no POs contract with agribusiness on Goat VC

Lessons learned

Facilitating multi stakeholder platform is an essential component of value chain development.

The concept of multi-stakeholder platform was not included in the original project design of 2009. MSPs were introduced when the project had entered its implementation stage in 2013 and they have proven to be hugely successful. MSPs have been instrumental for linking the small farmers to other businesses and helping them to make the transition from subsistence farming to commercial farming. Moreover, the multi stakeholder platform meetings have proven to be vibrant events providing all stakeholders an opportunity to share and acquire new knowledge and to initiate joint actions aimed at upgrading the value chains.

Women participation in multi-stakeholder platform still limited

In the annual report 2017/18, it was reported that 10,116 women were actively participating as members in 456 groups/cooperatives. They constituted 63% of the total number of participants in the HVAP project, that target for women participation at the end of the project was 60%. In terms of women participation in the project the HVAP has achieved good results. Whereas, the participation of women in the multi-stakeholder platform processes is still very limited. Multi-stakeholders platform processes involve many public events. Traditionally, women are not expected to assert themselves in public. As a result, they often lack the confidence to share their knowledge and views unless they are invited to do so. This limits their influence in decision-making. Approaches to improve women's active participation in decision-making need to be developed.



Meeting with apple group in Vattadi, Kalikot

Addressing asymmetric trade relations and misconceptions

The trade relationship between traders and farmer groups is asymmetric, because traders are much better informed about the market. They can use this advantage to negotiate a lower price through playing off farmer groups against one another. The position of farmers can be strengthened through establishing comprehensive market information systems accessible for farmers and that provide more information than only prices.

At the same time, facilitating multi-stakeholder platform also includes addressing some of the misconceptions that farmers have about traders. HVAP staff noticed for example, that farmers hugely overestimate the profit margin of traders. After taking the farmers through the maths from the perspective of the trader, this misconception could be addressed. Only then, farmers became aware of all the costs traders have to consider, including for example post-harvest losses, transportation costs and risks. The ability to understand the value chain from the perspective of a potential business partner makes it easier to enter into a business relationship.

There is a need for facilitating multi-stakeholder platform also after the project has come to a conclusion. The question is: how can this be done?

Many stakeholders believe that, after HVAP has come to an end, there will be a need to organise multi stakeholder platform meetings for the purpose of sharing knowledge, establishing business relationships and planning joint action for value chain development. HVAP has been the main facilitator of these processes which raises the question of who is going to take over this role after the phasing out of HVAP. In the course of the implementation of the project, the idea emerged that the District Chambers of Commerce and Industries (DCCIs) are best positioned to take on the role of value chain facilitation. In 2016, HVAP developed plans to hand over the facilitation of multi-stakeholder platforms to the DCCIs whereby agribusiness and producer groups pay the DCCIs for their services. This would be an expansion of

the roles originally foreseen for the DCCIs which was focused primarily on the dissemination of market information, which was essential for ensuring that the programme would be market-oriented. In some value chains (ginger, timur and OSV), DCCIs did take the lead in facilitating MSPs.

The Joint Review Mission (JRM) conducted in January/February 2017 observed that there were positive signs that in four of the project districts, the DCCIs could play leading roles in local value chain development. In other locations the market management committee, strong producer organisations or agribusiness might be best positioned to take the lead. The JRM concluded that the type of actor responsible for leading value chain development may vary from VC to VC, and from location to location.

In search for a conclusive solution for sustaining the multi-stakeholder platform, some interrelated questions need to be addressed:

Which institutional arrangements are needed at a minimum to continue the multi-stakeholder platform? Can it be a light informal set-up consisting of a core team of leading actors that from time to time meet to discuss what is required to upgrade the chain, or is a more formal set-up required consisting of sector associations with offices, staff, budgets, sources of income? Which resources in terms of financing and human resource capacity are needed to make such institutional arrangement work, and who will provide these resources?

Side-selling is an issue that needs to be addressed

HVAP has achieved a lot with facilitating the establishment of business linkages (B2B and B2S). However, side-selling is a threat to the sustainability of business linkages between producer organisations, traders on the one hand and agribusiness, on the other.

Side-selling refers to farmers breaching their contracts with buyers through selling to other buyers when the market price is higher than the price agreed on in the contract. Side-selling can cause huge losses for buyers, especially if they have provided the producers with embedded inputs and services. When the market price is below the contracted price the opposite happens. Buyers are tempted to buy from other producers with whom they did not sign a contract. These practices undermine the trust between farmers and buyers which makes much harder to negotiate contracts in the future.

Side-selling occurred especially in the value chains ginger and timur because the prices of these commodities are very volatile. The HVAP worked a lot on building trust between farmers and buyers. This worked out well in for example the case of Organic Mountain Flavour(OMF), a ginger processing company. OMF provides seed, tools and technologies to farmer groups and cooperatives. The farmers sell their produce to OMF also when the market price is higher than the contracted amount. The contract between the farmers and OMF was revised with the amendment that the price can divert from the agreed price within a bandwidth of 10 rupees (plus or minus 5 rupees from the agreed price).



A herd of goat in Surkhet



HVAP PRACTICE BRIEF 3

Service Market Development

For small farmers engaging in a value chain is like being promoted to the Champions League of farming. To perform at that level, they need lots of support in terms of training, coaching, supply of inputs, storage, transport, financial services and business development services. Service providers are the source of such support. The service system can be seen as market in which a large variety of service providers operate. Some run their own business, others are employed by the government, cooperatives, NGOs or Chambers of Commerce and Industries. This practice brief explains how HVAP's interventions focus on making the service system function more as a market. This strategy is referred to as "service market development".

For farmers producing for the market is a lot more challenging than producing for their own subsistence. They compete with commercial farmers on price and quality. In order to achieve production volumes that are big enough to attract buyers, farmers need to collaborate as a team and organise the bulking of their produce in collection centres. The timing of the production needs to be in accordance with market demand. Because the innovation process in agriculture never stops, farmers need to have continuous access to new knowledge.

Service providers are the sources of the knowledge, skills and inputs for which farmers need to face these challenges. Services include technical services focused on the production, business services to ensure that the farming is commercially viable, financial services for the provision of credit, and social services to facilitate group formation and inclusion of the most marginalised. Service providers can belong to the private sector, NGOs, government or the cooperatives. The table below provides a comprehensive overview of the service providers relevant for the farmers in Mid and Far Western Region of Nepal.

Constraints of the current service market

When HVAP started, the service sector in the target area was not yet ready to reach out to thousands of small farmers that were expected to engage in the production of commodities. Upgrading the value chain implied not only mobilising existing service providers, but also developing the capacity of the service sector as a whole. This became a substantive component of the project. The approach adopted by HVAP is based on the principle that, in order to be sustainable, the project's interventions should be focused on making a large part of the service system function as a market. This implies that whenever possible, services need to be paid for by the clients and users of these services. This way the services become an integrated element of the value chain and the costs of the services are factored into the price that will ultimately be paid by the consumers. This is considered a more sustainable option than services that are paid for with public funds through line agencies, projects and programmes.

This strategy, which is referred to as service market development, is quite different from what is common practice. In many countries, including in Nepal, the provision of services to farmers is largely supply driven, organised by governments and donor agencies and financed with public funds. The services are often offered to the farmers for free. This has led to the notion among farmers that free services are normal, which has contributed to reluctance among farmers to pay for services. A second disadvantage of the free delivery of services is that the recipients are not very critical customers. As a result the quality of the services remains low because critical customers are an important driver for constant quality improvement. Third, and probably most important, free services have undermined the development of a sub-sector of commercial service providers.

Table: Who are the Service Providers?

		Technical Services	Business Services	Social Services	Financial Services	Other
Agri-Business		Embedded technical services provided through employed staff or hired local service providers				
Sector	Individual Service Providers ¹	Fee Based Services	Fee Based Services			
	Agro-Vets	Fee Based Services				
Cooperatives		Through trained local service providers employed or hired by the cooperatives	Through trained local service providers employed or hired by the cooperatives			
DADOs, DLSOs, DFOs, VDCs ²		Free or subsidized services by technicians	Free or subsidized services			Knowledge development /innovation
Res	earch Institutes					

¹Village Agriculture Workers (VAWs), Village Animal Health Workers (VAHWs) and Local Resource Persons (LRPs)
²District Agriculture Development Office (DADO), District Livestock Services Office (DLSO) and District Forest Office (DFO), Village Development Committees

Naya Ram Bayak, chairman of Bar Pipal Farmer Group, Salkot, Surkhet.

"We set up our group four years ago and started growing tomato, beans. We used wooden stakes to support plants of tomato and cucumber. We grew the seasonal vegetables only during winter, following traditional, subsistence farming. Ever since we were supported by High Value Agriculture Project (HVAP), we have adopted new technology. The HVAP has provided us with technical support. Last year, we introduced an Israeli technology at our farm which covers 53 ropanis of land. Instead of bamboo, we now use ropes for vegetables. We have started drip irrigation. We also carry out mulching for the vegetables. This technology prevents weeds and protects soil from evaporation. We have already signed contract with a collection centre. We also have digital weighing machine and plastic containers to transport vegetables.

The traditional farming was based on inadequate knowledge on agriculture, but the new technology has helped us increase our output. This year, we

sold tomato, bitter gourd, beans, cabbage, cauliflower worth 2.5 million rupees."



For a well-functioning and sustainable service market to emerge, all actors need to become more



A woman livestock service provider at her shop in Biddhyapur, Surkhet

commercially savvy and market oriented in their attitudes and expectations. Farmers, farmer groups, cooperatives, traders and agri-businesses need to be aware that with buying a particular service, they can take their production to a higher level in terms of quality and quantity, which will result in a higher income. They need to be convinced that the service will be of good quality, and that the price is proportionate with the increase in income they expect to realise. This applies also to services that continue to be provided for free such as for example services to the poorest households and vulnerable groups. Beneficiaries of these services need to be convinced that it is worth their effort and time spent on receiving the services. Hence, the quality of the service provision is a key factor that needs to be addressed and therefore, many of the HVAP interventions focus on this aspect.

HVAP interventions

HVAP has developed the capacities of district line agencies through organising exposure visits for district based technicians. They have visited agribusinesses, producer organisations and markets to get acquainted with innovative technologies, the functioning of the value chains and market demands.

Staff members of District Chambers of Commerce and Industries (DCCIs) have been trained in chamber management, conflict management and leadership development. Exposure visits to other DCCIs have been organised with a view to exchange successful practices.

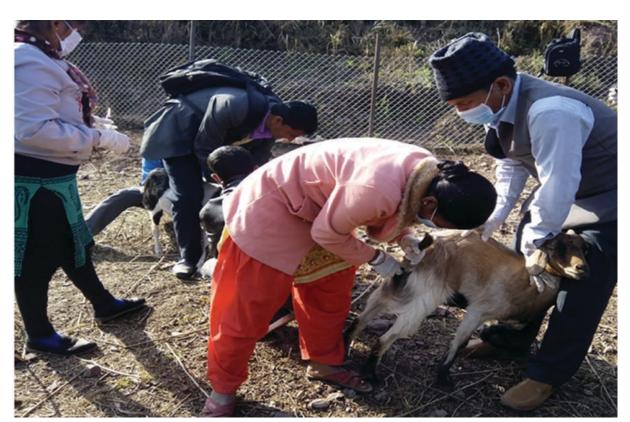
Service providers have been invited to agribusiness opportunity workshops to discuss with other stakeholders on the opportunities and constraints of the value chains.

Private sector providers of fee based services, such as village animal health workers, nursery growers have been supported with grants to upgrade the volume and quality of their services. Other fee-based service providers have been trained in entrepreneurial skills to improve their businesses.

Service models

Currently, four service models co-exist in the target area

- Service Centre Led Model: This is basically the model used by the government in which the services are provided in service centres by government line agencies (RAD, RLSD, DADO/ ASC, DLSO/LSC, HVAP).
- The Cooperative Model: The cooperatives employ or hire local service providers (JTA, VAWs, VAHWs and LRPs) to provide technical and business support services to their members (and to non- members for a fee). The cooperatives also provide inputs including fertilizers, seeds, tools and equipment, pesticides and others farm supplies to their members. The service is paid for from the revenue the cooperative gets from selling the produce.
- The Agribusiness Service Model: These are the services that are embedded in a contract between farmer groups and a buyer. The services include technical services and farm inputs. The farmer pays for the service through delivering the produce to the buyer.
- The Individual Private Service Provider Model: These are the private, often individual service providers that deliver fee based services. These include Village Agricultural Workers (VAWs), Village Animal Health Workers (VAHWs), Local Resource Persons (LRPs), Junior Technical Assistants (JTAs) and Business Development Service Providers (BDSPs).



Local Resource Persons (LRPs) providing technical services

Why it's important to invest in technical services: A trader's perspective

Providing technical services has been one of the major contributions of HVAP to both farmers and traders. The subsistence farmers used to rely on traditional knowledge passed down to them for tackling diseases and other issues of farming. But with the support from HVAP, they can now count on agriculture technicians commonly referred to as JTAs (Junior Technical Assistants).

Puja Singh, one of leading vegetable and fruit traders of Surkhet, has employed Ganesh Rokaya, a JTA. One recent afternoon, Rokaya arrived at Singh's counter at the Bulbule Agriculture market, an HVAP supported hub for farmers and traders.

Rokaya was one of several JTAs that HVAP had helped traders hire in order to solve problems among farmers. HVAP pays half of Rokaya's remuneration, with the rest borne by Singh. "I see a lot of benefit in paying for the JTA. If I don't pay 500 rupees, I will lose 5000 rupees if something goes wrong with vegetables," Singh, who employs 11 people, said.



Service market constraints

	Constraints	HVAP interventions to mitigate these constraints				
	Local resource persons lack insight in service needs of farmers	Exposure visits to farms and collection centres have been organised for local resource persons.				
Supply side	Financing institutions lack insight in financing needs of farmers and business opportunities to offer such services	Workshops on value chain finance and insurance have been organised. At these workshops representative of banks, insurance companies, microfinance institution exchanged views with farmer organisations, line agencie and NGOs on credit and crop insurance against risk for farmers.				
	Farmers are not aware of financial services offered on the market and why these services can be beneficial to them	Interaction workshops on financial services of products have been organized at the cluster level among the financial service providers and the farmers.				
Demand side	Farmers lack access to market information	HVAP has supported the Agro-Enterprise Centre of the FNCCI with the training of collectors of market prices of various commodities. Different ways of sharing this information with farmers were experimented with, including display boards in market centres along the road corridors, voice mail, FM broadcasting and a web page. Not all these experiments were successful. The outreach of the display board and the web page was too limited and voice mail turned out to be too costly. The AEC has developed an Agriculture Market Information System (AMIS) based on SMS.				

Results

With the facilitation of the establishment of business linkages between farmers and the service providers, HVAP has given a tremendous boost to the awareness among farmers about the value of services. Through the interactions they had with service providers and buyers, many farmers have become convinced that the procurement of services is essential for commercial farming, and that the fees paid for these services make it possible to substantially increase net income from farming. With the willingness to pay for services, a service market has emerged.

Lessons learned

The service sector needs continuous support

The service sector in the geographic intervention areas of HVAP needs continuous support in terms of training and access to knowledge and new technologies:

- Private service providers need to become viable businesses. In some cases, this requires service providers to diversify and expand the range of services they offer.
- New, and preferably local, service providers need to be trained in a way that their competencies meet the market requirement.
- Existing service providers need to be given opportunities to refresh their knowledge and upgrade their service offer in accordance with the latest technologies and insights.

It is still undecided who will be in the lead of service market development after HVAP has phased out

The question who takes the lead in further developing the service sector still needs to be answered.

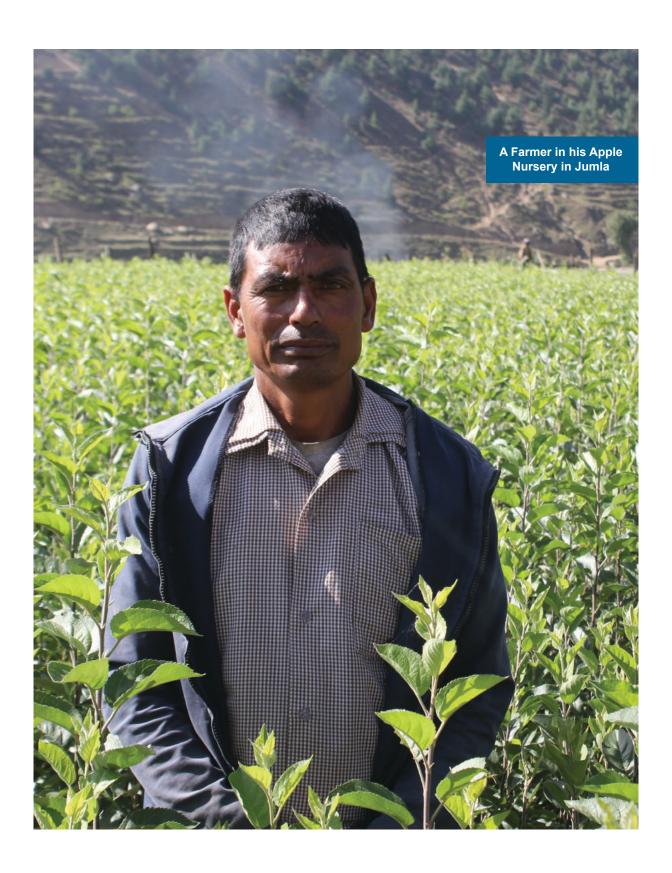
As the value chains grow and new technologies become available, it is important that the development of the capacity of the service sector continues, also after the phasing out of HVAP. The question is, who will take responsibility for service market development in the future? There are several types of organisations that are considered candidates for taking a leading role including the government, the sector associations, the Chambers of Commerce and Industries (CCIs) and the Agro-Enterprise Centre (AEC).

The vocational and higher education institutions need to become involved

Organisations that certainly should have a role, but that have not yet been involved in HVAP are the vocational and higher education institutions. Currently, the training of agricultural experts is mostly focused on the technical aspects of agriculture and livestock and with no or limited attention to value chain development or business skills. By making their curricula more relevant and comprehensive the education sector can make a very valuable contribution to inclusive value chain development. The question is which actors will take the lead in starting the dialogue with the education sector.



Women participants in Business Literacy Class (BLC)



HVAP PRACTICE BRIEF 4

Inclusive Producer Group Formation

Group formation is an indispensable element of all economic development programmes that focus on small farmers. Group formation, however, is not by definition an inclusive process. In fact, for the most marginalised people, it is very hard to become a member of a producer group. This is because they are not considered to be able to contribute sufficiently to the group, or because they are subject to discrimination and stigmatisation. This practice brief explains the HVAP approach to making group formation more inclusive.

One of the key assumptions underlying HVAP is that farmers need to be organised in groups. There are several reasons why group formation is a requirement for small farmers to enter the value chains:

- Getting services from commercial service providers is too expensive for an individual farmer. As
 a group, they can afford it. Also, government extension services would become too expensive if
 they are expected to reach out to individual small farmers.
- The quantities produced by individual farmers are too small for the traders and processors to
 engage in business deals with these farmers. If farmers form groups that organise the bulking,
 they become attractive business partners for commercial parties downstream the value chain.
- Eventually, farmer groups will evolve into cooperatives which have many advantages including
 a stronger negotiation position with suppliers and buyers, getting credit from financing institutions,
 engaging in processing, hiring staff that can provide technical or business services.

Therefore, almost all development interventions that focus on small farmers encourage group formation. In fact, in many of the VDCs, farmer groups did already exist as a result of interventions by government and development agencies in the past. In first instance, HVAP built on these already existing producer groups.

In practice brief 1 on 'Inclusive value chain development', we explained how the HVAP identified beneficiary producer groups and producer cooperatives, through issuing a call for expressions of interest.

While assessing the EIOs received from farmer groups, Value Chain Teams also talked to other groups in the same VDC, that had not submitted an EOI¹. Strong groups with promising products were also invited to submit a business plan or to participate in the next call for EOIs. Value chain teams visited VDCs from which no EOI was received, but that otherwise seemed to meet the ecological and locational criteria to generate commodities for the HVAP supported value chains. Through a sequence of steps, they mobilised the farmers who missed the first round of submitting EOIs and business plans.

Reasons for not submitting an EOI were various. For example, sometimes groups had not heard about the call. Other farmer groups did not submit an EIO because they assumed theirs would not be honoured because another group in the same VDC had already submitted an EOI.

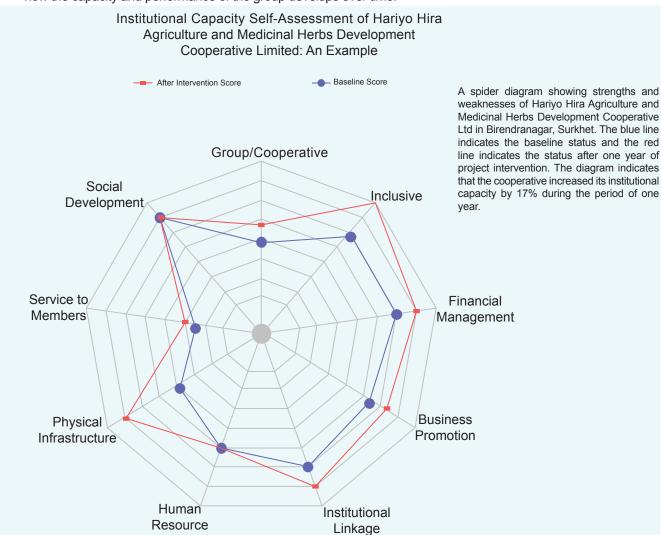
Group formation and strengthening



Members of a women's group discuss their plans

In locations that from an ecological and geographic point of view provided good opportunities for farmers to become integrated in a value chain, HVAP encouraged households that were not yet part of a group to form a group, or to join a group. The newly established groups, as well as the existing groups, were supported in strengthening their capacities. To this end, HVAP developed the Institutional Capacity Self-Assessment Tool for Value Chain Groups/ Cooperatives. This tool is used to determine for each group the type of support needed. On a regular basis, group members are invited to evaluate the capacity by rating their performance on nine key performance indicators. The ratings are presented in a spider diagram. Progress over time can be shown by including the assessment results of various years in the same diagram. The findings of these

self-assessments are used to determine which type of support is needed most by each group, and to measure how the capacity and performance of the group develops over time.



Including those that are left behind in group formation

Because it is often very difficult for the most marginalised households to become a member of a farmer group, HVAP has taken measures to link them up, too. The first step is to identify the ones who are left behind. As part of the Gender and Social Inclusion component of HVAP, the local partner NGOs are assigned to this task². PRA tools, including social mapping and well-being ranking, are used for identifying the poorest and most marginalised households.

Local partner on social mapping and well-being ranking

Kalpana Sejuwal, District coordinator for HVAP/ People's Awareness for Rural Development (PARD), Salli Bazaar, Salyan explains how the identification of the poorest and most marginalised households is done.

"People's economic status in the villages varies. We selected a community with about 50 households and we created a map of the area. We counted the households and gathered information concerning their sources of income. We looked at size of the landholding, the number of livestock they own, their access to forest and water resources and we looked at income from migrant members of the household working somewhere else. We gathered information to what extent there was sufficient income during all 12 months of a year. Then, we called for a meeting of heads of the households. We collected data on



Kalpana Sejuwal, a project coordinator, uses Capacity Self-assessment tool to identify poor and marginalized households in Salyan district.

their household incomes and expenses. We needed this information to determine which households were eligible for our support.

Once we collected data and identified the project's beneficiaries, we helped them prepare a business plan that best suited the value chain product. This was carried out in each social mapping and well-being ranking process."

Reaching out to these people is achieved through three types of interventions as listed below. All of these interventions are focused on group formation in a way the most vulnerable HHs would be included in existing or newly established groups:

- The Poverty Inclusion Fund.
- Business literacy classes.
- Training farmers in gender and social inclusion.

²Here we elaborate on how the project was able to identify poor households. Four poverty levels (extreme, moderately, near and non-poor based on land, food security, production, income etc.)

The Poverty Inclusion Fund (PIF)

After identifying the poorest and excluded households, the local partner NGOs identify producer groups that are best positioned to adopt these households as members of their group. Producer groups that commit themselves to including one or more excluded households are rewarded with a maximum grant of US\$ 3000. No co-funding by the group is required. The grant is supposed to be spent on the implementation of a production proposal. These proposals are developed by the local NGOs in consultation with the producer group. Typical activities funded for the PIF are inputs and equipment such as seed, sprayers, pesticides, fodder seed, fertilisers, small irrigation facilities, goat sheds and improved breed. In addition, funds from the Poverty Inclusion Fund can be used for providing supplementary support to the poorer households, or to help them to contribute to the co-funding that all households of the producer group are supposed to make for submitting an application to Window Two of the Value Chain Fund.

Value Chain	Number of PIF production proposals funded	HVAP support in Million Rs.	Number of excluded households adopted as members by the POs
Apple	11	2.6	9
Ginger	3	0.7	48
Goat	43	10.8	373
OSV	34	5.1	352
Timur	7	1.0	58
Turmeric	20	4.2	209
Vegetable Seeds	0	0.00	0
Total	118	24.93	1134

Business Literacy Classes (BLC)

Many of the people belonging to the poorest households, and especially women, are illiterate or semi-literate. This is a major stumbling block for them to participate effectively as producers in value chains. Literacy is needed for many aspects of being a commercial farmer including: reading business plans, contracts, training materials, market information and instructions on how to use inputs. One particular useful tool HVAP developed for the farmers is the farmer diary in which the farmer keeps track of all inputs, costs and income from commodity farming. This is an important self-monitoring tool for the farmers. All farmers interviewed for developing this practice brief knew exactly how their business had progressed over the years and how much additional net income they had been able to generate. Keeping the farmer diary requires a basic level of literacy and ability to make simple calculations.

Addressing illiteracy and semi-literacy is an essential step to include many of the poorest households in the value chains. The method of Business Literacy Classes (BLCs) developed by HVAP for training illiterate or semi-literate people, is based on the Regenerated Freirean Literacy through Empowering Community Technique (REFLECT) approach. In the nineties, this approach for literacy and social change was developed by ActionAid. The approach builds on the theoretical framework developed by Paulo Freire.

The project has trained BLC facilitators (one per PO) in 6-day ToT training sessions. The BLC facilitators are members of the producer groups and selected by the group members. Having passed grade 12 was a requirement and preference was given to female facilitators. The main learning objectives of the BLCs are:

- Understanding business plans and profit and loss statements;
- Understanding mathematical calculations related to their business plans;
- Building joint efforts for economic and social change;
- Women empowerment on business aspects and social rights
- By the end of 2017/18 a total of 8617 people (98% women, 18% Dalits and 12% Janajatis) had participated in Business Literacy Classes.

How a Women's Farmer Group Benefitted from Business Literacy Class

The Business Literacy Class (BLC) targets rural, semi-literate women involved in value chain activities. The goal is to train them to carry out business transactions.

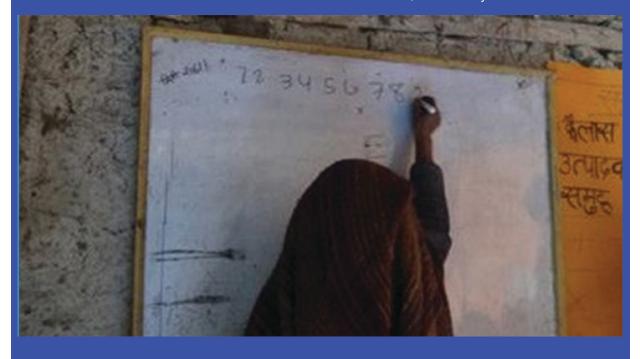
The group is made up of about 25 women (and some men) from marginalized communities. A week long training of trainers (TOT) is organized, which is followed with a refresher training course. The BLC focuses on basics of accounting, where trainees learn how to operate calculator and mobile phones. This enabled them to run their business and prevents them from being short changed by customers.

Radha Krishna Fresh Vegetable Group, a 24-member group led by Goma Chaudhary in Salli Bazaar, Salyan, is a fine example of how women have benefitted from the tool. "Now we know how to write our names and do some basic math," Chaudhary said. She credited the tools for the strides she and her fellow trainees made in their business. The group received 48 lectures over the course of three years.

Each group selects a facilitator (preferably a woman with grade 12 education). The sessions are run using hands on exercises. A tool called REFLECT is applied. The widely used tool seeks to foster trust between the student and teacher. It teaches them to respect the traditional knowledge of semi-literate people. The facilitators return to their group with training manuals and guidelines.

Such training sessions are crucial in rural Nepal, where women, due to marginalization, often miss out on primary education. Lack of education means most opportunities for them remain out of reach. This prevents them from joining others to do businesses in small towns to support themselves and their family.

After they attend BLC, however, the women have found themselves better equipped to handle these challenges. "Earlier, there was real possibility of being cheated by traders because we didn't know how to add or subtract. Now we know. This has boosted our confidence," Chaudhary said.



Training farmers in gender and social inclusion

HVAP has developed a special training programme for farmer groups with the aim to create awareness on the factors that can lead to the exclusion of women and other groups. The training also addresses measures that producer groups can take to achieve gender and social inclusion such as reducing the work load of women, improving equal access to resources and equal participation in decision making.

Karna Bahadur Budha, chairman of Hariyo Hira Agriculture and Herbal Product Cooperative, Birendranagar Municipality, Ward No: 2, Surkhet.

"We set up the cooperative in 2009. High Value Agriculture Project (HVAP) started helping us three years ago. We have received financial assistance of 2 million rupees so far. We invested that amount n various projects including 5 spray tanks, nine wells, 13 motor pumps, two irrigation pond, toilet, boring, building a vegetable collection centre, among others.

We also have digital weighing machine, a laptop and a kit box for testing soil. The latter has proved very useful as we use it for testing quality and ingredients of the soil before growing vegetable. Other HVAP contributions include training on vegetable farming, seminar and interactions as well as exposure visits.

The most important is the operation of vegetable collection centre. We have four staff including a manager, a loan assistant, an agrovet and market representative. We will continue to run this even after HVAP closes its project. We used to sell our vegetables in doko (weaker basket) and were often poorly paid because we didn't know how market worked. But after being trained by HVAP, we were able to understand the demand and supply, the rules of the market. The traders told us to grow vegetables that are high in demand in the market. They assured us that they will buy our products. This is very important for us because vegetables are perishable and we are always worried that it will go waste if we don't sell it on time.

We have hired a junior technical assistant, paying him a monthly salary of 10,000 rupees. We also have an agro-vet, who will inform us about fertilizer, seeds. We will continue these services even after HVAP. We have realized that we have to monitor the market and keep ourselves up to date to succeed in vegetable farming."

Results of gender and social inclusion

It is observed that 49% of the leadership positions of the groups and cooperatives were occupied by women in FY 2017/18.

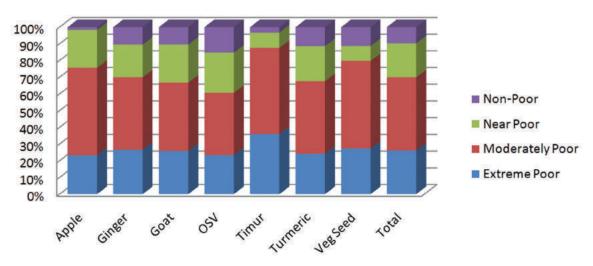
Women in Leadership Positions in POs

	Percentage of women in key posts in Producers' Organizations (POs)	Comparing results of current year with the baseline					
			Women Membership in POs	Women Leadership in POs			
Chairperson	31	Baseline	55%	41%			
Vice-Chairperson	59	Target	60%	50%			
Secretary	38	Achieved	63%	49%			
Treasurer	69	Achieved Against the Baseline	15%	19%			
Total	49	Achieved Against the Target	105%	98%			

Source: HVAP Annual Report 2017/18

The JRM concluded that the poverty focus of HVAP is satisfactory. 91% of project beneficiaries belong to poor households, and 28% are from extremely poor households. Only 9% of the beneficiaries are from non-poor households. Timur is the best performing value chain in terms of targeting the poorest households.

Distribution of Households by Poverty in FY 2017/18



Source: HVAP Annual Report 2017/18

No. of Trainings and Participants Till FY 2017/18

Training Hoods	No. of	No. of Participants								
Training Heads	Trainings	DF	DT	JF	JT	OCF	OCT	TF	GT	
Business Literacy	342	1489	1520	1050	1054	5904	6043	8443	8617	
Gender and Social Inclusion	268	969	1295	692	1067	3438	5288	5099	7650	
Social Mobilization	995	3185	4865	2519	3983	12340	20431	18044	29279	
MODIFIZATION										
Exposure Visit	13	16	31	26	31	137	275	179	337	
Total	1618	5659	7711	4287	6135	21819	32037	31765	45883	
Percent		18		13		69		69		

Note: DF-Dalit Female, DT-Dalit Total, JF-Janjati Female, JT-Janjati Total, OCF-Other Caste Female, OCT-Other Caste Total, TF-Total Female and GT-Grand Total

Source: HVAP Annual Report 2017/18

With regard to group formation and their capacity development approximately 61% of the groups and cooperatives reached a satisfactory level of maturity. The project was advised to pay extra attention to the weaker groups.

Percentage of Producers' Organizations and their ranking level (as of July 2018)

		Percentage of Producer's	Percentage of Producer's		
Ranking Level	Marks of Level	Organization (before project intervention)	Organization (after project intervention)		
Outstanding	Over 90	0	0		
Excellent	80-89	0	5.0		
Satisfactory	60-79	13.3	55.9		
Poor	50-59	29.2	19.3		
Very Poor	Under 49	57.4	19.8		

Source: HVAP Annual Report 2017/18



A livestock farmer with her goats in Achham district.



Women being capacitated and empowered through Business Literacy Classes (BLCs)

Lessons learned

Financing arrangements to groups that are based on co-funding can lead to exclusion of the poorest

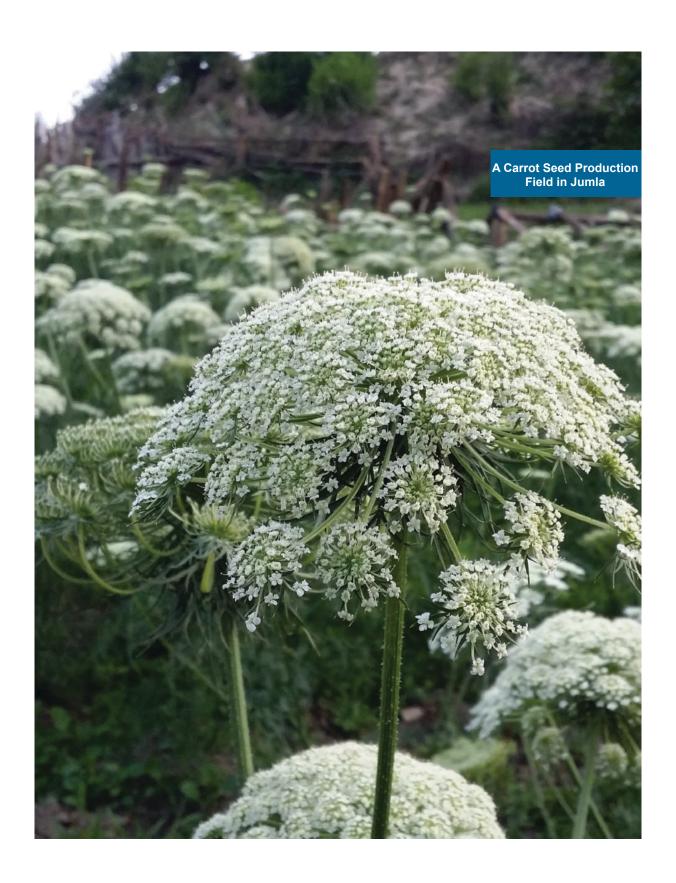
The Poverty Inclusion Fund, which was established as an incentive for groups to adopt one or more poor and extreme-poor households as group members, initially included the conditionality that 15% of the investments should be paid by the group. The groups expected that also the poorest households would pay this 15% "own contribution". As most of the poorest households were not able to contribute they were expelled from the groups. That made HVAP decide to make PIF funding a 100% grant.

Traditional barriers to equal participation of women need to be addressed

The figure of 49% of the leadership positions occupied by women has to be qualified. In fact, only in women-only groups women display leadership behaviour, whereas in mixed group they tend to stay in background. Traditionally, women are not expected to assert themselves in public. As a result, they often lack the confidence to share their knowledge and views unless they are invited to do so. This limits their influence in decision-making. Approaches to improve women's active participation in decision-making need to be developed.



A packet of turmeric powder produced by Bhattarai Masala Udhyog at Jarbuta in Surkhet district.



HVAP PRACTICE BRIEF 5

Financing and Project Management

The previous practice briefs address all the aspects of High Value Agriculture Project in Hill and Mountain Areas of Nepal (HVAP) that are aimed at bringing about lasting changes that will lead to sustainably improved livelihoods of thousands of poor households. These changes include upgrading value chains, and the establishment of business linkages that connect poor farmers to consumer markets and service markets. This practice brief is about the financing arrangements and the project organisation put in place on a temporary basis to ignite the process that will lead to the above lasting changes.

Financing inclusive value chain development: The plan

The project design document of October 2009 contained five financing mechanisms each with a specific function that would contribute to achieving the project goal. These included:

- The Production/Post Harvest Facility
- The Production Input Fund
- The Food Security Facility
- The Value Chain Fund
- The District Spatial Inclusion Fund.

Production/Post harvest support facility

This facility was meant to enable the project to hire high value commodity experts and specialists in production/post-harvest technologies. These experts would come from research stations of the Ministry of Agriculture and Cooperatives (MOAC), but also from the district agricultural offices, NGOs, consulting firms and technical institutions. The funding could cover fees plus operating and transport costs for the experts and training materials. The project design document also foresaw the need for experts from agribusinesses, but their inputs were expected to be financed by the agribusinesses themselves and thus no provision for such costs was made under this Facility.

Production input fund

The establishment of this fund was based on the consideration that many of the farmers are too poor to be able to pre-finance the inputs needed for production of the high value commodities. With this fund, the project could provide support to value chain groups in the form of a grant. The grant would become a revolving fund at group level. The Production Input Fund would be administered by local NGOs with the aim of helping the groups with the establishment of the revolving funds. The funding provided was based on the assumption that Rs. 20000/ha would be required to enable farmers to get started. The budget for the Production Input Fund amounted to a total of USD 380,000.

District-based farming systems/Food security facility

It was expected that approximately 20% of the farmers participating in the value chain could experience negative repercussions on their household's food security and this could affect the balance of crops in the farming system. In response, a special facility was proposed to enable MOAC, through its DADOs, to provide support on food crop production and farming systems to participating value chain farmers. The total budjet of USD 100,000 provided would cover the costs of DADO experts visiting value chain groups, plus the costs for establishing field demonstrations.

Value Chain Fund

The purpose of the Value Chain Fund was to enable producer groups, cooperatives, agribusinesses and service providers to invest in technical production capacity and in primary processing and storage capacity, including micro-irrigation schemes storage facilities, equipment for sorting, grading, cleaning, packaging and seed-cleaning. Consideration would also be given to funding certification - a costly process that is critical to marketing of certain commodities. The investments would be specified in business plans. The plans would include a full technical and financial assessment and justification for the investment; the constraints and/or opportunities that the investment addresses; integration of the investment into value chain and the value added; the contribution to be made by the applicants; and the ownership, operation and maintenance arrangements for the infrastructure/equipment once in place. The funding was based on assumption that an average amount made available to a producer group of 25 persons would be USD 8,000.

District Spatial Inclusion Fund

To facilitate the participation of more remote communities in value chain activities, and to promote spatial equity, a matching grant fund would be established to finance infrastructure to improve accessibility to those areas that have been identified as having high potential for high value commodities, particularly NTFPs/MAPs. The types of infrastructure foreseen included simple bridges, pulley traversing systems, ropeways, trails - any investment that would make the areas sufficiently accessible to be able to get low volume high value commodities out. Certain NTFPs/MAPs and organic-certified seeds were considered particularly suitable. The budget for the District Spatial Inclusion Fund was based on the assumption that every year in each district, one small infrastructure project would be funded at an average cost of approximately Rs. 2 million (about USD 25,000) each. The communities would contribute 10% (mainly in labour) with the VDCs/districts contributing another 10% from their development funds. The District Spatial Inclusion Fund had a total budget of USD 1.4 million.

Funds and Facilities	Million US\$
Production / Post harvest facility	1.9
Production Inputs Fund	0.38
Food Security Facility	0.1
Value Chain Fund	4.3
District Spatial Inclusion Fund	1.4

Source: Project Design Document, October 2009

Lessons learned

Lessons learned during the implementation led to some significant changes in the financing modalities. The project management found out that some of the assumptions underlying the original project design turned out to be incorrect.

- The original HVAP project design was based on the principle that only investments with a pay-back period of 6 years or less were eligible for funding from the Value Chain Fund. This was found not to be feasible. Certain investments were required at sector level, that was essential for developing the value chain, that could not meet this requirement. For that purpose, a Sector Development Facility was established which included a fund for Action Research and Demonstration as public infrastructures.
- An additional incentive was needed to persuade producer groups to include excluded households. For that reason, the Production Input Fund was turned into a Poverty Inclusion Fund.
- It was assumed that for agribusinesses the business case for inclusive value chains was in itself sufficiently convincing to persuade them to invest. When this was not the case, the Value Chain

Fund was equipped with two windows: one for the private sector and one for farmer groups and cooperatives.

- In the project design, the investments needed to boost the production and primary processing by the farmer groups was estimated at Rs. 50,000 per beneficiary household. This amount turned out to be far too low.
- Because there was no interest among farmers in support from the Food Security Facility, it was abolished.

After implementation of these changes, the financing model of HVAP consisted of the following facilities:

- A Sector Development Facility (including funding for Action Research and Demonstration).
- A Value Chain Fund.
- A Social Inclusion Facility consisting of a Spatial Inclusion Fund and a Poverty Inclusion Fund.

Sector Development Facility (SDF)



A view of Bulbule Regional Agriculture Market Center in Birendranagar, Surkhet

This facility is for investing in "public goods" that are essential for the upgrading of a value chain that is unlikely to be funded entirely by private investors. Examples of such investments are: research, the establishment of laboratory facilities, the development of a market place. the establishment of big collection centres and cold stores from which many chain actors can benefit, training programmes etc. In principle, sector development investments should not exceed US\$ 20,000, but in exceptional cases, larger investments are allowed. For a research project, the maximum grant is US\$ 5000. Sub-projects financed from the SDF need to be endorsed by the main VC actors and be included in a value chain action plan.

Value Chain Fund (VCF)



A view of ginger processing factory in Chhinchu, Surkhet

From the Value Chain Fund, HVAP provides matching grants to producer groups, cooperatives, agribusinesses and service providers for co-investment that address value chain constraints or that make it possible to seize market opportunities identified by the value chain actors. Investments may include "hardware" such as infrastructure or equipment, or "software" such as management, organisational and technical support, certification and other services. The Value Chain Fund has two windows:

- Window 1 offering co-funding for private sector actors including private sector companies, firms, cooperatives and individual service providers; and
 - Window 2 with co-funding for producer groups and producer cooperatives.

Window	Co-investment fund receipt	Eligibility Criteria	Grant Limit	Matching fund ratio
	Company/firm/Service Provider (institutional), Cooperatives	Registered for 3 years and have 3 years relevant business experience	US\$ 100,000 (US\$ 500,000 for Cold storage)	50:50
W1	Company/firm/Service Provider (institutional)	12 months business experience after registration with at least 3 years demonstrable experience in VC	US\$ 10,000	50:50
	Service Provider	Certified as eligible for proposed service provision	US 500 + US\$ 1000 for demo	50:50
W2	Producer's groups/ Cooperatives	Registered for 1 year with relevant Govt. Agency and have relevant experience	US\$ 20,000	85:15 or 50:50

Social Inclusion Facility

The Social Inclusion Facility has two funds.

The Spatial Inclusion Fund (SIF) was established to assist communities that have a high potential for the production of certain commodities, but that live in remote areas. From the SIF the HVAP can support these communities with co-funding for investments that can improve their access to markets such as bridges, culverts, pulleys, traversing systems or gravity rope ways.

The purpose of the Poverty Inclusion Fund (PIF) is to promote inclusion of the most marginalised households in the producer groups and the value chains. Producer groups that committed themselves to include one or more excluded households are rewarded with a maximum grant of US\$ 3000. Initially, the grant from the Value Chain Fund included the conditionality that 15% of the investments should be paid by the group. However, the groups expected that the poorest households would contribute to 15% from their own contribution.

As most of the poorest households were not able to contribute, they were expelled from the groups. That made HVAP decide to make PIF funding a 100% grant. No co-funding by the group is required. The PIF grants are supposed to be spent on the implementation of a production proposal. These proposals are developed by the local NGOs in consultation with the producer group. Typical activities funded for the PIF are inputs and equipment such as seed, sprayers, pesticides, fodder seed, fertilisers, small irrigation facilities, goat sheds and improved breed. In addition, funds for the Poverty Inclusion Fund can be used for providing supplementary support to the poorer households or to help them to contribute to the co-funding that all households of the producer group are supposed to make for submitting an application to Window Two of the Value Chain Fund.

Results: Co-Investments per value chain

Sub-projects and Investment (NRs million) by value chains till the Fiscal Year 2017/18

Value Chains	1	CF 1 AB		CF 1 SP		CF N2	F	PF	\$	SIF	s	DF	F	PIF	A	RD	Т	otal
Cilaliis	No.	Grant	No.	Grant	No.	Grant	No.	Grant	No.	Grant	No.	Grant	No.	Grant	No.	Grant	No.	Grant
Apple	3	11.6	22	0.9	56	62.1	9	2.1	2	3.4	4	7.2	2	0.5	4	1.9	102	89.8
Ginger	4	11.5	1	0.1	44	37.7	0	0.0	1	2.0	0	0.0	3	0.7	2	0.9	55	53.0
Veg Seed	1	9.2	1	0.1	14	13.9	0	0.0	0	0.0	0	0.0	0	0.0	3	1.0	19	24.3
Goat	6	6.4	45	2.3	89	99.9	37	9.7	0	0.0	7	10.9	6	1.1	4	1.1	194	131.4
osv	9	63.8	30	2.2	131	163.6	26	4.8	6	6.9	7	45.7	8	0.3	7	2.8	225	289.6
Turmeric	2	15.0	0	0.0	29	26.3	16	3.3	0	0.0	0	0.0	4	0.9	1	0.2	52	45.6
Timur	1	1.0	0	0.0	18	19.9	7	1.0	0	0.0	1	1.7	0	0.0	1	0.5	28	24.0
BDS	0	0.0	9	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	9	0.5
Total	26	118.5	108	6.1	381	423.4	95	20.8	9	12.4	19	65.4	23	3.5	22	8.4	682	658

Note: VCF: Value Chain Fund; AB: Agribusiiness, SP: Service Providers; PPF: Production and Post-harvest Support Fund; PIF: Poverty Inclusion Fund; SDF: Sector Development Fund; ARD: Action Research and Demonstration; SIF: Spatial Inclusion Fund



Apple growing in Jumla

Organisational Structure of the Project

The Ministry of Agriculture and Livestock Development (MoALD) is the main executing agency of HVAP. The main implementing partners are The Netherlands Development Organization (SNV), and the Agro Enterprise Centre (AEC) of the Federation of Nepalese Chambers of Commerce and Industries (FNCCI). The day-to-day management, coordination and implementation is in the hands of a Project Management Unit, led by a project manager who is a MoALD official. PMU staff members are drawn from MoALD, SNV and AEC. The PMU is based in Birendranagar of Surkhet which is at the centre of the target area.

District level activities are carried out by district line agencies including the DADO, DLSO and the DFO and by partners NGOs that are backstopped and supported by the PMU.

Within the PMU there are four Value Chain Teams (VCT) and six thematic teams. The table below provides an overview of the composition and tasks and responsibilities of the teams. The meeting of VCT is held frequently based on the EOI and business plans received in the respective VCT.



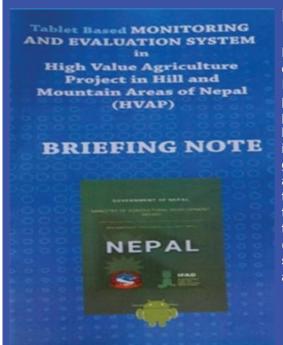
Jit Bahadur Shahi, a goat farmer, directs his goats to a manger outside his home in Kumbhikot, near Birendranagar of Surkhet district.

Value Chain Team (VCT)	Number of Staff	Tasks and responsibilities
VCT: Off season vegetables	4	Support in business plan preparation, contracts, sub-projects implementation and monitoring, business linkage with value chain actors
VCT: Ginger, Timur and Turmeric	4	Support in business plan preparation, contracts, sub-projects implementation and monitoring, business linkage with value chain actors
VCT: Apples and vegetable seeds	3	Support in business plan preparation, contracts, sub-projects implementation and monitoring, business linkage with value chain actors
VCT: Goats	4	Support in business plan preparation, contracts, sub-projects implementation and monitoring, business linkage with value chain actors

Thematic Team	Number of Staff	Tasks and responsibilities
Value chain development and inclusive business (VCD-IB)	5	Institutional linkage among the value chain actors, business linkage, market facilitation, B2B linkage, contracts (buy back guarantee) etc
Gender and social inclusion and institutional development (GSI-ID)	3	Gender and inclusiveness in value chain actors, institutional capacity development of POs, business literacy, risk averse household identification, poverty inclusion
Planning, monitoring and evaluation and knowledge management (including MIS) (PME - KM)	4	Annual work plan and budgeting, monitoring and feedback, baseline studies, mid-term studies and end line studies, RIMS Survey, data management at different level (farmer-farmer diary, PO level-registers, NGO-level-formats/tablet), reporting, knowledge products development and dissemination and sharing
Engineering and infrastructure	4	Design and cost estimate of value chain infrastructures, research and demonstration of innovative technology for production and marketing of high value products, implementation and monitoring of VC infrastructures.
Service market development		Support in business plan preparation of service providers, contracts and implementation of the service, promotion of service market, facilitation fee based service to VC actors, linkage and facilitation for credit in coordination of financial institution.
Funds and contracts	1	Contract management of sub-projects, contract monitoring, extension of contract periods etc

Value Chain Management Team (VCMT): VCMT has been formed to verify and recommend the business proposals received from the POs and agribusinesses and recommend to Project Manager for approval or reject or for modification and send to the external evaluation committee. This team composed of four officials, Senior Agriculture Officer being the Chairperson, Team Leaders of SNV/ HVAP and AEC/HVAP as members and Planning officer as member secretary. The meeting of VCMT is held on regular basis as per request from the VC Team.

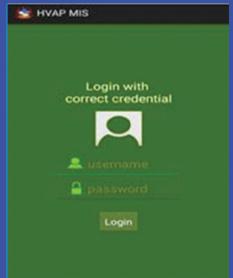
Senior Management Team (SMT): SMT has been formed to discuss on the administrative and management issues related with the project implementation and resolve the problems at the PMU level. Project manager being the Chairperson of the SMT, Team Leaders of SNV/HVAP, AEC/HVAP as members and Senior Agriculture Officer as member secretary. The SMT meeting held three times a year.



Briefing note on tablet-based M&E System of **HVAP**

Harnessing data using digital tools

Data is one of the basic facts for project monitoring and evaluation that can be linked to making good decisions. It helps the project stakeholders to assess the project performance. Generally, data is used at the end of the project and during the time of supervision and evaluation, but the project has to know the performance of the project in each pulse for corrective action to achieve the project goal in the given period of time. So, the data collection and monitoring of the project activities face challenges of the development projects due to the remoteness, lack of the connectivity, limited fund and staff, more data travel time/time consuming, skill, etc. HVAP used the application (both off-line and online) by using a small tablet and try to solve the above mentioned difficulties for data collection and monitoring of project interventions.



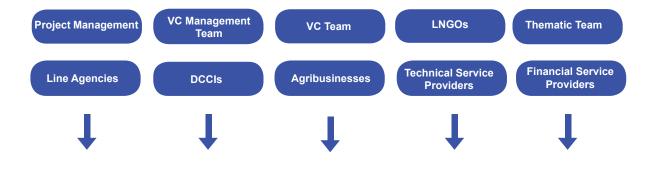
A tablet application for data entry

It is an android application, which can be operated online and off line. At the beginning, the social mobilizer enters the data periodically that depends upon the nature of data. Once the activity done, meantime the mobilizer enters the data and which is saved in device (tablet). For this, the social mobilizers go to the group/cooperative to collect data of individual farmer in every four month and should enter the data in the device. When the mobilizer gets the connectivity, she/he should synchronize the data. Once it is synchronized, the central server immediately receives the data and can be seen and can be used by all project stakeholders wherever they are.

The tablet-based monitoring and evaluation system eases the problems during monitoring and evaluation of the project. Basically, it resolves the remoteness, lack of the connectivity, limited fund and staff, more data travel time etc which are considered as biggest constraints for M&E.

Organisational Process

The graph below shows the main organisational processes captured in six mobilisation steps. These are the processes that are coordinated and facilitated by the PMU in close collaboration with local NGOs, line agencies, agribusinesses, local service providers and financial service providers.



Old Groups/ Cooperatives

- Project awarded groups and cooperatives
- Project awarded agribusinesses
- New clusters along road corridor

First Mobilization

- Cluster mobilization to cover periphery HHs,
- Cluster Mapping (HHs, Land, water sources, roads, forest, involving HHs in VCs, production, market, volume, traders)
- Listing of additional HHs with the group/ cooperatives and within cluster

Second Mobilization

- Well being ranking of listing HHs then include marginalized HHs in existing POs
- If new group needed, form new groups within the cooperative/cluster

Third Mobilization

- Micro Plan of each POs to find financial requirement to each HHs
- Re-budgeting process of old POs if need for additional HHs

New Groups/ Cooperatives

- New Groups/Cooperatives
- New clusters along road corridor

Desk Review

- New proposals of new clusters
- New proposal of old cluster (new groups)

First Mobilization

- Households mobilization to cover whole selected group and cooperative
- Cluster mobilization and mapping to cover new groups and to find the potentiality of VC (HHs, Land, Water sources, roads, forest, involving HHs in VCs, production, market volume, traders, collection centers etc)

Second Mobilization

- Carry out well being ranking covering periphery HHs of POs then cover additional marginalized HHs in POs
- If new group needed, form new groups

Third Mobilization

- Micro plan of each POs to find financial requirement
- Re-budgeting process of POs for additional HHs
- Proposal of new POs

Fourth Mobilization

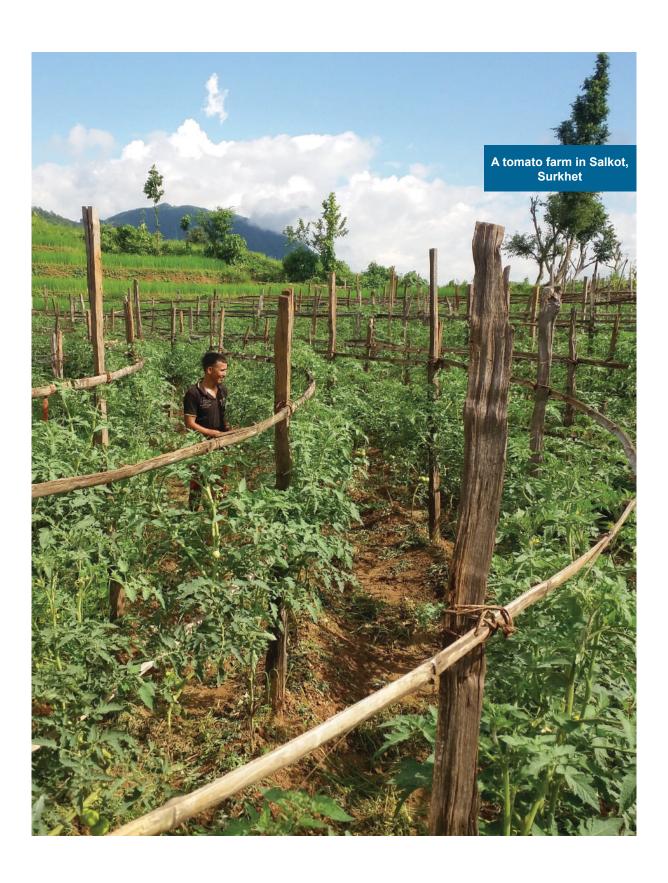
- Market Arrangement (inputs supplier and output traders)
- Institutional linkage with technical service providers, financial service providers, institutional capacity building service providers etc

Fifth Mobilization

- Production Plan (crop plan) of each POs based on crop cycle and demand of agribusiness
- Technical support plan with new technology
- Continious follow up in each step (seed collection, land preparation, fertilizer application, sowing, hoeing, flowering, harvesting, marketing)
- Establish collective marketing in each POs

Sixth Mobilization

- Institutional building of POs
- Institutional linkage among the VC actors



HVAP POLICY BRIEF

Inclusive value chain development: Lessons learned from the High Value Agricultural Project in Hill and Mountain Areas of Nepal (HVAP)

The High Value Agricultural Project (HVAP, total budget USD18.9 million, implementation from 6 February 2011 to 30 September 2018) aims to reduce poverty and vulnerability of women and men in hill and mountain areas of the Mid and Far Western Development Region of Nepal. This is done through including poor smallholders and landless people in carefully selected value chains that offer good market opportunities. HVAP has been designed within the context of the IFAD Country Strategic Opportunities Programme 2007-2012 and responds directly to key policy initiatives of the Government of Nepal as expressed in its Poverty Reduction Strategy. The Ministry of Agriculture and Livestock Development (MoALD) is the main executing agency of HVAP. The main implementing partners are The Netherlands Development Organization (SNV), and the Agro Enterprise Centre (AEC) of the Federation of Nepalese Chambers of Commerce and Industries (FNCCI).

HVAP aims to help 13,500 households to increase their annual net income by Rs. 30,000 (approximately US\$300). The project is located in the poorest Region of the country¹ and within that region, the project's hill and mountain districts are among the poorest. The project focuses on three North-South corridors: the Surkhet-Chhinchu – Jajarkot road, Surkhet –Dailekh and the Surkhet – Jumla road. These corridors connect seven districts including Achham, Dailekh, Jajarkot, Jumla, Kalikot, Salyan and Surkhet.

The project focuses on the poorest people who tend to be excluded from development because they lack the power and voice for claiming benefits and services. From the outset, it was decided that among the participants in all project activities, the proportion of women should not be less than 60% and proportion of Dalits, Janajatis and other marginalised groups should not be less than 25%. The target group consists of subsistence farmers who were not, or were only marginally integrated in value chains. The basic assumption underlying HVAP is that if these people can be included in value chains, they will have the opportunity to generate more income and achieve a better standard of living.

The selection of the value chains

In 2009, a team of experts from SNV and the Department of Agriculture conducted a study into 18 value chains (later stated in the project design) with market potential and with opportunities for the inclusion of small farmers. After the start of the project, the value chain priorization workshop listed about 52 commodities. Through several consultative processes, with the involvement of participants representing producers, cooperatives, agribusiness organisations, government agencies and representatives of development partners, this long list was reduced to a final selection of seven value chains. The commodities that emerged from this process were apple, ginger, goat, off-season vegetables, timur, turmeric and vegetable seeds. What all these commodities have in common, is that many of the small farmers were already involved in the gathering or cultivation of these products, but mainly for subsistence purposes. At the same time, value chains for these commodities did exist in Nepal, but with the involvement of only commercial farmers. The challenge for the HVAP was to find ways to also involve the small subsistence farmers in these chains. This had to be done in consultation and close collaboration with agribusinesses downstream the value chain. These companies constituted the entry point for the intervention because they are best informed about market opportunities. The approach for achieving this was captured in a value chain intervention plan which was developed in 2012.

¹Poverty incidence in the Mid-Western Development Region: 44.8, Far Western: 41.0 and Nepal: 31.0

The HVAP Theory of Change

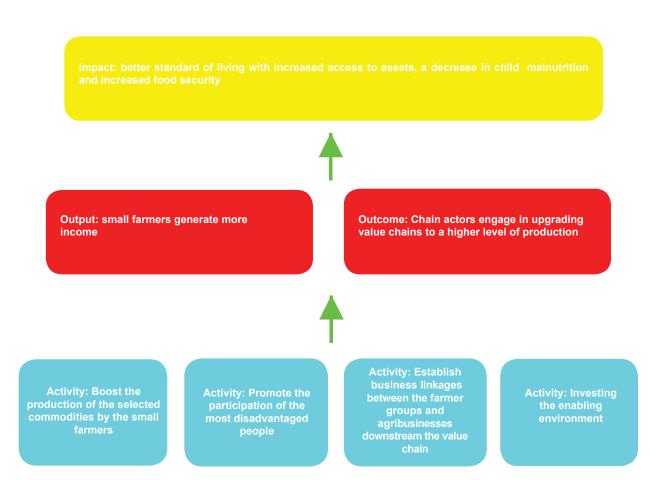
The intervention plan for upgrading the value chains in an inclusive way was based on a theory of change that can be summarised as follows: At activity level the HVAP approach consists of four sets of interventions:

- Boosting production of selected commodities by small farmers.
- Establishing business linkages between the farmer groups and agribusinesses down-stream the value chain, based on sound business cases for both parties.
- Investing in the enabling environment and engaging actors that belong to the enabling environment.
- Taking measures to promote the participation of the most disadvantaged people, including women and people who belong to groups such as the Dalits and the Janajatis.

It is expected that this combination of interventions will lead to two outcomes:

- The selected value chains will be upgraded to a higher level of production by all chain actors in a sustainable way.
- The target group of small farmers will generate more income and they will be able to sustain and even increase that income.

At impact level this will ultimately lead to a better standard of living with increased access to assets, a decrease in child malnutrition and increased food security.



The implementation phase

The implementation phase consists of five main components:

- The identification of beneficiary households and other key stakeholders.
- Establishing business linkages.
- The provision of advisory services through service market development.
- Making the value chain inclusive.
- Financing inclusive value chain development.

The identification of the beneficiary households and key stakeholders

The identification and engagement of beneficiaries and other key stakeholders is done through an annual recurrent cycle, in which private sector actors and producer groups are invited to submit expression of interests (EOIs), which include proposals to invest in the value chain in a way that private sector actors, producers, cooperatives and groups as well as the people in the target districts will benefit. Applicants with the best proposals are invited to submit a business plan. The business plan will, after approval, be eligible for co-funding by HVAP.

Establishing business linkages

After the first call for expressions of interest in 2013, HVAP had a good overview of farmers and private sector actors who would play a key role in upgrading of the value chains in an inclusive way. As part of the EOI, applicants had formulated proposals for co-investment projects. To ensure that the elaboration of these proposals into detailed business plans would be informed by market opportunities, the farmers had to be connected with actors that are most conversant with the market: the traders, the wholesalers, processors and exporters. Also, the suppliers of knowledge and inputs had to be involved to ensure that farmers would make use of the most appropriate technologies and practices. Therefore, the HVAP project brought together all stakeholders, thereby giving them the opportunity to get to know each other, to jointly explore the value chain opportunities and constraints, and to develop a shared vision for developing the value chains. With a view to the realisation of this shared vision, stakeholders also needed time to learn what to expect from each other, and to decide with whom to engage in a business relationship. For facilitating the establishment of these business linkages, HVAP has developed a multi stakeholder process that basically consists of:

- Clustering of key stakeholders in groups of actors that are most likely to engage in business relationships with each other because they have something in common (focus on the same commodity and operating in the same geographic location)
- Organising for each value chain Multi Stakeholder Platform meetings where stakeholders are
 given ample opportunity to share their views on market opportunities and challenges, where
 representatives of farmer groups, suppliers and buyers meet and explore possibility to enter into
 business relationships.
- Facilitating B2B linkages between farmers groups and traders and processors and the formalisation of these linkages in contracts.

The details about contracts has been illustrated in Practice Brief 1.

The provision of advisory services through service market development



Joint Review Mission, January 2015

For farmers, producing for the market is a lot more challenging than producing for subsistence. They compete with commercial farmers on price and quality. In order to achieve production volumes that are big enough to attract buyers, farmers need to collaborate as a team, and to organise the bulking of their produce in collection centres. The timing of the production needs to be in accordance with market demand. Because the innovation process in agriculture never stops. farmers need to have continuous access to new knowledge. Service providers are the source of the knowledge, skills and inputs. Services include technical services focused on the production, business services to ensure that the farming is

commercially viable, financial services for the provision of credit, and social services to facilitate group formation and inclusion of the most marginalised.

When HVAP started, the service sector in the target area was not yet ready to reach out to thousands of small farmers that were expected to engage in the production of commodities. Upgrading the value chain implied not only mobilising existing service providers, but also developing the capacity of the service sector as a whole. This became a substantive component of the project. The approach adopted by HVAP is based on the principle that, in order to be sustainable, the project's interventions should be focused on making a large part of the service system function as a market. This implies that whenever possible, services need to be paid for by the clients and users of these services. This way the services become an integrated element of the value chain and the costs of the services are factored into the price that will ultimately be paid by the consumers. This is considered a more sustainable option than services that are paid for with public funds through line agencies, projects and programmes.

Inclusive producer group formation

Group formation is an indispensable element of all economic development programmes that focus on small farmers. Through groups farmers can get access to advisory and financial services, they can bulk their produce in order to attract buyers, and they can improve their negotiation position vis-à-vis suppliers and buyers. Therefore, almost all development interventions that focus on small farmers encourage group formation. In fact, in many of the VDCs, farmer groups did already exist as a result of interventions by government and development agencies in the past. In first instance, HVAP built on these already existing groups. In locations that from an ecological and geographic point of view provided good opportunities for farmers to become integrated in a value chain, HVAP encouraged households that were not yet part of a group to form a group, or to join a group. The newly established groups, as well as the existing groups were supported in strengthening their capacities.

Group formation, however, is not by definition an inclusive process. In fact, for the most marginalised people it is very hard to become member of a producer group. This is because they are not considered to be able to contribute sufficiently to the group, or because they are subject to discrimination and stigmatisation. Because it is often very difficult for the most marginalised households to become member of a farmer group, HVAP has taken measures to link them up also. The first step is to identify the ones who are left behind. As part of the Gender and Social Inclusion component of HVAP, the local partner NGOs are assigned to this task. PRA tools including social mapping and well-being ranking are used for identifying the poorest and most marginalised households.

Reaching out to these people is achieved through three types of interventions. All of these interventions are focused on group formation in a way that also the most vulnerable HHs would be included in existing or newly established groups:

- The Poverty Inclusion Fund Producer groups that commit themselves to include one or more
 excluded households are rewarded with a maximum grant of US\$ 3000. No co-funding by the
 group is required. The grant is supposed to be spent on the implementation of a production
 proposal.
- Business literacy classes Addressing illiteracy and semi-literacy is an essential step to include many of the poorest households in the value chains. Therefore, HVAP developed the method of Business Literacy Classes (BLC).
- Training farmers in gender and social inclusion HVAP has developed a special training programme
 for farmer groups with the aim to create awareness on the factors that can lead to the exclusion
 of women and other groups. The training also addresses measures that producer groups can
 take to achieve gender and social inclusion such as reducing the work load of women, improving
 equal access to resources and equal participation in decision making.

Financing inclusive value chain development

The financing model developed in the design stage of HVAP was radically changed in the early stages of implementation. The new model consists of following facilities:

• A Sector Development Facility (including funding for Action Research and Demonstration)
This facility is for investing in "public goods" that are essential for the upgrading of a value chain that are unlikely to be funded entirely by private investors. Examples of such investments are: research, the establishment of laboratory facilities, the development of a market place, the establishment of big collection centres and cold stores from which many chain actors can benefit, training programmes etc.

A Value Chain Fund

From the Value Chain Fund, HVAP provides matching grants to producer groups, cooperatives, agribusinesses and service providers for co- investments that address value chain constraints or that make it possible to seize market opportunities identified by the value chain actors. Investments may include "hardware" such as infrastructure or equipment, or "software" such as management, organisational and technical support, certification and other services.

- A Social Inclusion Facility consisting of a Spatial Inclusion Fund (SIF) and a Poverty Inclusion Fund (PIF)
- The Spatial Inclusion Fund was established to assist communities that have a high potential for the production of certain commodities, but that live in remote areas. From the SIF the HVAP can support these communities with co-funding for investments that can improve their access to markets such as for example bridges, culverts, pulleys, traversing systems or gravity rope ways.
- The purpose of the Poverty Inclusion Fund is to promote inclusion of the most marginalised households in the producer groups and the value chains.



Houses in the village of Garche in Salyan district

Outcomes

By the end of July, 2018 HVAP has been able to reach out to 15,965 farmer households. These households are all member of one of the 456 groups and cooperatives that HVAP has linked up to buyers and suppliers. Out of these 15,965 beneficiary households, 13,221 households are able to make profit from sale of agriculture production and 5,286 households have been able to increase their net income by Rs. 30,000 or more. Out of these 5,286, 12.5% were Dalit households, 12.7% Janajati households and 74.8% households belonging to other castes. Furthermore, 49% of the leadership positions of the groups and cooperatives were occupied by women. Detail are illustrated in Practice Brief 1.

Impact

From 15,965 farmer households, HVAP took a sample of 900 households and assessed the changes in terms of household assets index, child nutrition and food security. The findings of this impact assessment, called as the RIMS study (Result and Impact Management System) concluded that, the 57% of HHs could increase the household asset index, as 6% increment achieved as against the baseline. Detail has been illustrated in Practice Brief 1.

Household assets

The data gathered for establishing changes in household assets, malnutrition and food security seem to suggest a correlation between the project intervention. However, more evidence is required in order to establish a causal link:

- Data need to be gathered from a control group of households not belonging to the 15,965 households reached out to by the project.
- The statistical significance of the changes needs to be established, for example, through trend analysis and the calculation of p-values.
- Rival explanations for changes need to be explored.

Lessons learned

Facilitating multi stakeholder platform (MSP) is an essential process of value chain development.

The concept of multi-stakeholder platform was not included in the original project design of 2009. MSPs were introduced when the project had entered its implementation stage in 2012 and they have proven to be hugely successful. MSPs have been instrumental for linking the small farmers to other businesses and helping them to make the transition from subsistence farming to commercial farming. Moreover, the multi-stakeholder platform meetings have proven to be vibrant events providing all stakeholders an opportunity to share and acquire new knowledge and to initiate joint action toward upgrading the value chains. Many stakeholders believe after HVAP has come to an end, there will be a need to organise multi-stakeholder platform meetings for the purpose of sharing knowledge, establishing business relationships and planning joint action for further value chain development. HVAP has been the main facilitator of these processes which raises the question who is going to take over this role after the phasing out of HVAP. The option currently explored by HVAP is that the Chambers of Commerce and Industries take on the role of value chain facilitators.

Side-selling is an issue that needs to be addressed

HVAP has achieved a lot with facilitating the establishment of business linkages (B2B and B2S). However, side-selling is a threat to the sustainability of business linkages between producer organisations on the

one hand and traders and agribusiness, on the other hand. Side- selling refers to farmers breaching their contract with buyers through selling it to other buyers when the market price is higher than the price agreed on in the contract. Side-selling can cause huge losses for buyers, especially if they have provided the producers with embedded inputs and services. When the market price is below the contracted price the opposite happens. Buyers are tempted to buy from other producers with whom they did not sign a contract. These practices undermine the trust between farmers and the buyers which makes much harder to negotiate contracts in the future. Side selling occurred especially in the value chains ginger and timur because the prices of these commodities are very volatile. In the facilitation of B2B linkages HVAP addresses the problem of side selling through focusing trust. Furthermore, contracts have been developed that allow prices to divert from the agreed price within a bandwidth.



Plastic tunnel farming in Salkot, Surkhet

The service sector needs continuous support

As the value chains grow and new technologies become available, it is important that the development of the capacity of the service sector continues even after the phasing out of HVAP. The question is: who will take responsibility for service market development in the future? There are several types of organisations that are considered for taking a leading role including the government, the sector associations, the Chambers of Commerce and Industries (CCIs) and the Agro-Enterprise Centre (AEC). Organisations that certainly should have a role, but that have not yet been involved in HVAP are the vocational and higher education institutions. Currently, the training of agricultural experts is mostly focused on the technical aspects of agriculture and livestock and with no or limited attention to value chain development or business skills. By making their curricula more relevant and comprehensive, the education sector can make a very valuable contribution to inclusive value chain development.

Traditional barriers to equal participation of women need to be addressed

By the end of FY 2017/18, 49% of the leadership positions of the groups and cooperatives were occupied by women. In fact, only in women-only groups women display leadership behaviour, whereas in mixed group they tend to stay in background. Traditionally, women are not expected to assert themselves in public. As a result, they often lack the confidence to share their knowledge and views unless they are invited to do so. This limits their influence in decision making. Approaches to improve women's active participation in decision-making need to be developed.

Financing arrangements to groups that are based on co-funding can lead to exclusion of the poorest

The Poverty Inclusion Fund (PIF), which was established as an incentive for groups to adopt one or more poor and ultra-poor households as group members, initially included the conditionality that 15% of the investments should be paid by the group through the VCF. The groups expected that also the poorest households would pay this 15% "own contribution". As most of the poorest households were not able to contribute, they were expelled from the groups. That prompted HVAP to make PIF funding a 100% grant.

Not all value chains have performed equally well

From the seven commodities HVAP project staff considers the value chains for ginger, turmeric, off season vegetables as the most well- established, or mature value chains. The vertical linkages (connecting actors up and down stream along the value chain), the horizontal linkages (connecting actors at the same level within the value chain in cooperatives and up to export associations) and the service markets are well developed. Farmers who engage in the commercial production of these commodities have a good chance to increase their net income with Rs. 30000 or more. On the other hand, the farmers that focus on the commodities timur and vegetable seeds are expected to be less successful, as these value chains are less well established. More time and efforts would be required to achieve for these value chains a similar level of maturity as for ginger, turmeric and off season vegetables. It seems that from a project perspective, the investments in the value chains for timur and vegetable seeds have been less cost effective than the investments made in ginger, turmeric and off season vegetables. A more in-depth cost effectiveness analysis, establishing which characteristics of these value chains can explain the differences in cost effectiveness, would be of great value for future projects. It would help to further develop the methods for identifying commodities that have the best potential for inclusive value chain development.



A turmeric field in Surkhet





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