



FORWARD Nepal



2016

Annual Report
2015/16 (2072/73)



FORWARD Nepal

Forum for Rural Welfare and
Agricultural Reform for Development
(FORWARD Nepal)

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Vision

A society where all women and men at all levels, the economically poor, vulnerable and marginalized, have prosperous and dignified lives.

Mission

FORWARD Nepal reaches and empowers vulnerable and marginalized communities for their improved livelihoods through a value chain approach, technology generation and adoption, advocacy and social transformation.

Goal

Improved quality of life for marginalized communities through empowerment, socio-economic transformation, inclusive development and risk reduction.

Objectives

- Enhanced food and nutrition security, and increased income of disadvantaged people.
- Improved technical and managerial capability and resilience of vulnerable communities in biodiversity conservation, climate change adaptation, and disaster risk management.
- Developed and validated agricultural technologies and innovations using participatory research and development approaches.
- Developed physical infrastructure and strengthened local institutions.
- Advocating and conducting capacity building programs to ensure the rights of people with different ability, elders, indigenous/ethnic groups, Dalits, women, and children.

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Foreword

In the last two decades, FORWARD Nepal has served over 0.4 million households as direct beneficiaries, poor and marginalized people living in rural areas and depending mainly on farming, to improve their quality of life through several project interventions related to their daily livelihoods.

The Annual Report 2072/73 B.S., covering the period from July 16, 2015 to July 15, 2016, describes the projects/programs launched by the organization in different parts of the country in partnership with national and international entities in assisting to reduce extreme poverty, promote shared prosperity, and support the global sustainable development agendas. Agriculture is widely adopted by over 80 percent of the rural population in Nepal, and it can raise income, improve food and nutrition security and benefit the environment. Thus, FORWARD Nepal's programs were focused towards this direction in the reporting period, and has implemented 22 projects across 22 districts in the country.

Those projects which are listed in the report provides readers an overview on how FORWARD Nepal reached to its target beneficiaries to support them for their livelihoods improvement through different projects' interventions and the progress update. As in the previous years, we were involved in technology innovation and transfer our learnings and knowledge to farmers and other concerned institutions through different means of interaction, field demonstration, visits, seminars, publications, and promotion of agro/forest based new enterprises to benefit the communities. Climate change, Disaster Risk Reduction (DRR), and gender issues remains always in priority in executing the programs. We believe that the activities conducted on improving the quality of raw milk supply chain for sustainable development of the dairy sub-sector, and its findings will certainly support the concerned authorities for formulating a policy on Good Manufacturing Practices (GMP) on raw milk. We were also engaged in productive rural infrastructural works which provided us an ample opportunity to sharpen our knowledge and

understanding in this field. Besides, we were actively involved in reconstruction/renovation and infrastructural works related to agriculture and seed support activities to help the earthquake affected people and communities in Chitwan and Makwanpur districts with the support and partnership with different entities, which has empowered ourselves to work on such disaster related situations.

Our participation in meetings, seminars and trainings organized by different institutions both inside and outside the country were very much fruitful to the organization not only for sharing of our knowledge and experience to greater audience but bring new learnings and institutional networking for the organization. The trainings attended by our staff have immensely helped us to capacitate ourselves and bring positive change in our work. In this endeavor, our sincere credits goes to Welthungerhilfe (WHH)/Civil Society Academy (CSA) for providing different training opportunities to our staff.

This year we put our enormous efforts for new program partnership/collaboration and networking. In a joint open project bid, it largely depends on competitive proposals and lead partner's capability and networking. However, to some extent at local level, we have succeeded to enter into new partnership with SAMARTH/National Market Development Program (NMDP) and World Food Program (WFP) in the productive rural infrastructure works. We believe that the linkages we have established with different institutions will provide us further opportunity to work together with them in the future. We have also significantly increased our financial turnover over NRs. 180 million this year, which we believe is our achievement for providing services to our targeted clients. In the reporting year, we engaged a total of 110 staff for implementation of programs/projects undertaken by the organization in different parts of the country. Besides, some consultants and enumerators were hired for the programs as per the needs. Field staff were also hired by our districts' partners in the partnership projects.

As yet, our programs and existence is largely contingent on donor funded projects, and we have not been able to formulate our own independent projects and programs for the organizational sustainability, though we envisioned some in our five year strategy plan. It is a matter of fact that in a country like ours, NGOs programs are very easily inflated by the changes of government policies for social organizations. Thus, it makes us compelled to rethink our investment plan for resource generation for the organizational sustainability. In this line, we are revisiting our Five Year Road Map and making it safe and less contradictory with the government policies. In gist, we want to develop our own self-sustaining projects along the donors supported projects to reach out our service for the target beneficiaries.

The year 2015/16 was a remarkable year for many reasons. We are privileged to be engaged in post-earthquake reconstruction works for the needy communities, new partnerships and networks strengthened, staff performance

capacities enhanced through trainings, and a new executive committee formed for another 3 years' term.

Last but not the least, we would like to take this opportunity to thank our partners and donors, and government authorities without whom the work we do would not have been possible. More importantly, we are very proud and encouraged by the restless work, support and guidance we received from our staff members, general members and executive board in navigating the organization in a responsible manner to provide our expertise and services for the needy communities through various project interventions. We enjoyed working with you all. We are looking forward to another exciting year to work together. Again, thank you all for your support as we celebrate 21st anniversary. The journey promises to be quite exciting!

Sincerely,



Prof. Dr. Madhav Kumar Shrestha
Chairperson, FORWARD Nepal



Netra Pratap Sen
Executive Director

Abbreviations and Acronyms

4CA	Child-Centered Climate Change Adaption	DLSO	District Livestock Service Office
ADRA	Adventist Development and Relief Agency	DPAC	District Project Advisory Committee
ADS	Agriculture Development Strategy	DR	Disaster Risk
AFU	Agriculture and Forestry University	DRM	Disaster Risk Management
AgLEARN	Agricultural Learning Exchange for Asian Regional Network	DWCO	District Women and Children Office
AIT	Asian Institute of Technology	ELIVES	Enhancing Livelihoods of Smallholder Farmers in Central Terai Districts of Nepal
ANC	Antenatal Care	FAO	Food and Agriculture Organization of the United Nations
BCES	Building Community Enterprises of Small-Holders	FECOFUN	Federation of Community Forest Users, Nepal
BMZ	Federal Ministry for Economic Cooperation and Development	FFP	Farmers' Fertilizer Practice
CAESC	Community Agriculture Extension Service Center	FNCCI	Federation of Nepal Chambers of Commerce and Industry
CBDMC	Community Based Disaster Management Committee	FORWARD	Forum for Rural Welfare & Agricultural Reform for Development
CC	Climate Change	FRM	Flood Resilient Measurement
CCA	Climate Change Adaptation	FtF	Feed the Future
CDCAN	Central Dairy Cooperatives Association, Nepal	FY	Fiscal Year
CDO	Chief of District Office	GAP	Good Agricultural Practices
CFA	Cash for Asset	GATE	Global Agri-tech Private Limited
CIMMYT	International Maize and Wheat Improvement Center	gm	Gram
COPILA	Community Practice in Schools for Learning Climate Change Adaptation	GMP	Good Manufacturing Practices
CR	Community Resilience	GOs	Government Organizations
CRSP	Collaborative Research Support Program	GR	Government Recommendation
CSA	Civil Society Academy	ha	Hectare
CSDRM	Climate Smart Disaster Risk Management	HES	Household Economy Security
CSIDC	Cottage and Small Industry Development Committee	HHs	Households
DADC	District Agriculture Development committee	HU	Hiroshima University
DADO	District Agriculture Development Office	I/NGOs	International/Non-governmental Organizations
DDC	District Development Committee	ICIMOD	International Centre for Integrated Mountain Development
DDRC	District Disaster Recovery Committee	ICS	Improved Cooking Stove
DDRPP	District Disaster Response and Preparedness Plan	iDE	International Development Enterprises
DFID	Department for International Development	IEC	Information, Education and Communication
DFO	District Forest Office	ILRI	International Livestock Research Institute
DFTQC	Department of Food Technology and Quality Control	IOM	International Organization for Migration
DIA	Dairy Industries Association	IPM	Integrated Pest Management
DIP	Detail Implementation Plan	IPNI	International Plant Nutrition Institute
DLS	Department of Livestock Service	IRD	Informal Research and Development
		IYCF	Infant and Young Child Feeding
		JTA	Junior Technical Assistance
		KAP	Knowledge Attitude and Practice
		kg	Kilogram
		LAAN	Linking Agriculture, Nutrition and Natural Resource Management

LDMC	Local Disaster Management Committee	PGS	Participatory Guarantee Systems
LDRMP	Local Disaster Risk Management Plan	PLA	Participatory Learning and Action (approach)
LFUGs	Local Forest User Groups	PMCA	Participatory Market Chain Analysis
LRP	Local Resource Person	PNC	Postnatal Care
Ltd.	Limited	PPME	Participatory Planning, Monitoring and Evaluation
M&E	Monitoring and Evaluation	RbF	Riverbed Farming
MAPs	Medicinal and Aromatic Plants	RDC	Rural Development Centre
MCC	Milk Chilling Center	RDMA	Regional Development Mission for Asia
MCHN	Mother and Child Health Nutrition	RWEE	Rural Women Economic Empowerment
MDGs	Millennium Development Goals	SARR	South Asia School of Rural Reconstruction
MISS	Malika Integrated Social Service	SDGs	Sustainable Development Goals
MIYCN	Maternal, Infant, and Young Child Nutrition	SIFS	Sustainable Integrated Farming System
MoAD	Ministry of Agricultural Development	SLC	School Leaving Certificate
MOU	Memorandum of Understanding	SSU	Service Support Unit
MPC	Market Planning Committee	SWOT	Strengths, Weaknesses, Opportunities and Threats
MPFG	Multi-Purpose Farmers Group	TA	Technical Assistance
MSFP	Multi Stakeholder Forestry Programme	ToT	Training for Trainer
Mt	Metric Ton	UN	United Nations
NAPA	National Adaptation Program of Action	USAID	United States Agency for International Development
NARC	Nepal Agriculture Research Council	VAHW	Village Animal Health Worker
NDA	Nepal Dairy Association	VDC	Village Development Committee
NDBB	National Dairy Development Board	WFP	World Food Programme
NE	Nutrient Expert	WHH	Welthungerhilfe
NMDP	National Market Development Programme	YE	Youth Empowerment
NRNA	Non-Resident Nepali Association		
NRs.	Nepalese Rupees		
NTFPs	Non-Timber Forest Products		
PCVA	Participatory Climate Vulnerability Assessment		

A Brief Introduction to FORWARD Nepal

Forum for Rural Welfare and Agricultural Reform for Development (FORWARD Nepal) is a non-profit, service-oriented national non-governmental organization established in 1997 to help disadvantaged groups and the rural poor. The organization is registered at the District Administration Office, Chitwan, and affiliated to the Social Welfare Council, Nepal. The organization aims at reducing poverty of marginalized communities through integrated and sustainable development interventions. It provides forum to researchers, development professionals, rural artisans, private sectors, academia, grass root level organizations, and funding agencies committed to change the quality of lives of underprivileged people in Nepal.

FORWARD Nepal emphasizes collaboration and partnership with GOs, I/NGOs, research institutions, academia, private sectors and public media at national/international levels and community-based organizations as appropriate for greater impacts of its programs, resource generation/sharing, knowledge, skills, experience sharing, and learning. It has MOU with various concerned institutions like GOs, Universities, I/NGOs and private sectors at national and international level for project collaboration, partnership and sharing of work experiences and learning from each other.

Over the past twenty years, the organization has implemented eighty-four projects in fifty-five districts representing Terai, Mid Hills, High Hills, as well as Mountains, involving a total of about 0.4 million direct beneficiaries. During the reporting period (FY 2015/16), the organization has implemented twenty-two projects. Some of the projects were implemented through district-based NGO partners. In the reporting period, a total of 109 staffs were directly employed by the organization for the implementation of its programs. Among total staff, 47 were officers from diverse professional backgrounds. In addition, some consultants and enumerators

were engaged for the projects' baseline survey, studies, and trainings as per the needs of the organization. There are also affiliated professional members and founder members whose services are taken on need basis.

The organization has acquired 0.17 ha land in Bharatpur Municipality-13 (Kalyanpur), Chitwan for its office building. FORWARD Nepal is also a major shareholder of the Global Agri-tech Nepal Pvt. Ltd, Banke where it has invested NRs. 12,197,681. Above all, a five Year's Road Map has already been developed and its implementation is gradually moving ahead based on its practicability and capacity of resources.

FORWARD Nepal's program development and implementation is multi-pronged, integrating key interventions both in horizontal and vertical dimensions, to enhance sustainable livelihoods and ensure positive socio-economic impacts on the communities. The organization has five Program Thematic Areas with the following interventions:

- 1. Food and Nutrition Security**
 - Food crops and seed supply system
 - Livestock, aquaculture and fisheries
 - High value commodities
 - Farm forestry and Non Timber Forest Products (NTFPs)
 - Productive infrastructure
- 2. Business Promotion and Market Development**
 - Enterprise development
 - Value chain development
 - Market promotion and networking
- 3. Adaptive Research and Development**
 - Participatory innovation, technology development and verification
 - Development studies and technology dissemination

- 4. Natural Resource Management**
 - Biodiversity conservation, promotion and optimum utilization
 - Promotion of renewable energy
 - Nutrient use efficiency and recycling
 - 5. Climate Change and Disaster Risk Management**
 - Awareness raising and capacity building
 - Climate smart agriculture
 - Disaster preparedness, emergency response and recovery
- Cross-cutting themes**
- Gender and social inclusion
 - Participatory planning, monitoring and evaluation
 - Rights-based approaches to development
 - Advocacy and policy lobbying
 - Institutionalization

Strategies/Approaches

FORWARD Nepal continues to be known as respected, committed and dynamic organization in alleviating poverty through these strategies/approaches.

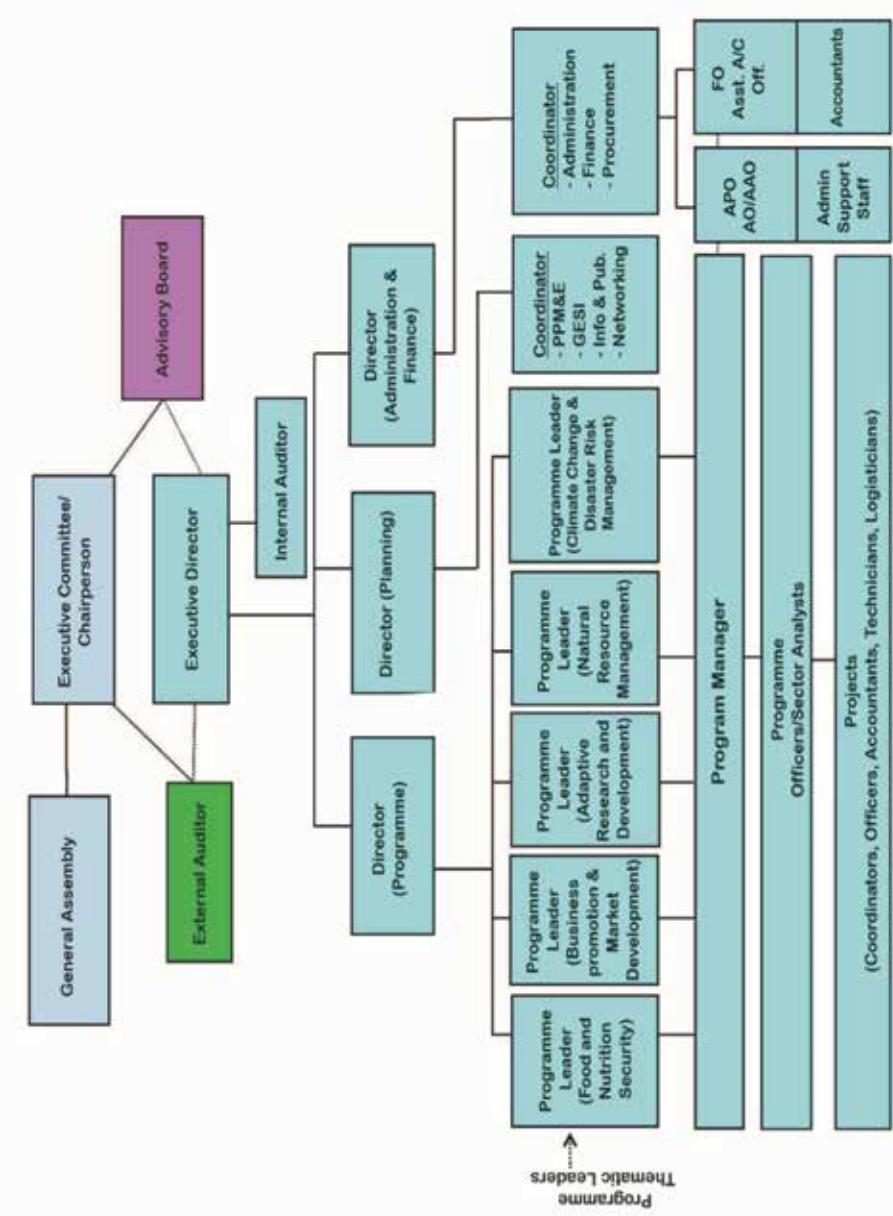
- A value chain approach for selected sub-sectors within agriculture, livestock, aquaculture, fisheries, and forestry.
- Engage target communities in research, institutional strengthening and development interventions.
- Utilize and promote local knowledge and skills in devising resource management solutions through participatory action research and development.

- Gender and social inclusion through participation of disadvantaged communities.
- Employment generation through vocational training and income generation activities.
- Develop and institutionalize local resource persons, local resource centers, and community based organizations for the sustainable community development.
- Multi-sectoral and multi-stakeholder collaborations at local, national and international levels for institutional networking, sharing knowledge, skills, experiences and resources.
- Promote Good Agricultural Practices (GAP) considering sustainable and judicious use of the natural resources.

Governance

The Executive Committee or Board elected by the General Assembly provides overall policy direction and guidance to the organization. All the Board members are volunteers who contribute in reviewing and formulating policies and goals as necessary. The Chairperson and founder members collectively provide patronage to the organization. The Executive Committee delegates its authority to the Executive Director to hold responsibility for implementing policy decisions and day-to-day management of the organization while the Directors lead their team of multidisciplinary specialists for overall execution of their respective programs run by the organization. Moreover, projects are managed by the Project Leader/Coordinators while the center oversees its credibility and accountability.

Organizational Structure



Program Highlights

During the year 2015/16, FORWARD Nepal implemented 22 projects across 22 districts in the country. The following section describes the projects' key activities and the progresses during the period.

FORWARD Nepal implemented projects (2015/16)

SN	Name of project	Project district/s	Project duration	Expenditure (2015/16) (NRs.)	Number of Beneficiaries	Funding source
1	Agricultural Learning Exchange for Asian Regional Networking (AgLEARN)	Chitwan, Surkhet, Banke	Jun 2013 - May 2016	2,949,243	349	USAID/ RDMA
2	Enhancing Quality Standards of Raw Milk: Validation of Good Manufacturing Practices (GMP) in the Chain	Nawalparasi, Tanahun, Kavre, Bara, Makwanpur	Feb 2016 - Jan 2017	10,435,885	6,000	DFID/ SAMARTH-NMDP
3	Building Community Enterprises of Smallholders in Bangladesh and Nepal	Chitwan	Oct 2015 - Sep 2018	4,080,873	2,300	BMZ/ WHH
4	Improving the Livelihood of Poor Households in Siddhi VDC of Chitwan through Beekeeping Development	Chitwan	Feb 2015 - Jan 2016	1,111,417	28	WHH
5	Community Practice in Schools for Learning Climate Change Adaptation (COPILA)	Banke	Jun 2015 - Aug 2016	1,339,918	2,650	HELVETAS
6	Improved Flood Resilience of Communities in Morang and Sunsari Districts (CR)	Sunsari, Morang	Apr 2016 - Aug 2017	584,167		Plan International
7	Enhancing Livelihoods of Smallholder Farmers in Central Terai Districts of Nepal	Bara, Rautahat, Sarlahi, Mahottari	Apr 2015 - Apr 2018	44,191,588	30,000	UKaid & ADRA-UK
8	Promotion of Green Economy in Hill Areas of Nepal and Bangladesh	Chitwan	Jan 2015 - Dec 2015	1,124,862	1,513	WHH
9	Household Economic Security (HES) Program	Morang	Jul 2013 - Jun 2016	4,708,612	15,296	Plan International
10	Transfer, Evaluation and Dissemination of an Innovative Fertilizer Management Tool (Nutrient Expert®) for Increasing Crop Yields and Farmers' Income in Eastern Nepal	Jhapa, Morang	Sep 2014 - Oct 2016	1,319,939	300	IPNI/NRNA Australia
11	Enhancing Food Security through Scaling up of Climate Smart Agricultural Practices in Rice-Lentil System	Dang, Banke, Bardiya, Kailali	May 2015 - April 2016	4,024,281	2,000	USAID/ Winrock International

SN	Name of project	Project district/s	Project duration	Expenditure (2015/16) (NRs.)	Number of Beneficiaries	Funding source
12	Construction of Livestock Sheds	Makwanpur	Sep 2015 - Jul 2016	27,707,152	600	DFID/ SAMARTH-NMDP
13	Construction of Community Seed/ Grain Storage Bank	Makwanpur	Sept 2015 - Jul 2016	13,657,498	-	DFID/ SAMARTH-NMDP
14	Renovation of earthquake affected School in Siddhi-2, Lotanti, Chitwan	Chitwan	July 2015 - April 2016	21,326,641	144	Hiroshima University, FORWARD, Rotary Club of Bharatpur
15	Vegetable Seed Distribution to Earthquake affected Households	Chitwan	June 2015 - Oct 2015	397,589	1,943	WHH
16	Multi Stakeholder Forestry Programme (MSFP): Forest-Based Enterprise Promotion	Bajura, Doti	Nov 2014 -June 2016	21,326,640	3,404	MSFP
17	Riverbed Farming	Banke, Morang Jhapa, Saptari, Siraha	May 2011 - Dec 2016	4,971,021	1,276	HELVETAS
18	Socioeconomic Study on Maize Production and Evaluation and Dissemination of Nutrient Expert® Tool based on Farmer Typologies in Eastern Terai of Nepal	Jhapa, Morang	Apr 2015 - May 2016	826,416	180	IPNI
19	Technical Assistance (TA) Services to Rural Women Economic Empowerment (RWE) Programme	Sindhuli, Rautahat, Sarlahi	Feb 2016- Oct 2016	12,450,203	3,600	WFP
20	Child Centered Climate Change Adaption (4CA)	Sunsari, Morang	Feb 2014 -Mar 2016	6,040,088	700	Plan International
21	Youth Empowerment (YE) Program	Morang	July 2016 - June 2017	-	330	Plan International
22	Improving Livelihoods of Smallholder Dairy Farmers through Feed Management in Kailali District	Kailali	Mar 2013 - Sep 2015	1,515,538	700	ILRI

PROJECT REPORTS



AGRICULTURAL LEARNING EXCHANGE FOR ASIAN REGIONAL NETWORKING (AgLEARN)

Farmers' field day - organic vegetable farming, Kunathari, Surkhet

Agricultural Learning Exchange for Asian Regional Networking (AgLEARN) was a regional project funded by the United States Agency for International Development (USAID)/Regional Development Mission for Asia (RDMA) and implemented by a consortium of partners led by the Asian Institute of Technology (AIT), Thailand for the duration of three years, starting from 22 May 2013 to 21 May 2016. The AgLEARN project contributed directly to two specific areas of strategic investment of USAID Feed the Future (FtF) initiative in Asia as (i) improvement of overall farm productivity through sustainable agricultural practices, and (ii) promotion of high-quality, high-value crops with the aim of enabling smallholders to increase their income by linking them to appropriate niche markets through accessible supply/marketing chains. The project aimed at improving agricultural production in three countries of South and South-East Asia as Bangladesh, Cambodia and Nepal. The project consisted of two institutions as technology receiving and disseminating partners in each program country.

In addition, there were two Universities from Thailand, two institutions from India as Society for Integrated Land and Water Management (SOFILWM) and Acharya NG Ranga Agricultural University (ANGRAU), and a network Horticulture CRSP as collaborators for providing innovative technologies. NARC and FORWARD Nepal jointly implemented the project activities in two agro-ecological zones as Mid-hills and Terai of Nepal. Shaktikhor VDC of Chitwan district and Kunathari VDC of Surkhet district represented the Mid-hills, while Baijapur VDC of Banke district represented Terai. The main activities of the project included mainly the on-farm testing and field demonstration of the technologies. There were altogether 130 beneficiary farmers; 30 farmers from Shaktikhor (Chitwan), 20 farmers from Kunathari (Surkhet) and 80 farmers from Baijapur (Banke). The project adopted social mobilization, participatory planning, monitoring and evaluation (PPME), local resource persons (LRPs) development, inclusive development and farmer-to-farmer extension approach in the program implementation.

The AgLEARN project organized different capacity building trainings and events to beneficiary farmers and project staff. The project delivered various trainings to farmers on seed storage and zeolite based seed drying technology, lentil production, zero till garlic farming, green bean farming, soil solarization, foliar fertilizer preparation, vegetable nursery raising and production. On top of that, the project facilitated the farmers' internship program in two phases - three farmers (one from each district) participated in one month internship program and 15 farmers (3 from Chitwan, 7 from Banke and 5 from Surkhet) participated in 15-day internship program in Thailand. Besides, AgLEARN Field Manager and FORWARD staff also got opportunity to be a part of internship program, and learnt various innovative technologies for organic farming like Bokashi manure, wood vinegar, herbal steam, soil solarization, Trichoderma spp., plastic mulching and other proven technologies of different countries. The internship program enhanced the capacity of farmers and motivated them to adapt innovative technologies learnt in Thailand. In turn, intern farmers facilitated the trainings on learnt technologies to their neighbors - respective farmer groups. During the last Fiscal Year, the project facilitated plastic mulching training for 43 farmers of Surkhet, Herbal steam making training for 36 farmers of Chitwan and wood vinegar making training for 41 farmers of Banke.

The innovative technologies were tested in the farmers' field. The project supported technical trainings and external inputs to the farmers for technology testing in experimental and control plots established by the farmers. The technologies like bed drying, improved lentil farming, rhizobium treatment, zero till garlic farming, soil solarization, foliar fertilizer, Trichoderma incorporation, drip irrigation, fermented fruit juice, Bokashi manure, wood vinegar, herbal steam and other proven technologies were tested in different crops in different project sites. In the last year, the tested technologies were plastic mulching on tomato crop in Surkhet, wood vinegar on tomato in Banke, and herbal steam on Tomato in Chitwan.

The project conducted field demonstration to observe the performance of the crops tested under various technologies, and disseminate the outcomes to the extended groups in the

presence of representatives from DADO and NARC stations. The project organized national level workshop once a year, and used it as a platform to share the project approach, strategies, outcomes of the preceding year, feedback exchange, and decide on the crops and technologies for succeeding season. In the National Workshop, representatives from AgLEARN-USAID/RDMA, NARC, FORWARD Nepal, and farmer groups participated.

The project left some marks for the innovative technologies of organic agricultural production. The training and field demonstration programs have encouraged the farmers for the adoption of organic farming technologies. Herbal steam is found to be effective for managing pests like aphid and fruit borer. Similarly, tomato cultivation under plastic house has shown the control of blight diseases. Farmers have appreciated the bicycle pump technology. However, not all the technologies got fitted into the farmer's condition. Majority of the farmers didn't prefer wood vinegar due to difficulties in its preparation, and only small amount can be produced at a time. The project has developed local resource persons (LRPs) through various exposures and trainings to ensure the continuity of the technologies disseminated by the project. Farmers are expected to continue the promising technologies, which are convenient and suitable to their conditions.



Biochar making technology demonstration,
Shaktikhor, Chitwan



ENHANCING QUALITY STANDARDS OF RAW MILK: VALIDATION OF GOOD MANUFACTURING PRACTICES (GMP) IN THE CHAIN

Milk collection at Manakamana Dairy Cooperative, Makwanpur

With the goal of improving the quality of raw milk for sustainable development of dairy sub-sector, a project named "Enhancing Quality Standards of Raw Milk: Validation of Good Manufacturing Practices (GMP) in the Chain" has been initiated from January 2016 through DFID/SAMARTH-NMDP funding. The project has two specific objectives as (i) to establish and validate the application of good management practices (developed by Nepal Dairy Development Board) of raw milk supply chain from producers to milk chilling centers, and (ii) to increase farmers' income through increase in the sale of milk with improved milk quality. The project targets to reach about 6,000 smallholder dairy farmers within the milk catchment areas of the six pilot sites in five districts (Tanahun-1, Nawalparasi-1, Kavre-2, Makwanpur-1 and Bara-1). The farmers, currently delivering milk to the chilling centers of the piloted sites through respective collection centers, are the direct beneficiaries. In addition, about 200 dairy personnel

(laborers, staff, and managers) working at the milk collection and chilling centers of the six pilot sites are also the direct beneficiaries. The key stakeholders of the project include National Dairy Development Board (NDDB), Central Dairy Cooperatives Association Nepal (CDCAN), Nepal Dairy Association (NDA), Dairy Industries Association (DIA), Department of Food Technology and Quality Control (DFTQC) and Department of Livestock Services (DLS) for policy and strategic direction of the project. The project has been implemented through the local partners, key actors in the raw milk supply chains, in the respective project sites, as (i) Tanahun District Milk Producers' Cooperative Union Ltd (Tanahun), (ii) Gyanodaya Dairy Udyog, Sunwal (Nawalparasi), (iii) Setidevi Milk Producers Cooperative Society Ltd (Kavre), (iv) Timal Mahabharat Multipurpose Cooperative (Kavre), (v) Manakamana Milk Producers Cooperative Society Ltd (Makwanpur), and (vi) Shree Dumarwana Milk Producer Cooperative Ltd. (Bara).

The accomplished project activities include inception workshop, identification of pilot chilling centers, development of training curriculum and training manuals, baseline study on GMP status, ToT trainings, and interactive meetings with different stakeholders. The inception workshop was held in the presence of representatives from DIA, NDA, CDCAN, and Dairy Development Corporation (DDC), to lay a foundation for adoption and scaling up among stakeholders. The workshop came up with a mutual agreement, to pilot GMP in six chilling centers and their milk-sheds in five districts. A baseline study on farm practices, personal hygiene and behavior, and milk quality parameters has also been completed.

In order to scale up, FORWARD Nepal has signed partnership agreement in the 6 pilot sites for creating a GMP fund through contributions from local partners based on per unit volume of milk traded. MCC partners and processors have expressed their commitment for long-term sustainability of the intervention and its scaling up. The project also established a functional liaison with Department of Livestock Services for rolling out curriculum development and accomplishment of ToT trainings. Four ToTs were organized to train 90 nominees from milk collection/chilling centers in the selected GMP pilot sites. The major focus was to capacitate the partner MCCs on GMP in hygienic milk production, husbandry practices, milk storage, transport and chilling. Trainers developed hands-on skills, and learned methods of delivering trainings on the ground to transfer technical knowledge to chilling centers and farmers. Among 90 trained trainers, 23 trainers are providing training at the milk chilling centers, including transporters while 67 trainers are providing training to farmers on hygienic milk production. A total of 41 women trainers were developed during this process. These local resource persons will ensure sustainability in the GMP knowledge transfer in the pilot sites. A training manual (in Nepali) has been developed in consultation with DLS and CDCAN. The senior officers of DLS were also trained so that they can provide ToTs in the future. Similarly, DLS's technicians of the respective pilot sites were also trained to support/backstop the trainees while rolling out GMP training to farmers in the field.

ToT training changes behavioral practices for improved quality of milk

Mr. Yogendra Yadav (23), an inhabitant of Amrot-5, Dainaha, Nawalparasi, is the youngest son of Mr. Dhurba Prasad Yadav. He lives in a joint family of seven members. He is a graduate in business studies. His family possess about 1.4 ha of land, and also keeps buffaloes as family business. Few years before, the family decided to enter into the milk aggregation business with support from Gyanodaya Dairy, where they used to collect milk since long time. They bought a 1,000 liters-capacity-milk-chilling vat in partnership with Gyanodaya Dairy, and started to collect milk in the village and then send milk to Gyanodaya Dairy at Sunwal. Amrot Chilling Centre started receiving technical support from FORWARD Nepal as a network member of Gyanodaya Dairy Udyog, one of the six local implementing partners of GMP validation. Gradually, the business expanded to other location like Sukrauli VDC of Ghinaha and Digbal of Amrot. Now, his father and brother support Mr. Yogendra in collection and transportation of milk. Until now, about 235 milk producing farmers are associated with the Amrot Collection Center, and it has been collecting about 800 liters of milk per day.

Mr. Yadav happily states that the opportunity to participate in one of the ToT training organized by FORWARD Nepal for adoption of GMP in raw milk at Collection and Chilling center has been an eye opening event. Before, they were completely ignorant on quality issues. He has now realized that milk handing practices are so important. He adds, "We never used to adopt even basic principles of dairy practices, and were unaware about the effect of such practices in regards to quality of milk". Mr. Yadav and his team of trainers have already completed the trainings to all the farmers under his network. The training to the milk producing farmers are found to be effective as the farmers have stopped the use of plastic utensils for milk collection, started filtering milk at the home itself, and cleanliness of utensils has been significantly improved. At the same time, animal husbandry and feeding practices are also changed. Further he adds, "I will improve the

collection center and provide facility to farmers to make them avail all inputs to continue GMP practices specifically, the product like liquid soap, steel utensils, feeds and other technical input on animal husbandry to motivate farmers to produce high quality milk". All the personnel working at the collection center are adopting code of conduct.

He declares "Amrot milk meets minimum quality standards by all means". He further claims that until now, his chilling center has the best quality milk in the network, and he is sure one day such milk will fetch the highest prices, attracting more buyers/processors in the future.



Mr. Yogendra along with his father



Mr. Yogendra briefing about the technical aspects of GMP with the visit team



BUILDING COMMUNITY ENTERPRISES OF SMALL-HOLDERS IN BANGLADESH AND NEPAL

Farmer-to-farmer training in Siddhi, Chitwan

The three-year project funded by the Federal Ministry for Economic Cooperation and Development (BMZ)/Welthungerhilfe (WHH), Germany has been initiated in October 2015. It is being executed by four partners in two South Asian countries, Nepal and Bangladesh. In Nepal, CEAPRED has been implementing the project in Salyan district and FORWARD Nepal in Siddhi and Kaule VDCs and Kalika municipality (former Shaktikhor) of Chitwan district. The project has targeted 2,300 beneficiaries from indigenous and marginalized communities in Chitwan district. The overall objective of the project is to combat poverty and food insecurity of the most vulnerable sections of the society. The project focuses on building the community owned and managed enterprises, which will act as a business entity and establish strong market linkages and strengthen value chains, and also supply the needs of the farmers for input and sell the surplus product from the farmers on a commercial basis. The project follows target-group-oriented and participatory approach in the program implementation. The project officially started with a kick-off meeting,

which took place in Kolkata, India with the purpose of sharing the ideas and approaches of the project implementation. Thereafter, the project proceeded as specified in the plan. The activities in the first year remain focused on inception meetings, group formation/reformation, capacity building, farmer-led learning activities, value chain analysis, micro irrigation schemes, and collection centers in parallel with exploration of potential community enterprises in the respective project sites.

Initially, the project staffs were informed about the project concept, targets, and various approaches to project implementation, with several technical sessions to enhance their technical knowledge. Similarly, for project familiarization, six cluster-wise and three VDC level inception meetings were held in the presence of representatives from major local level stakeholders and community members. The project has reached 2,338 households, which are organized into 110 farmers groups involving about 59% women. Among the total beneficiary households (2,338), Chepangs represent about 61% followed by Janjatis (25%), Brahmin/

Chhetri (11%), and Dalits (3%). Furthermore, 110 resource farmers (one in each farmer group) have been developed and capacitated on technical and managerial aspects. The project undertook a review and baseline planning workshop to discuss on project progress, improvement areas, value chain assessment, and baseline survey along with possible adjustment parts for amendment. As a first step for the promotion of community enterprises, value chain study of farm surplus has been completed in all project sites. The project also arranged an exposure visit, which has enabled the participants to experience the actual scenario of collective marketing and community enterprises, and made realization of its potential for income generation. A manual/flip chart has also been developed and printed (150 copies) in Nepali version covering SIFS approaches and LAAN-PLA cycle in pictorial form. After that, the project trained 110 resource farmers on the manual, and handed over teaching-learning materials to each resource farmer for conducting sessions and replicating their knowledge in the groups.

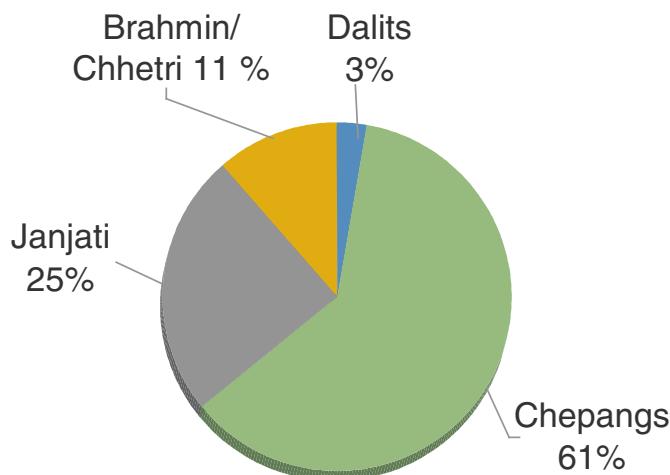
In addition to technical service, the project catered the farm inputs to the farmer groups based on the farmers demand and preference. The project supported the beneficiaries with seeds of different vegetable crops for kitchen

garden, and breeding bucks to few farmer groups for goat breed improvement. The project accomplished four micro irrigation schemes, three pipe irrigations and one lift irrigation, benefitting 42 farmers. In addition, the project has also been supporting the construction of two collection centers in Kaule VDC, which are halfway to completion.

Proper and periodic monitoring field visits have been carried under the project. A WHH team comprising of Program Director (Mr. Mathias Moggie), Country Director (Ms. Asja Hanano), and Program Manager (Mr. Surendra Gautam) visited Siddhi VDC to have more insights on the progress of BMZ/WHH funded project activities through community interaction and make sure whether the project activities are implemented as specified in the plan or not.

The project capacitated the staff through various national and international trainings/ workshops/ conferences offered by WHH-CSA as Advocacy for Food and Nutrition Security in the Context of the Agenda 2030, LANN, Global Civil society Dialogue on Ending Hunger: Making SDG 2 Work, and How to become an exceptional Civil Society leader. The training/workshops are crucial for the organizational capacity building.

BCES project beneficiaries by Ethnicity/Caste





IMPROVING THE LIVELIHOOD OF CHEPANG HOUSEHOLDS IN SIDDHI VDC OF CHITWAN THROUGH BEEKEEPING DEVELOPMENT

Beekeeping is one of the promising income generating sectors for enhancing the livelihood of marginalized communities. Considering this fact, FORWARD Nepal implemented a project to improve the livelihoods of Chepang communities through beekeeping development in Siddhi VDC of Chitwan. The one-year project (February 01, 2015-January 31, 2016) was financed by Welthungerhilfe (WHH), Germany. The project developed twenty-eight beekeepers, including nine beehive makers. The project beneficiaries have been capacitated and promoted for sustainable and productive beekeeping. They have realized beekeeping as a good alternative income venture, since they became able to reap utmost benefits from just a single hive. Their high level of enthusiasm, communal contribution, and expansion of beehives are indications of sustainable beekeeping. An average honey production per beehive in one season has increased by 222% compared to the baseline situation. This could be attributed to the adoption of the high yielding exotic species, *Apis mellifera* with an average honey yield of

17.5 kg/hive/season over the native species, *A. cerena* with an average honey yield of 5.4 kg/hive/season. Beneficiaries have improved their household income through improved beekeeping. Some have utilized the income to fulfill the household basic needs, while some (young beneficiaries) covered their college tuition fee, and one has invested NRs. 45,000 (income from beekeeping plus additional money) on purchasing of bee colony and hives to expand the beekeeping enterprise. About 25% of the beneficiaries have already multiplied their learnings to neighbors, and motivated others to adopt modern beekeeping.

The project outcomes could be attributed to improved trainings, material as well as technical support, and regular follow up and monitoring visits. A three-day production level training was organized to aware beneficiaries on modern beekeeping covering different topics from introduction to the marketing (types of bees, absconding, swarming, their control, management, off-season management, dividing a colony, uniting colonies, artificial

Beehive management training to Chepang households, Chitwan

diet, feeding management, honeybee diseases, pest, parasites, control measures, honey and other beehive products, etc.). Participants also visited beekeeping farms and demonstrated the subject matters covered in the theoretical sessions (i.e. handling of the modern beehive; identifying the queen, worker and drone bees in the frame; identifying healthy and weak bee colony; making and feeding sugar syrup; dividing the colony, etc.). A four-day training on manufacturing of beehive and wax combs was organized for nine beekeepers. The main objective of the training was to develop beehive makers at the local level, so that the beekeepers and hive makers in Siddhi VDC reap mutual benefits. The project organized a processing and marketing level training coinciding with the time for honey harvest. Beekeepers received theoretical knowledge as well as practical demonstration on the processing of the honey with the honey processing unit. A one-day workshop on food diversity and honey utility was organized to widen the concept of project beneficiaries on diverse use of honey. The beneficiaries were made aware of nutritive and medicinal value of honey along with its proper use. Participants also got the opportunity to gain more information about beekeeping development in Nepal and its expanding scope,

bee equipment, manufacturing of beehives, harvesting, processing, quality management, branding, and marketing of honey at large scale through exposure visits to the successful beekeeping enterprises in Chitwan and Nawalparasi.

In addition to capacity enhancement, the project beneficiaries also received beehives with bee colony, honey processing unit, and other necessary beekeeping materials like brush, bee veil, smoker, stand, and foundation bee wax. The project succeeded with the publication of a beekeeping manual, which has been published in Nepali language covering a wide range of topics related to beekeeping: scope and importance of beekeeping development in Nepal; production and utility of honey, wax, and other hive products; direct and indirect benefits of beekeeping; different types and life cycle of honey bee; bee equipment; honey harvesting, processing, and storage; insect and diseases; and many other basic topics.

Beekeeping becomes a good source of income to Arjel Chepang

Arjel Chepang (23), an energetic farmer, has achieved success in the beekeeping. In the last year (prior to the project implementation), he earned NRs. 8,000 through marketing of honey from his four traditional hives with *A. cerana*. Traditional beekeeping was contributing 20% to his household income. Though he was engaged in beekeeping, he was not able to utilize the potentiality of his area in the right way. He always showed keen interest in learning new skills of beekeeping. Meantime, the project launched in his area, and he showed strong concern and commitment towards the project, thus involved as a project beneficiary. He received different trainings on the techniques of modern beekeeping with *A. mellifera* species. He also received support as one beehive with bee colony (*mellifera*), one empty beehive, smoker, foundation sheet, bee veil, stand, and brush through the project. He also got the opportunity to visit commercial beekeeping farms. At present, he is one of the successful honey producers in



Beehive making training to Chepang households, Chitwan

his village. He has been able to earn satisfactory income through beekeeping. He says "Because of the large number of Chiuri trees in the locality, as well as good maintenance of beehives, I have been able to increase honey production".

Mr. Arjel Chepang was able to harvest 42 kg of honey in one season from a single beehive, which is even more than 20 kg honey from four traditional hives. After home consumption of 2 kg, he sold 40 kg honey at the rate of NRs.400/kg, hence earned NRs. 16,000. Besides household expenses, he has utilized his earnings to pay the college tuition fees and mortgages. "I would like to thank the project for enhancing my skill

and knowledge of modern beekeeping, and all supports" says Mr. Arjel. Other farmers are also impressed by the success of Mr. Arjel, and have shown their interest on modern beekeeping. Now, Mr. Arjel is in the process of expanding his beekeeping enterprise as in his experience the income from beekeeping with *A. mellifera* is much more as compared to *A. cerena*. He also found that his recent income from just a single hive is comparatively more than what he gets from goat rearing and farming in 0.23 ha of land. He dreams of being a successful entrepreneur, and also wants to share his skills and knowledge to his neighbors.



Mr. Arjel inspecting his bee colony



COMMUNITY PRACTICE IN SCHOOLS FOR LEARNING CLIMATE CHANGE ADAPTATION (COPILA)

Tree plantation on the school land, Banke

The project COPILA, funded by HELVETAS Swiss Intercooperation, was implemented in Banke district to increase the resilience of men and women in the working area against the negative impacts of climate change. The project had three objectives as (i) climate change education in communities through students and farmers, (ii) integration of knowledge sharing between farmers and students to bridge the gap of indigenous knowledge and modern education system, and (iii) acting as a pool for sharing the knowledge of climate change. The COPILA project covered 294 households directly, and launched different climate change awareness programs targeting the farmers and students. The project mainly focused to capacitate the individuals on the issues of climate change and its impacts. The project has developed the course about climate change, which is included in the curriculum in different schools of Banke district. The students from the schools are actively involved in the program for creating the desired result in the target area. Now, three government Schools as Shree Laxmi H. S. School (Kachnapur), Shree

Bhagwati High School (Titihiriya), and Shree Saraswati H. S. School (Baijapur) have been practicing integrated curriculum development with local issues (considering climate change) so that students could relate the knowledge with the practical situation. Thirty students chosen as climate change leaders have been actively undertaking their roles in raising awareness and building up the leadership qualities. Similarly, farmers groups have moved forward, and are integrating adaptive practices along with their indigenous knowledge to minimize and avoid the negative impacts of climate change. Besides, the project has built the capacities and strengthen the leadership of women, as a result of which they are more confident on sharing their experiences and knowledge.

In the beginning of the project, communities were unaware about the climate change and its effects, but now they have acquired a lot about the climate change, and started remarking the things around them and the agriculture systems. As an impact of the awareness on the

climate change adaptation, the communities have started the use of biological pest control methods, and minimize the application of pesticides /insecticides, knowing the harmful consequences. Some farmers have adopted riverbed farming as an adaptive measure against climate change. They believe that they could

gain the remarkable progress through riverbed farming in the near future. In addition, there have been a lot of changes in the communities after being a part of the program as people have adopted mixed farming systems to get multiple benefits at the same time.



Climate change awareness campaign to students, Banke

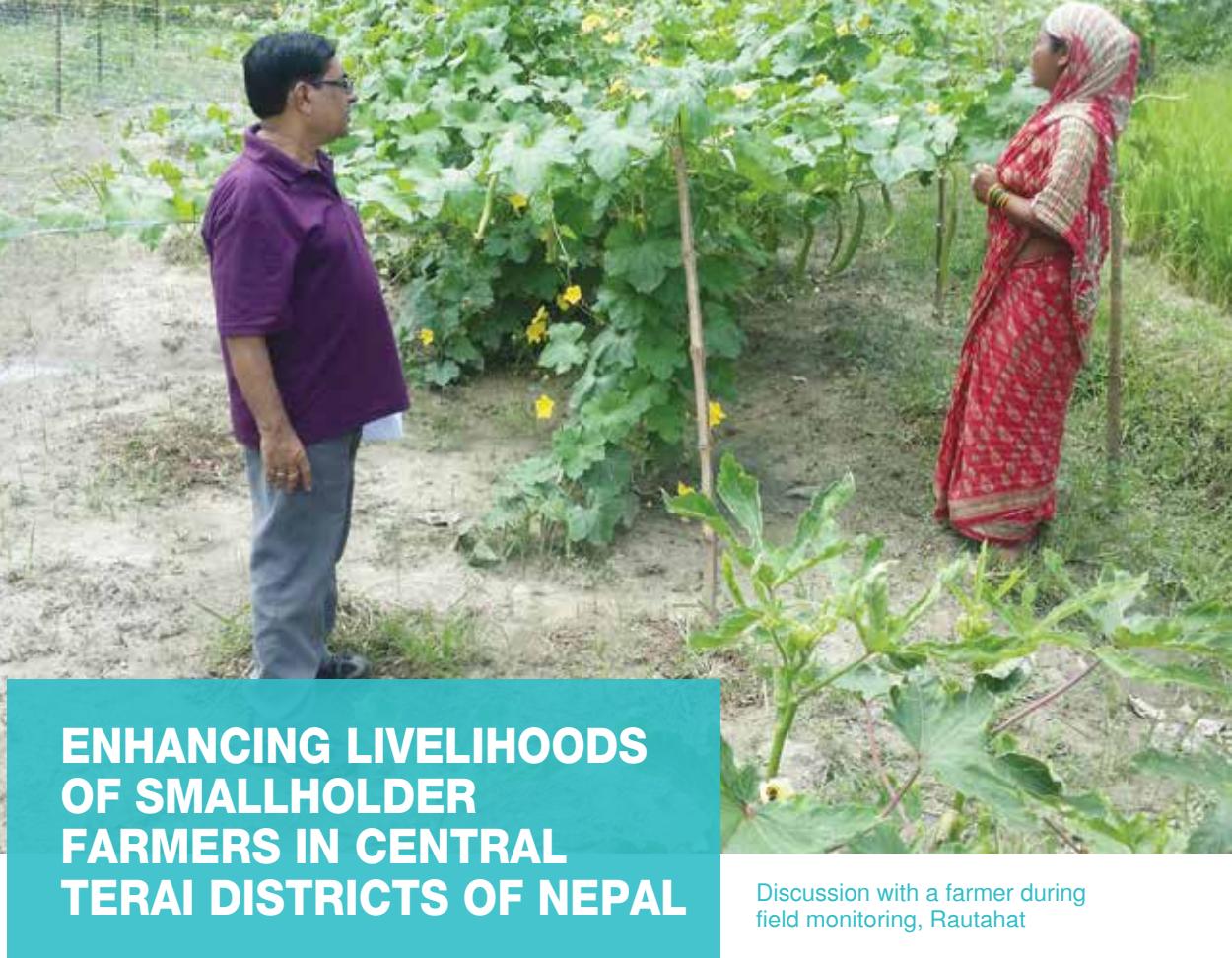


COMMUNITY RESILIENCE (CR) PROJECT

Gabion wall to prevent flood effects in the communities, Letang, Morang

Community Resilience (CR) project has been initiated by Plan International and FORWARD Nepal with the financial support from the Zurich Foundation. The project is related to disaster risk management (DRM), and works in the framework of Flood Resilient Measurement (FRM) tool developed by Z-Zurich Foundation in 2013. FRM tool works on the basis of five capitals (5C) - physical, human, financial, social, and natural, and four resilient characteristics (4R) - robustness, redundancy, resourcefulness, and rapidity under the framework of five stages of DRM cycle. The project has been implemented since April 2016 in Letang Bhogateni Municipality-7, Morang; and Barahachhetra-2 and 6, Sunsari. The goal of the project is to test and contextualize the flood resilience tools developed by the Zurich Foundation in flash flood area and on the bank of Koshi River. To achieve its goal, the project has two expected outcomes as (i) developed tested model for increasing resilience to floods of Nepalese communities, and (ii) enhanced community skills and capacity for managing flood response. FORWARD Nepal directly works to

achieve the second outcome, and also assist Plan International to achieve the first outcome. Various activities and targets have been set in the project, which support the communities in different aspects, and help them to become more resilient towards flood disaster in the sites. The project involves awareness campaigns on DRM, implementation of school level extracurricular activities with emphasis on flood risks, and different trainings to flood affected farmers in alternative livelihoods. Similarly, it supports communities for life-saving equipment, search and rescue, first-aid, and evacuation centre. It works to protect the physical infrastructures (e.g. hand pumps, tube wells, toilets, schools and hospitals) from floods, and use of gabion walls and bio-engineering to protect riverbanks. The project focuses on water resource conservation, forest conservation and plantation, and improve the quality and quantity of the ecosystem services. The project ultimately aims to strengthen the social safety nets by linking the communities with the local, district and national networks. The project has already developed a community action plan and completed a baseline survey.



ENHANCING LIVELIHOODS OF SMALLHOLDER FARMERS IN CENTRAL TERAI DISTRICTS OF NEPAL

Discussion with a farmer during field monitoring, Rautahat

Enancing Livelihoods of Smallholder Farmers in Central Terai Districts of Nepal (ELIVES) project has been implemented by FORWARD Nepal in coordination with ADRA Nepal & iDE in Bara, Rautahat, Sarlahi and Mahottari districts. The three-year project, initiated since April 2015, is funded by UK Aid and ADRA UK. The project aims to enhance the livelihoods and income of poor and marginalized smallholder farmers with a focus on women and socially excluded groups through development of pro-poor value chains in the goat and vegetable sub-sectors. The objective of the project is to increase the income of 30,000 households through their capacity building, input supports, value chain interventions and their engagement in goat and vegetable production and marketing. The target beneficiaries have been organized into 442 goat farming and 157 vegetable farming groups, and the project interventions implemented through these groups.

To accomplish its objectives, the project has implemented management and saving-credit trainings to increase the effectiveness of

farmer groups in the business management and marketing of the products. The activities as formation of Market Planning Committees (MPC), market management training to leader farmers and cooperative members, business literacy class for semi-literate women farmers and service providers, and initial facilitator training were accomplished. Besides, the project has trained the goat rearing groups on goat breeding, animal health, animal shed management, and feed and forage management to improve goat farming practices. Moreover, Village Animal Health Worker (VAHW) training, castration, dipping and drenching, and PPR campaign, demonstration of improved shed (stilted shed), and fodder/forage plantation (demo on common land) have also been implemented. More than 42,600 goats belonging to direct and value chain households from all districts were treated during the PPR and parasite control campaigns. For the breed improvement of local goat, the project has distributed 187 breeding bucks (75% Jamunapari breed) to goat farming groups in four districts. For the promotion of vegetable subsector,

training was provided on nursery management to 29 nursery operators, offseason vegetable production training to 96 farmers, making markets work for the poor (M4P) training to 22 government staff and partner organizations' chairpersons. Besides, 25 ultra-poor households from each district were supported with drip irrigation materials alone or drip irrigation materials plus sprinkler as micro irrigation promotion in the vegetable groups. For motivating farmers to maintain vegetable diversity in their diets, 5 kitchen gardening demonstrations and 20 IPM package demonstrations were laid out in each district. Besides, piloting of vegetable farming in leasehold lands has been initiated involving 10 ultra-poor households in each project district.

The impact of business literacy training and capacity building activities on goat has been visible in the initiatives taken by goat farmers in construction and repair of goat sheds in the project districts. Construction of 172 new goat sheds and repair of 207 old sheds in Bara, 310 in Rautahat, and 127 in Sarlahi are glaring examples of the impact of group level trainings on goat farming and business literacy classes.

Motivation in Farming Due to Technical Training and Business Literacy Class

Ms. Puja Bhattarai is a smallholder farmer living in Kohlbi VDC, about 25 km north of Kalaiya, the district headquarter of Bara district. She spends her time in household chores and farming in the limited land of her household and raising a few goats. Puja always wanted to do something to raise her income, but remained undecided on what to do. When ELIVES project was implemented in her locality, she became associated with the project as a member of Janamat Mahila Goat Group. As a member of goat group, she participated in different technical trainings organized by the project. Puja was an eager learner and wanted to enact what she



Improved cattle shed

learned from the trainings. She also joined the business literacy classes.

Previously, Ms. Bhattarai family owned only three goats (one doe and two kids), which she reared on traditional knowledge. But after participating in the activities of the ELIVES project she bought two does and three milking cows. She constructed improved goat and cattle shed, and started her own small goat and dairy farm business. Only in a short period of about four months she owns ten goats (3 does and 7 kids) and three milking cows. She sells 20 litres of milk every day at the average price of NRs. 50 per litre. These days Ms. Bhattarai earns about NRs. 1,000 daily from sale of milk. With the increase in income, she has now become financially independent and is very happy.



PROMOTING GREEN ECONOMY IN HILL AREAS OF NEPAL AND BANGLADESH

Inter farmer exposure visit,
Shaktikhor, Chitwan

The Green Economy project, financed by the Welthungerhilfe (WHH), Germany, sought to make inclusive participation of the farmers in promoting green economy for sustainable development. The project was executed in the hill areas of Nepal and Bangladesh from January to December 2015. FORWARD Nepal implemented the project in two hilly VDCs of Chitwan district as Shaktikhor and Siddhi. The project aimed to strengthen the technical capability of the existing farmer groups, community-based institutions, as well as improvement of the market access. The project rendered the follow-up support to ensure sustainability of the Sustainable Integrated Farming System (SIFS) project activities, as it was the continuation phase of SIFS project. The project covered 1,513 households (70 farmer groups), three Market Centers, and three Cooperatives.

The project followed knowledge-centered approach to sustainable development through knowledge sharing, advisory, and training

services to targeted communities. The major activities of the project remained regular follow-up, group level trainings, and technical support to SIFS farmers. The project organized different technical trainings, concentrated on participatory guarantee systems (PGS), household nutrition improvement through diet diversity farm planning, and entrepreneurship development. By the end of the project, 93 group level trainings were delivered, which reached 1,796 participants, involving 78% women. Similarly, the project also explored the status performance and positive and negative attributes of two market centers and three cooperatives through SWOT analysis. Besides, a value chain study of high-value commodities (honey, legumes, ginger and turmeric) was also undertaken in the project sites. The project arranged the inter-group visits to exchange the best practices adopted by farmer groups. The project also put its efforts to maintain proximity with the government agencies. District level project status and plan sharing meeting was organized with District Project Advisory Committee (DPAC) members

in participation of allied governmental and non-governmental line agencies, followed by a joint monitoring visit to Siddhi and Shaktikhor VDCs. The project promoted the beneficiaries' access to the exposure visits and programs organized by the line agencies on capacity building and livelihood improvement of poor farmers, which has also fostered the strong linkages with the line agencies.

The project has left considerable impacts on the communities. The trainings and technical support have enabled farmers to expand the farm production and become more commercially oriented. Farmers have started planning of farm activities to ensure the household nutrition security as well as monetary gain. The beneficiaries have developed better understanding of the nutrition security, and manage their farms to ensure diet diversity. As a result, farmers have a year round supply of diverse nutritious vegetables. Similarly, some farmers have developed themselves as successful entrepreneurs in the community, leading to better and sustainable livelihood. Further, to strengthen the marketing system, the project took some technical and advisory efforts to reinforce the capacity of market centres, and also curtail the possible gap between farmers and market centre. Nonetheless, the progress of market centers and cooperatives were not up to the expectation, except few, due to several internal and external factors. However, they can be strengthened with further periodic monitoring, proper guidance, awareness, and capacity building trainings. Further exploration can be done, if any new initiatives are needed to intensify the existing market centers/cooperatives and make them sustainable.

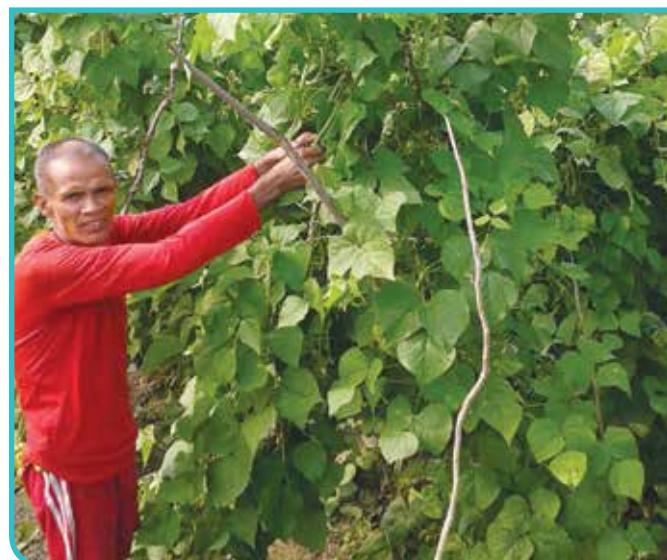
Vegetable farming- a good source of income

Mr. Bhim Prasad Lamsal (63), is an inhabitant of Gairibari-4, Shaktikhor VDC. His family includes 2 men and 4 women, with a total of 6 members. His major source of livelihood is agriculture. He has 0.4 ha land, 2 oxen, 2 buffaloes, and 3 local hens. Before the implementation of SIFS Project in his area, he used to have less farm production, which was not enough to feed his family, and had to depend on market products to fulfill their basic needs. But, since the launching of SIFS project,

his livelihood status has improved drastically. He became a member of Icchakamana MPFG, after which he got chance to participate in various technical trainings like seed production and storage, off-season vegetable farming, compost and manure management, organic farming, Jholmol preparation training and many more.

He followed the SIFS learnings and succeeded to achieve some improvement in his livelihood through vegetable farming. He also participated in the trainings as entrepreneurship development, nutrition and diet diversity, and PGS under the Green Economy project. After having good understanding of diet diversity farm planning and entrepreneurship development, he started growing diverse crops in surplus amount for ensuring household nutrition as well as generating cash income.

This year, he made good income through vegetable farming. He was able to earn NRs. 60,000 from 0.10 ha land by producing 1,500 kg of four season beans. Likewise, he earned NRs. 17,000 and 12,000 from potato and snake gourd respectively. He utilized the money for children education as well as for buying necessary items for the household. His income has greatly increased as up to 90,000 annually from vegetable itself, which is four times higher than what he used to earn before. He is determined to continue the activities that he learnt through the project in the future as well.



Mr. Lamsal in his farm, Gairibari, Shaktikhor



HOUSEHOLD ECONOMY SECURITY PROJECT

Commercial vegetable farming,
Motipur, Morang

Household Economy Security (HES) project was implemented for three years (July 2013 to June 2016) in Morang district under Plan International-FORWARD partnership program. The main purpose of the project was to uplift the living standards of backward community through intervention of various sustainable livelihood practices. The works mainly focused to reduce the poverty of ultra-poor families by developing niche based capacity. The project targets especially women, landless, Dalit, people with disabilities, marginalized, Plan-supported families, and resource poor communities. The project directly supported households of 18 VDCs and indirectly eight VDCs of Morang district. Basically, the project covered the sponsored child families, home garden program, group-based farming, agro-production, and riverbed vegetable farming.

In the last Fiscal Year, the project accomplished different trainings as fish farming for 40 farmers and mushroom cultivation for 100 farmers, facilitated by DADO. Twelve farmers from Tetariya, Sisbani,

Jahada and Babiyabirta VDCs have been able to do mushroom farming at semi-commercial level. Similarly, District Forest Office (DFO), Biratnagar, provided technical knowledge to 25 farmers for plantation, and supported 1,500 forest tree saplings. The project promoted home garden, under which 227 sponsored families received one-day training on vegetable farming and improved seeds of seasonal vegetables (cabbage, cauliflower, chilli, brinjal, bottle gourd, sponge gourd, bitter gourd, okra, beans, tomato and spinach). The project also supported baby chicken and duck to sponsored families in 13 VDCs of Morang district. In total, 337 sponsored families in 26 VDCs of Morang district were directly benefited from the HES project activities.

Vegetable farming is a good source of income

Ms. Somi Devi Majhi (38) is a resident of Bhathigachh VDC, Morang. The VDC lies around 16 km north-east of Biratnagar Bazar. Ms. Majhi

was born in a poor family where her family was not able to fulfill all her desires as well as good education. Her family consists of four members including herself, son and daughter and her husband. She used to grow vegetables in a small scale purchasing seedlings from other nurseries. This was not enough to sustain her household. She had to borrow money every year for daily household expenses, so life was miserable. She was able to feed her family only for a month from own field production. Ms. Somi Devi Majhi and her husband were forced to daily labor work for income generation. Her husband worked as a laborer at the factory.

After the HES project supported her on irrigation, seeds and fertilizers, her family has generated considerable income. She was also one of the participants of the one-day commercial vegetable farming training. The HES project supported her on vegetable cultivation training, material support, seasonal/off-seasonal vegetable seeds, chemical fertilizer, plant micro nutrient, plant protecting tools and agriculture tools. She is involved in the seasonal and off-seasonal vegetable farming in semi-commercial scale in 0.1 ha of land. She is earning about NRs. 70,000 every year from the sale of fresh vegetables.

Now, it is clear to her that hard work is a key to success, and she wants to acknowledge Plan International/FORWARD Nepal partnership program for her success.

Ms. Majhi said "I got one-day training of commercial vegetable farming from the HES project and with the seeds, materials, fertilizers provided after the training, I earned about NRs 70,000 in a year. I came to know that hard work leads to success. Now I grow seasonal and off-seasonal vegetables. I use earnings from farming to invest in the education and nutrients of my children. In the next year, I have planned to invest more on vegetable cultivation with expecting to increase the income at least by two-fold".

Ms. Majhi is now able to generate income from the semi-commercial vegetable farming and provide good education and health care of her children. She has cultivated vegetables in 0.1 ha land but is planning to increase the land area to more than 0.5 ha for vegetable farming. She is highly motivated from her first success and the improvement in the household livelihoods with the adoption of improved vegetable farming practices.



Ms Somi Devi Majhi on her commercial vegetable farming field, Bhathigachhi, Morang



TRANSFER, EVALUATION AND DISSEMINATION OF AN INNOVATIVE FERTILIZER MANAGEMENT TOOL (NUTRIENT EXPERT) FOR INCREASING CROP YIELDS AND FARMERS' INCOME IN EASTERN NEPAL

Dr. J. Timsina
(NRNA Australia)
visit a farmer's
field, Jhapa

Rice, maize and wheat are the most important food crops of Nepal. The average farm yields of these crops, however, are far below their potential. Imbalanced and low quantities of Nitrogen, Phosphorous, and Potassium fertilizer application is one of the factors for the low yields. In addition, the blanket fertilizer recommendations over the entire country by the government have led to overuse in some cases, while underuse in others. Overuse of chemical fertilizers results in high cost of production with negative impacts on the environment, while underuse results in poor crop productivity. To address this issue, site specific fertilizer recommendation with the application of

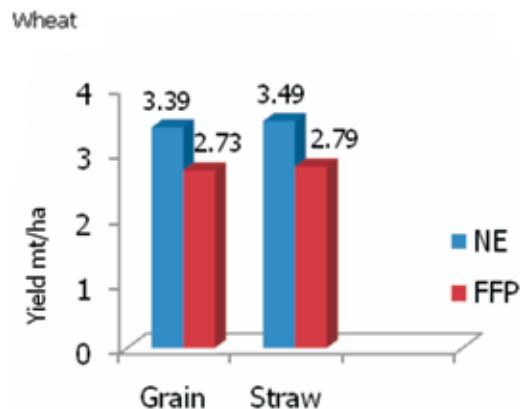
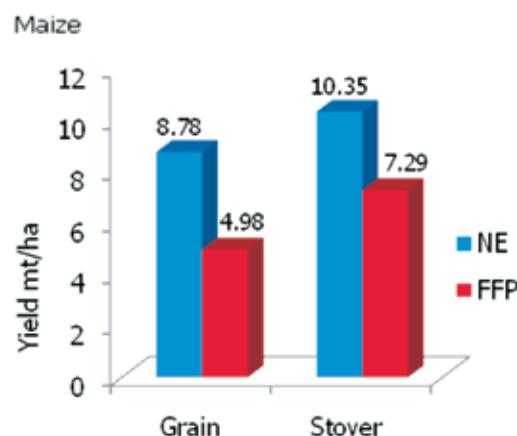
Nutrient Expert (NE) tool has been advocated for enhancing efficiency of fertilizers and increasing the productivity of the crops. NE is a decision support tool for site specific nutrient management of crops. The tool utilizes simple information like soil color, previous crops, addition of organic matter, crop residues etc. provided by the farmers, to suggest a target yield for a particular location, and formulates a fertilizer management strategy to attain the target yield.

The NE tool was piloted in two villages each of Jhapa and Morang districts through on-farm research in rice, wheat and maize. Three treatments as (i) Farmers' Fertilizer Practice

(FFP), (ii) Government Recommendation (GR), and (iii) NE-based recommendation (NE) were evaluated in rice, wheat, and maize in 100 farmers' field during 2014/2015. Results from the first year study showed consistent higher yield of NE plots over GR and FFP plots. Therefore, in the second year, only two treatments NE and FFP were evaluated in 100 farmers' field each in wheat and rice. In maize, the trials were conducted through funds from the socioeconomic project. All trials were conducted in 100 square meter plots.

Grain and stover/straw yield data were recorded for maize and wheat from 10 square meter sample area of each plot, while data from rice was not available as the crop was at seedling stage. Mean grain yields of maize and wheat were higher in plots receiving fertilizer as per NE recommendation than from plots receiving FFP. Additional yields of NE plots over FFP were 0.66 Mt/ha in wheat, and 3.8 Mt/ha in maize. Additional yield from NE plots resulted in additional income of NRs. 96,731 from maize and NRs 13,246 from wheat per hectare over FFP. The stover yield of maize and straw yield of wheat were also higher in plots receiving fertilizer nutrients as per NE recommendation than from FFP plots.

During the course of field trials, farmers' field days were organized in each project site at crop maturity to observe plant nutrient response of different treatments by mainly non-participant farmers and to collect various comments and inquiries from the participants. The participants highly acclaimed of the response of fertilizer as per NE recommendation and expressed that they would practice it in the coming season. Besides, the project organized program review and planning workshop to discuss on the results of field trials and ways of scaling up the project outcomes. The workshop was attended by Regional Directorate of Agriculture, Regional Director of RARS Tarahara, DADO of Jhapa and Morang, DDC Morang, representative farmers, IPNI experts Dr. T. Satyanarayana, Dr. Sudarshan Dutta and Dr. Jagadish Timsina from NRN Australia. A poster on "Validation of Nutrient Expert tool for enhancing productivity of rice maize and wheat in the eastern Terai districts" was presented in the 4th annual symposium organized by USAID FtF, Tufts University and IOM in Kathmandu.



Effect of fertilizer treatments on maize and wheat yield in 2015/016



ENHANCING FOOD SECURITY THROUGH SCALING UP OF CLIMATE SMART PRACTICES IN RICE-LENTIL SYSTEM IN DANG, BANKE, BARDIYA AND KAILALI DISTRICT

Seed production
plot of Sukhadhan,
Holiya, Banke

In the context of changing climatic scenario in the recent years, e.g. erratic and unpredictable rainfall, drought, submergence/flood, and shift in rainfall pattern, farmers have been facing uncertainty on assured production of rice and lentil from the existing technology and practices. Realizing the importance of climate smart agricultural technology in enhancing productivity of rice-lentil system, the grant activity was initiated aiming to enhance food security of smallholder farmers through increase in crop productivity by scaling up the climate smart agricultural practices in the existing rice-lentil systems of 5 VDCs each in Dang, Banke, Bardiya and Kailali districts. The project was

implemented in coordination with the key stakeholders as District Agriculture Development Offices (DADOs), Nepal Agricultural Research Council (NARC), Global Agri-tech Pvt Ltd (GATE-Nepal), private seed companies, seed producer groups and agricultural cooperatives, VDCs, DDCs, Agriculture Insurance Company, Regional Seed Laboratory, local agro-vets and other concerned organizations. Major project interventions included distribution of informal research and development (IRD) kits of drought and submergence tolerant rice and high yielding lentil varieties, community-based seed production, technology demonstrations and capacity building of farmers and seed producer

groups. Total beneficiaries included 2,212 HHs, consisting of 61% women members.

Rice variety Sukhhadhan-3 produced average grain yield of 4.46 Mt/ha in the demonstration plots and similar yield levels were obtained in the IRD plots. This indicated an increase in mean grain yield by 11% over the pre-project level. The yield of Sworna sub-1 and Samba sub-1 were 3.97, and 3.72 Mt/ha respectively. Long spells of drought in the rice growing season was in favor of Sukhhadhan-3, and was unfavorable to Sworna sub-1 and Samba sub-1. In case of lentil, mean yield in demonstration plot was 0.95 Mt/ha, whereas it was only 0.63 Mt/ha in farmer practice. The yield increment in demonstration plot was by 76% over the pre-project yield. The yield level is quite high due to the use of good quality seeds, adoption of seed priming and rhizobium inoculation, timely sowing and favored by dry winter months.

During the project period 2,213 farmers were trained on the Climate Smart Agricultural Practices in rice-lentil system; 39 farmers associated with 16 seed production groups produced and marketed 40 Mt rice and 11 Mt lentil seeds in collaboration with GATE Nepal, private seed companies and cooperatives. The project

helped in strengthening farmers' linkages with 12 agro-vets, 6 private seed companies, 5 mills/ processing units, 2 insurance companies, and government line agencies. This has capacitated them to avail the services of stakeholders / service providers and value chain actors of rice and lentil sub sectors. In addition, farmer's access to seeds of drought and submergence tolerant rice and improved lentil varieties and knowledge of climate smart agricultural practices has improved. Farmers' behavior towards the saving of crop seeds has been changed. More than 75% of beneficiary farmers have saved seeds of improved varieties of rice and lentil for use in the next crop season.

Rice variety Sukhhadhan-3 is the best variety for rainfed upland area of the mid and far western Terai. Under irrigated land or submerged condition, Samba sub-1 is better. Relay sown lentil crop showed good growth in most of the farmers' field both in demonstration and seed increase plots, as it allowed for earlier sowing and adequate time for vegetative growth and development. Sowing lentil after rice harvest should be practiced only in fields where rice is harvested timely and soil moisture is optimum for lentil germination.



Lentil seed production, Dang



LIVESTOCK SHED CONSTRUCTION IN MAKWANPUR DISTRICT

Improved goat shed, Namtar, Makwanpur

The earthquake on 25th April 2015 and its aftershocks have caused many damages in the hilly areas of Makwanpur district where most of the inhabitants are farmers. Many households have lost their houses, livestock sheds and animals, those created great obstacles in their livelihoods. Due to the loss of livestock sheds and animals, the households faced difficulty in keeping animals and integrate the livestock system into the cropping system. In the light of the situation, FORWARD Nepal with the financial support from DFID/SAMARTH-NMDP, implemented a livestock shed construction project in five earthquake affected VDCs (Agra, Bhaise, Namtar, Thaha and Tistung) of Makwanpur district. The project has achieved its targets of constructing 600 livestock sheds in the project sites. The livestock sheds comprised of three types as goat shed (400), cattle/buffalo shed (100) and joint shed (100). In addition, a model joint-shed had been constructed in the DLSO Makwanpur office with the objective to show and replicate the earthquake proof livestock shed in other places. The livestock sheds were

constructed as per the government approved design, estimate and guidance. The masons were oriented to construction requirements and the general layout of goat, cattle or joint type of sheds. The trained local masons involved in the shed construction works in the same village and other places as skilled masons.

Prior to the planning and implementation of the project, a scoping study was conducted in the same project VDCs in order to assess the earthquake effects on the households and livestock. The scoping study pointed out the necessity (urgent needs) of the livestock sheds; almost all households lost the livestock sheds and many livestock died due to the earthquake. Accordingly, for welfare of the remaining livestock, and to restore the integrated crop-livestock farming, construction of livestock sheds in those VDCs was planned. Based on the results of the scoping study, 600 high priority households were identified for livestock shed construction. The pre-defined criteria and results of the scoping study were used to select the

beneficiary households either for goat, cattle or joint type of shed construction. The households were also verified in collaboration with local bodies. District Livestock Service Office (DLSO) was also consulted for the final verification of the beneficiary sites/households eligible for support.

At the beginning of the project, the selected beneficiary households were informed about the project and the ways/procedures of the project implementation. They were also oriented on the importance of improved sheds and earthquake-proof structure/sheds to protect livestock. During the orientation, roles and responsibilities of communities on construction work was also discussed. The on-the-spot training/orientation to local masons was organized. The one-day training/orientation covered awareness raising for the construction of earthquake resilient structure; precautions needed on selection of sites to avoid steep slopes and low lying area; selection of good quality construction materials; proper ratio of sand, cement and aggregates; and maintaining proper slopes on the shed floor to facilitate collection of urine into urine pits.

The beneficiary households received the construction materials as cement, iron rods, iron

poles, CGI sheet, etc. according the type of shed being constructed. Local materials like sand, bricks, and bamboos were procured locally from the neighboring villages. Beneficiary households were involved in the transportation of materials from the road-head to the construction sites. Site selection, site clearance and leveling were the first steps (work) carried out, following the earth work, foundation laying, stone masonry with mortar mud, stone soling on the floor at pillar bed level, pole fixing, PCC on the floor, and roofing. A urine collection pathway was inbuilt in the cattle/joint shed so that farmers can collect animal urine and use it in the field. Farmers were oriented on the collection of urine into urine pits and its subsequent use in farming. Project staff (overseers) regularly monitored the construction works and assisted the construction team (masons and laborers) for the smooth completion of the construction works. FORWARD Nepal worked in close collaboration with the District Livestock Service Office (DLSO). Dr. Ram Prakash Pradhan (Chief-DLSO, Makwanpur) frequently visited the livestock shed construction sites to monitor the project activities and guide the project team, and also aware the communities on the successful completion of the project.



Observation of livestock sheds by DFID and SAMARTH team



COMMUNITY SEED/GRAIN BANK CONSTRUCTION IN MAKWANPUR DISTRICT

Rustic store building,
Dandabas, Makwanpur

Following the contract with SAMARTH-NMDP for the construction of five community food grain and seed storage structures in earthquake affected places of Makwanpur district, FORWARD Nepal collaborated with District Agriculture Development Office (DADO), and District Disaster Recovery Committee (DDRC) to identify/select beneficiary communities and construction sites. The scoping study for the construction of storage structure was conducted prior to the signing of the MoU with identified VDCs and communities who were in the need of storage structures. Following the approval of VDCs/communities for the construction of Community Seed and Food Grain Bank by DDRC, the selected groups/cooperatives were communicated about the preliminary actions to be taken by them for availing the land required for seed storage structure as indicated during the scoping study. The communities were informed of their expected roles and responsibilities during the construction phase. During the process of land acquisition by respective cooperatives, project staff continued in convincing the community on the importance of

community seed storage structures in the storage of seeds/seed materials and grain as per the need of the community. The value of the community being self-reliant in seeds and the opportunity for storage of food grains was communicated to them. Summary of community seed grain storage structure construction sites and direct beneficiaries



Potatoes Rack (Rustic store), Dandabas, Makwanpur

Cooperative/sites	Cooperative /group members	Existing Seed production area (ha)
Gupteshwori Krishi Sahakari Sanstha, Hetauda-13, Padam Pokhari	451	40
Rajdevi Namuna Krisak Samuha, Hetauda 20, Hatiya	27	30
Chhatiwan Krishi Sahakari Sanstha, Chhatiwan	381	52
Basanta Krishi Sahakari Sanstha, Thaha Municipality-1, Bajrabarahi	135	50
Kali Devi Multipurpose Cooperative, Agra-5, Dadabas Agra	350	80

Major activities conducted included coordination meetings at the local level, coordination with DADO and DDRC, approval of building drawing from the concerned municipality, formation of construction coordination committee, and project monitoring. During the course of construction, local masons were trained on the principles and practices of earthquake resilient construction. During the course of project implementation, a series of interactions was held with community members of each cooperative/group. It provided an opportunity for them to ascertain their needs in relation to seed and food grain storage structure. Following the interaction, three groups from Padampur, Hatia, and Chhatiwan decided for construction of seed and grain storage structures, whereas the communities from Agra and Bajrabarahi decided for the construction of Rustic Store for storing potatoes. Based on the interest of the communities, approval was

taken from SAMARTH for changing the grain storage design into rustic store, keeping the basic capacity of both types of storage structure same. The grain/seed storage structures were constructed as per the government approved design, estimate and guidance. The potato rustic stores were constructed with approval of DADO and SAMARTH-NMDP on design prepared by FORWARD Nepal. The storage structure was constructed under the technical guidance of construction engineer and supervision of overseer. All the storage structures have been handed over to the community with an agreement among SAMARTH-NMDP, DADO Makwanpur and the respective cooperatives/groups.

Farmers expressed happiness with the support provided by the project in a critical time when they were not able to store crop seeds due to lack of proper storage facilities, and they were not able to construct it on their own expenses. Although they were implementing seed multiplication program, they were facing the problems of storage. Therefore, they provided land either from personal contribution, through purchase by the cooperatives or through acquirement of public lands for the construction of community food grain and seed banks. The willingness to contribute lands from community was an indication of community ownership of the storage structure leading to the sustainability of the intervention. It was realized that the formation of construction management committee at the community level was vital for overseeing the construction works, and for facilitating the contract of local masons, labor and supply of local raw materials as sand, aggregates.





RENOVATION OF EARTHQUAKE AFFECTED SCHOOL IN SIDDHI-2, LOTANTI, CHITWAN

Building rehabilitation support scheme, Lotanti-Siddhi, Chitwan

FORWARD Nepal executed a recovery project of school renovation/reconstruction to provide better and safer access to basic education for the small children in earthquake affected area of Siddhi VDC. The project was an outcome of a collaborative effort of FORWARD Nepal, Hiroshima University (HU), Japan and Rotary Club of Bharatpur. FORWARD Nepal was the major implementer, which contributed on human resources, logistic arrangement, and proper periodic monitoring and supervision work. The project initiated from July 2015; however the actual construction/renovation work was started from November 2015, and completed in April 2016. The initial period was programmed with school survey, detail planning and cost estimation, procurement activities, and community sensitization for labor contribution. Following the survey, the National Primary School in Siddhi-2, Lotanti was selected for reconstruction/renovation support, considering the accessibility and necessity. After the identification of the improvement areas of school buildings (old and new), the programme firstly facilitated the supply of clean drinking water through PVC pipe, and

also installed the tap, which also eased the reconstruction work. The school buildings were reconstructed/renovated with proper fixing of the damaged part, plaster work, and painting. The school was also supported with furnishing items.

The renovation activities were accomplished with the active involvement of FORWARD Nepal's staff in close coordination with the Principal of the school, School Management Committee, and the community members. FORWARD Nepal supplied the necessary items for the construction work whereas the school management committee managed the necessary manpower and local materials. Nowadays, not only the students, but also the households nearby school are benefitting from easy access to water. Apart from drinking water, this initiative has been promoting and encouraging the hygienic behavior practices of the Chepang children. The students are enjoying the clean classroom. The school teachers got teaching environment from the furnishing support. This construction program has also contributed to the local livelihoods through short term employment generation.



VEGETABLE SEED DISTRIBUTION FOR EARTHQUAKE AFFECTED HOUSEHOLDS IN CHITWAN DISTRICT

An earthquake recovery project entitled "Vegetable seed distribution for earthquake victims in Chitwan District" was executed during June 01 to October 31, 2015. FORWARD Nepal implemented the project for the earthquake affected households - ethnic and minority groups in Kaule, Siddhi, and Shaktikhor VDCs. The project aimed to contribute to food and nutrition security of the earthquake affected households through enhancing the production and marketing of the agricultural produce. FORWARD Nepal with its internal fund and its staff contribution distributed vegetable seed mini-kits to 350 highly affected households. Later on, the project supported additional 1,593 households with financial support from Welthungerhilfe (WHH), Germany. In total 1,943 affected households (Siddhi: 724, Kaule: 1,011, and Shaktikhor: 208) were supported with vegetable seeds. Most of the households belonged to a indigenous nationality (Chepangs). The project expected to maintain regular farming activities and agricultural production in the earthquake affected areas.

Vegetable seed mini-kit distribution, Siddhi, Chitwan

Most of the seed support activities completed in the previous fiscal year, thereafter, the major accomplishments were follow-up, monitoring, data collection, and end-line assessment. The project harnessed the technical knowledge of farmers through follow-up, trainings and demonstrations. Project carried out periodic monitoring of the field to ensure proper utilization of the supported seeds. Similarly, an end-line survey was conducted to access the impact of the seed distribution program on household food self-sufficiency of earthquake-affected families through vegetable production over the period. The project also supported winter season vegetable seeds as onion (Red Creole - 20 gm) and cauliflower (Snow Crown - 10 gm) to 250 progressive farmers of Siddhi VDC during the final phase of the program.

The project has shown considerable impact on farm families. The farming activities and agricultural production were continued by most of the households in the project VDCs. Most of

them achieved food self-sufficiency, and some households were able to fetch income from vegetables, especially from yardlong beans and four-season beans, which they spent on household expenses, children education, and managed other minor expenses. Also, few farmers had produced and saved seeds of four-season beans and yardlong beans for the next season planting, which reflects the positive impact of the seed support program. The project made remarkable progress in improving the household nutrition; the households consumed different types of vegetable, as well as the project helped them to make a living in such a dire situation. The seed distribution program remained successful, as it supported quake-affected families in many ways, and enabled farmers to secure the good harvest. The project became an encouragement for the earthquake-affected farm families to revive the farming activities. This project has become a learning, and showed the future direction for the project of similar nature - a project in the crisis period to protect farm families.

Continued Farming due to Easy Access to Seeds

Ms. Gyani Maya Chepang (45) is living with five members in a small open wooden house, placed in Siddhi-6, Majhbang. She owns 0.47 ha land, out of which 0.06 ha is under vegetable, and the rest is under cereal crop production. She has five cows, a pig, five hens, and 21 goats. She is a member of the Gauthali Multi-Purpose Farmers Group (MPFG). Her main source of income is agriculture and livestock. Last year, she made a good income from vegetable production.

An earthquake on 25th April 2015 swept away her house completely and also food grains. Ms. Gyani, who used to live in the stoned well-built house, is compelled to live in a temporary shed type house. Earthquake and its aftershocks left a great impact on her life and farming. She was more than happy and confident with her farming occupation. But, a sudden change had put her life in difficulty- not enough food to meet the family daily requirement. They were supported with rice



Gyani Maya harvesting yardlong bean

bags and tents from different organizations. At some point, she realized that the external relief supports were not enough to sustain her life. She was searching for the vegetable seeds, but due to dearth of money at that time, she decided to buy seeds through borrowing money from neighbors. "My happiness knew no bound when I got the vegetable seeds from FORWARD Nepal at the very needy situation. My house is in geographically inaccessible area, and I got easy access to the seeds - need not to walk long way to the market area," says Ms. Gyani.

She produced 7 kg okra, 45 kg four-season bean, 20 kg brinjal, and 30 kg yardlong bean, which she used for household consumption. She achieved food self-sufficiency for 2-3 months with the supported seeds. Though she could not make cash income from the vegetables, she expressed satisfaction for being able to meet the family food and nutrition requirement. It saved money for vegetable purchase, and also they became able to consume different kinds of fresh vegetables.



MULTI STAKEHOLDER FORESTRY PROGRAMME (MSFP): FOREST-BASED ENTERPRISE PROMOTION IN BAJURA AND DOTI DISTRICTS

Solar drier for drying of the nettle leaves, Doti

Non-Timber Forest Products (NTFPs)-based small and medium enterprises offer good prospects for enhancing the livelihoods and income of disadvantaged communities in the rural areas of Bajura and Doti. Considering the situation, FORWARD Nepal, in consortium with Malika Integrated Social Service (MISS) in Bajura and Rural Development Centre (RDC) in Doti, implemented a project under Multi Stakeholder Forestry Program (MSFP) from November 2014 to July 2016. The major objective of the project was to develop and strengthen the forest-based enterprises and create employment opportunity for the economically poor, disadvantaged and socially excluded groups. The project devised a

value chain development approach and focused on private sector involvement and investment in the promotion of the new and existing forest-based enterprises. The project stakeholders, mainly District Forest Office (DFO), District Development Committee (DDC), Federation of Community Forest Users, Nepal (FECOFUN), Federation of Nepal Chambers of Commerce and Industry (FNCCI), Cottage and Small Industry Development Committee (CSIDC) were involved in planning, implementing and monitoring of the project activities.

The MSFP covered 13 VDCs and one Municipality in Bajura district and 14 VDCs in Doti district.

Fifty-four local forest user groups (LFUGs) in Bajura and forty-six LFUGs in Doti received technical and financial support to promote the forest-based enterprises. The forest-based sub-sectors promoted in Bajura are Allo, Beekeeping, Dhatelo, Lokta, Medicinal and Aromatic Plants (MAPS), Nigalo (a type of bamboo used for making baskets), Olive, Shiitake mushroom, Sisnu (stinging nettle) powder, and Timur. The sub-sectors promoted in Doti are Duna Tapari (bowls made from leaves), Resin collection, Rittha (soap nut) collection, Sisnu powder, Beekeeping, and Tejpat (cinnamon leaves) collection. The improved cooking stoves (ICS) have also been installed, and ICS Master have been developed in some project sites.

The MSFP has considerable impacts in the promotion of forest-based enterprises and creation of jobs in Bajura and Doti. The MSFP established nine new enterprises and strengthened seven existing enterprises in Bajura and Doti districts. These forest-based enterprises have been providing jobs to the local communities, particularly poor and disadvantaged groups. Many people are engaged in the forest-based sectors for generating income as 3,404 jobs have been achieved (1,696 jobs in Bajura and 1,708 jobs in Doti). Recently, they are employed in the forest-based enterprises and are making good earning. The already established enterprises are continuing and expanding the business activities, which would be a great source of livelihood for many people.

The major outputs of MSFP in Bajura and Doti in the last Fiscal Year include capacity building activities as record keeping and financial management trainings to 17 LFUGs; Participatory Market Chain Analysis (PMCA) workshops on Duna Tapari, Dhatelo and Sisnu enterprises; 7 skill development and orientation programs on Rittha; beekeeping training to 304 persons; registration of 6 enterprises (3 Duna Tapari and 3 Sisnu powder) in the Small Cottage and Home Industry Committee of Doti; an exposure visit of 14 Duna Tapari entrepreneurs to Pyuthan and Nawalparasi districts; participation of the selected entrepreneurs (Allo, Sisnu powder, and Duna Tapari) in the Far-western Regional Festival in Dipayal (March 04-13, 2016); a multi-stakeholder platform workshop for Sisnu entrepreneurs; orientation program on Chiuri;

resin collection trainings; skill development training to 60 new and 29 existing Tejpat collectors; 7 Timur collection trainings (196 persons); quality improvement training on Sisnu enterprise for 12 persons; olive collection and seed processing training to 220 persons and pruning and propagation training to 20 persons; 41 awareness programs on Dhatelo (2,767 persons); shitake mushroom production training to 12 persons; an awareness Campaign of Lokta (373 persons); 4 nursery management trainings of Timur and olive (35 persons); lab test of the Sisnu powder; and business plan support training to 15 entrepreneurs. Apart from capacity building programs, some project beneficiaries also received material support to promote the forest-based enterprises. In addition, the detailed business plans of eight promising enterprises have been developed. A glimpse of the "Forest-Based Enterprises and Success Cases in Bajura and Doti" has been published. The publication covers the technology and management of some forest-based enterprises (Allo, Duna Tapari, Lokta, Sisnu powder, and Timur) and a few successful cases in the communities. Honorable Minister (Ministry of Industry), Mr. Som Prasad Pandey, visited Namuna Sisnu Prasodhan Udyog in Sarswatinagar-7, Doti on March 4, 2016. The Minister appreciated MSFP works in establishing the promising enterprises, and assured to support the enterprises for their sustainability.

Sisnu Powder Micro-enterprise: Easy Source of Income to Rural Women

"I never believed we could get income by processing of Sisnu (Nettle) leaves" said Ms. Kamala Joshi (52) from Beltukra, Sarswatinagar VDC-6 of Doti district. She had seen Sisnu leaves used as a leafy vegetable as well as cattle feed. Though Ms. Joshi belongs to Brahmin family, her family is economically very poor. The amount of money earned by her husband (Priest) was not enough to feed the family, and could hardly meet three months' food security. Ms. Joshi's concept on Sisnu has been changed when she participated in the awareness and Sisnu processing training.

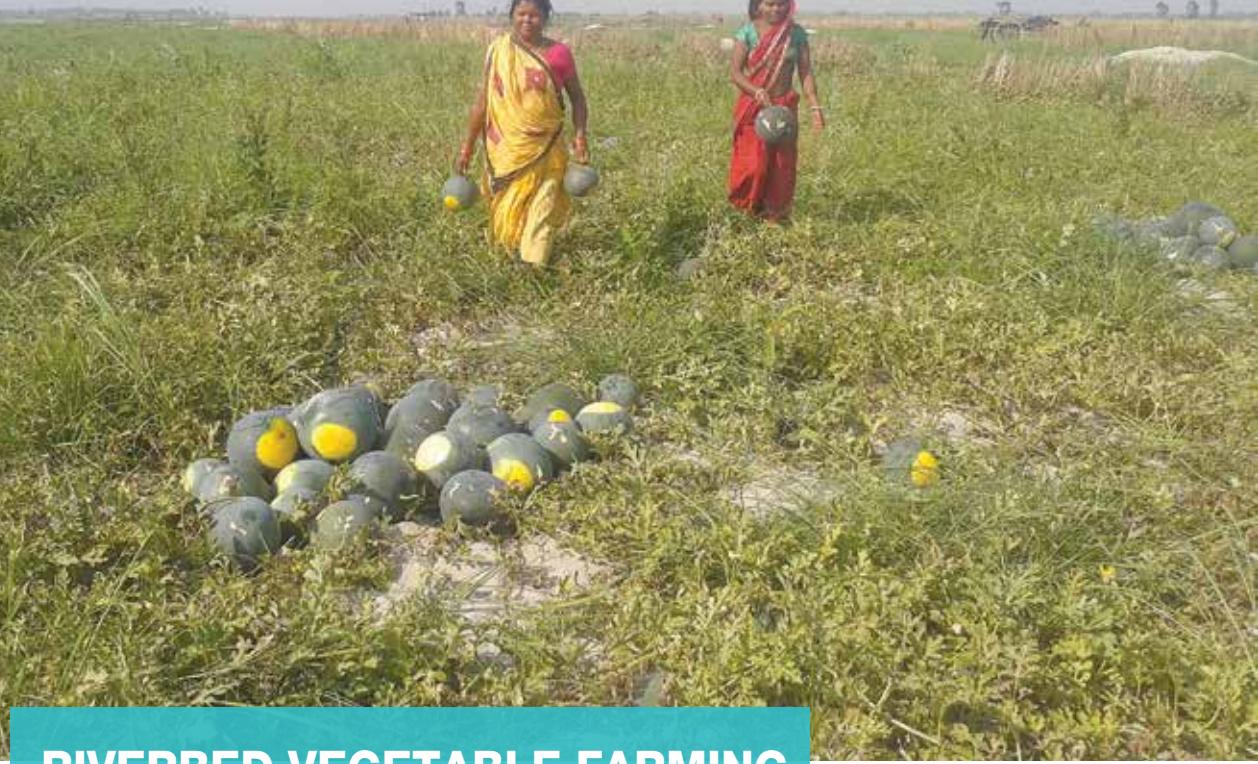
She has been widening her knowledge on Sisnu enterprise, medical and socioeconomic value, collection, conservation and marketing of Sisnu powder. Ms. Joshi collected 75 kg green leaves of Sisnu and sold to Namuna Mahila Sisnu Prasodhan Udyog. Her neighbors (women) in Sarswatinagar VDC have also been collecting Sisnu leaves. They are aware on conserving the Sisnu plants. Presently, 102 persons, including 84 women are getting income from Sisnu collection.

The Namuna Mahila Multipurpose Cooperative established Namuna Mahila Sisnu Prasodhan Udyog with the support of MSFP in Rawatkatte of Sarswatinagar VDC-7. The enterprise buys the green Sisnu leaves, then processes and grinds into powder form. After the establishment of Sisnu powder enterprise, especially rural women

are directly benefited. The Sisnu powder is sold in the market at the rate of NRs. 500 per kg. The collectors earn cash income by selling of Sisnu leaves to Namuna Mahila Sisnu Prasodhan Udyog. The demand of Sisnu powder is increasing day-by-day. The product has been consumed at local markets as well as markets of Dhangadhi, Mahendranagar and Kathmandu. "We are in profit now and our organization has given priority to this enterprise", said Ms. Jamuna Bohara, Chairperson of Namuna Mahila Multipurpose Cooperative. She further adds, "The Namuna Mahila Multipurpose Cooperative has initiated to declare the Jorayal area (Sarswatinagar, Ghanteswor and Chhatiwan VDCs) as the pocket area of Sisnu for Sisnu processing and marketing".



Drying of nettle leaves by the traditional method, Doti



RIVERBED VEGETABLE FARMING

Harvesting watermelon for marketing, Shivagunj, Jhapa

In Nepal, thousands of lives are affected by natural disasters like flood, landslides and soil erosion annually. By increasing the awareness on climate change and making the farmers aware about the adaptive fund, FORWARD Nepal has left some remarkable image in the disaster affected areas of Nepal. With the aim to give equal opportunity for income generation, FORWARD Nepal has started the River Bed Farming (RBF) program in the flood affected districts of Nepal in coordination with HELVETAS Swiss Intercooperation. The program directly benefitted 2,158 landless farmers - severely flood affected households. The program has developed local employment opportunities for the youths and reduced the outmigration to India to earn a living. As the environment friendly activities, FORWARD Nepal capacitate rural people, especially landless poor, in utilizing the riverbeds for farming, which is increasing every year. The villages of Jhapa, Morang, Banke, Sunsari and Saptari have benefitted from the riverbed farming activities to adapt to the hazards created by the floods.

Riverbed farming contributed in owning land, riding motorbike, studying Agriculture JTA and becoming a model farmer

Mr. Janardan Mandal (24), resident of Kankai Municipality (former Surunga VDC-5) in Jhapa district has been following riverbed farming since three years. His house is located at about 9 km south from Surunga Bazaar, east-west highway. Mr. Mandal is unmarried and living in a joint family of 10 members. Prior to participating in the HELVETAS-FORWARD implemented Riverbed Farming (RbF) project, his family had 0.33 ha of unregistered land nearby Kankaimai River. At that time, for managing household livelihoods, his family leased 2.7 ha of land from a land owner. The leasehold land was used for farming. From 2.7 ha of leased land and 0.33 ha of own land, the big family could hardly meet household food requirement for about 7 months in a year.



Mr. Janardhan Mandal in his field

Remaining 5 months was maintained by wage laboring. The Mandal's family is not literate; his parents are illiterate, his older brother (Mr. Arun Kumar Mandal) could study until grade 5 only. However, Mr. Janardan Mandal studied till grade 10 and passed the SLC exams. He tried to continue education and also enrolled in the +2 program; however, due to poverty he couldn't continue. His elder brother Arun borrowed NRs. 100,000 to go to Malaysia for overseas employment; however he returned after three years with almost no savings.

In 2014, Mr. Janardan Mandal joined the Shree Mandal Basti Riverbed Farming group formed by the RbF project. He was the secretary of the group comprising of 20 members. He also empowered neighbors and contributed to form/ establish another group in his locality. The two riverbed farming groups selected Mr. Mandal as a Local Resource Person. Accordingly Mr. Mandal actively participated in the project supported activities, particularly trainings on riverbed farming technologies. He trained his group members and neighbors and shared what he learned about the promotion of riverbed farming technologies. With

support from the project, Mr. Mandal received a 35-day training on farming systems at the Madan Bhandari Memorial College. Immediately after the training, he shared his knowledge and skills to his group members and empowered them to utilize the riverbeds for farming. He remembered, immediately after the trainings in 2014, he cultivated cucumber and watermelon on the riverbed (0.5 ha) of the Kankaimai River. From 0.5 ha of riverbed farming, he was able to make a profit of about NRs. 150,000. He used that money to purchase 0.33 ha of land worth NRs. 200,000. Mr. Mandal was very happy with the earning from the riverbed farming in the first year. In the second year, he cultivated cucumber and watermelon on 0.76 ha of riverbed and earned a profit of NRs. 250,000. In the third year, Mr. Mandal again increased the land area under riverbed farming; he used 0.84 ha of land and earned a profit of NRs. 350,000.

Mr. Mandal invested the earnings from the riverbed farming on his education, purchasing a Motorbike, purchasing land, repayment of loan, and maintaining household's livelihoods. He used NRs. 100,000 for roofing of his house with colored GI Sheet. Mr. Mandal used NRs. 70,000 for his education - agriculture J.T.A. He believed that he could do a lot from farming and with this confidence he studied the agriculture J.T.A. program.

Mr. Janardan Mandal says "the RbF project implemented by FORWARD came as a god to me and my family". Currently, his family is not leasing land from others, rather the family is using own land of 1 ha and riverbeds for income generation. Due to the popularity of his work and the development of riverbed farming in his place, nowadays many organizations have been supporting them. Now staffs of many organizations (e.g. Municipality, District Agriculture Development Office, and District Development Office) recognize Mr. Mandal as a local resource person and invite him for several agriculture-related workshops/seminars. Mr. Mandal was able to secure supports from the Youth Focus Self-Employment Program of the DADO, Jhapa; four members received the support of NRs. 240,000 to promote commercial vegetable farming. In addition, the riverbed farming groups also received a support of crop seeds equivalent to about NRs. 20,000.

Mr. Mandal has planned to increase the land area under vegetable cultivation. Mr. Mandal plans to use the income from farming to purchase additional cultivable land. After becoming an agricultural technician, Mr. Mandal aims to support his communities in developing the improved farming systems. Mr. Mandal is now a model farmer/technician. The local

communities believe in his capacity and expect him to lead in the accomplishment of all the tasks in the locality. It seems that he become a social leader too. Mr. Mandal is currently involved in all the development works in his community; the community members are happy to accomplish any type of works with his leadership.



Briefing of the riverbed project activities to Hon. Agriculture Minister, Mr. Haribol Gajurel



Cash for asset work, Sarlahi

TECHNICAL ASSISTANCE SERVICES TO RURAL WOMEN ECONOMIC EMPOWERMENT (RWEE) PROGRAMME

Rural Women Economic Empowerment (RWEE) is a five-year program, initiative of UN agencies specifically WFP, FAO, IFAD, and UN Women. Ministry of Agricultural Development (MoAD) led the RWEE programme in Nepal with the goal of securing rural women's livelihoods and rights, ensuring sustainable development in a post conflict and millennium development goals (MDGs) context, based on four outcome areas as (i) rural women's improved food and nutrition security, (ii) increased income to secure their livelihoods, (iii) enabling and strengthening representation, leadership and participation, and (iv) a more gender responsive policy environment. WFP is supporting on food

and cash transfer upon construction of productive assets, super cereal distribution to individual households or communities. The field level activities of RWEE, figured out under the WFP's role, were implemented by FORWARD Nepal in 23 VDCs of Sindhuli, Rautahat and Sarlahi districts. FORWARD Nepal implemented various activities from March to July of 2016 to achieve the first two outcome targets stated above.

RWEE is the pilot project designed for the execution of agriculture development strategy (ADS) in Nepal. All the program VDCs were selected by District Agriculture Development Committee (DADC) of the respective district. The program

organized district level orientation meetings with participation of DDC, CDO, DADO, DLSO, DWCO, WFP, UN Women, FAO and FORWARD Nepal. All the stakeholders were oriented on the program, its approaches and outcomes and suggested the ways/strategies for better execution of the program. There was the continuous monitoring and feedback to the program from WFP, FAO Nepal, UN Women and government agencies in the field.

Construction of productive structures like community agriculture extension service center (CAESC), irrigation schemes and fish ponds were initiated in all three project districts, in leadership of rural women, and with approval from DADC. WFP approved the design and estimate of CAESC constructed in Brahmapuri, Ranichura and Simra Bhawanipur VDCs of Sarlahi, Sindhuli and Rautahat districts, respectively. Similarly, shallow tube wells, deep boring, and irrigation canals construction sites were identified in the targeted farmers' groups of those VDCs. The program started construction of 74 irrigation schemes in 17 VDCs to provide irrigation facilities to 492 ha of land, benefiting 1,812 households. Similarly, 25 fish pond construction projects were identified in Rautahat and Sarlahi district for cash for asset (CFA) work. Those construction

projects supported farmers for increased access to resources, farm efficiency, productivity, income and decision making power.

Mother and Child Health Nutrition (MCHN) beneficiaries - pregnant woman, lactating mothers and children aged 6-23 months were registered from the farmers' groups of nutrition targeted VDCs. FORWARD Nepal received 28.2 Mt super cereal from WFP, stored it in the headquarter, and distributed to 3,133 MCHN beneficiaries on three installments within three months period. The food was distributed among 540 pregnant women, 792 lactating mothers, and 1,801 children of 16 VDCs of the program districts. Providing supplemental food to the beneficiaries helped to reduce the chronic malnutrition in the region. In addition to the food support, FORWARD Nepal facilitated hands-on training on hand washing; Antenatal Care/ Postnatal Care (ANC/PNC) visit; growth monitoring of 6-23 months aged children; Infant and Young Child Feeding/ Maternal Infant and Young Child Nutrition (IYCF/MIYCN) consultations; iodine deficiency and remedial measures; exclusive breast feeding and supplementary foods; nutrition requirement to women and children from pregnancy to two years of child, etc. to the MCHN beneficiaries at local level.



Rehabilitation of irrigation canal, Ranichuri, Sindhuli



CHILD CENTERED CLIMATE CHANGE ADAPTATION (4CA)

Child Centered Climate Change Adaptation (4CA) project was implemented from February 2014 to March 2016 in Plan International-FORWARD partnership. It aimed to contribute to local community for building safe and resilient society through active participation of children and youths to reduce the risks of climate change. The specific objectives included (i) increase awareness and capacity of children, youths and communities on climate change and associated disasters, (ii) develop and implement locally appropriate climate smart DRM to demonstrate the 4CA model, and (iii) advocate for the inclusion of best practices and learning from 4CA program approach in local, district and national development processes. The project targeted children, Dalit, people with disabilities, marginalized and Plan-supported families. The project covered 17 VDCs of Morang and Sunsari districts, Itahari Municipality of Sunsari, and Biratnagar Sub Metropolitan City of Morang district.

The major outputs of the 4CA project includes baseline and Knowledge, Attitude and Practice (KAP) studies on Climate Change; ToT training to local people (Local Disaster Management Committee - LDMC, Teachers, Children) to develop as local resource persons on Climate Change Adaptation/ Disaster Risk Reduction (CCA/DRR); Participatory Climate Vulnerability Assessment (PCVA) in community for preparing Local Disaster Risk Management Plan (LDRMP) and planning for climate change adaptation; toolkit development on CCA and DRM for local resource person (resource book); production of Information, Education, and Communication (IEC) materials of CCA/DRM (poster, 4CA brochure, brochure on climate change and children, flex banner, notebook, etc.); local curriculum development on Climate Change Adaptation and Disaster Risk Management; teachers training for implementing local curriculum of climate change and Disaster Management; awareness campaign on CCA and related disaster (street drama, DRM game, poetry competitions, workshop);

Monitoring of the weather station, Madhumalla, Morang

awareness through peer/special class on CCA and related disaster; training on CCA and DRR to representative of child clubs; drawing training and exhibition on CC to children; formation of LDMC in VDC and municipality; formation of Child/youth Club in school/community; training on Climate Smart Disaster Risk Management (CSDRM) to the LDMC, teacher, children and youth; formulation of LDRMP in all VDCs of the project area; review and update the DDRMP of Sunsari district; piloting CC/DR mitigation measures in community/school level; Local Disaster Management Committee (LDMC)/Community Based Disaster Management Committee (CBDMC) Network meetings in both district; wall magazine production through child club in schools; intra and inter school children's competition (speech, drawing, essay writing on CCA and DRR); national level sharing workshop with stakeholders to influence the national climate

change policy; child-led national level workshop on sharing with National Adaptation Program of Action (NAPA) and knowledge centers; media sensitization workshop on Climate Change and media advocacy; and preparation of case studies.

The project successfully executed its programs, teaming up with various stakeholders as District Development Committee, District Administrative Office, District Education Office, District Women and Children Office, District Agriculture Development Office, District Forest Office, District Public Health Office, Water Induced Disaster Control Division Office, NGO Federation, Federation of Nepalese Journalist, Biratnagar Sub Metropolitan City, and Village Development Committees.



Culvert construction, Jante, Morang

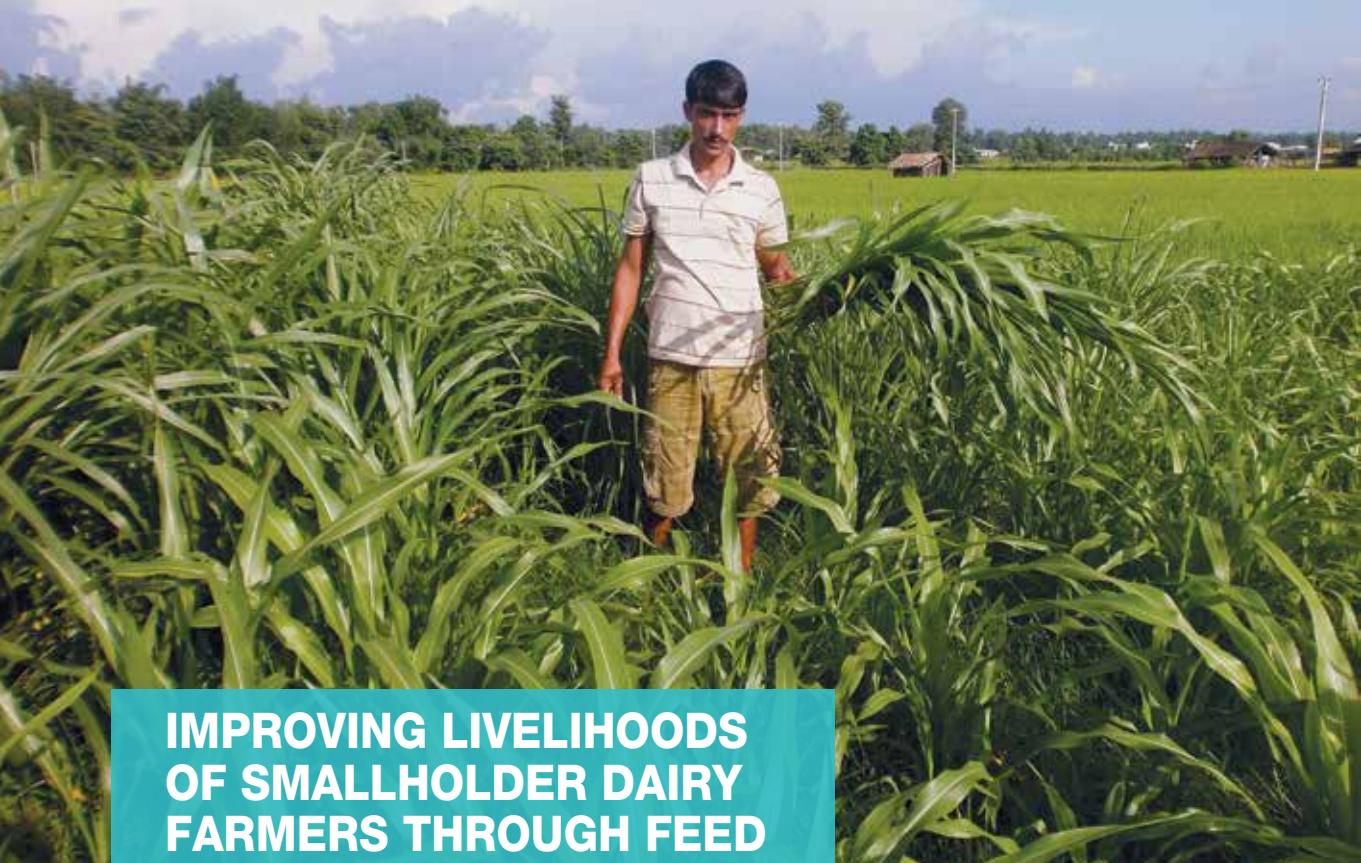


YOUTH EMPOWERMENT (YE) PROGRAM

Commercial mushroom training
and seed material support,
Pokhriya YWO's member

FORWARD Nepal, in partnership with Plan International, has been implementing the Youth Empowerment (YE) project in 15 VDCs of Morang district since 1st August 2016. The general objective of the project is to empower and capacitate girls and young women for lobby advocacy on their issues of economic empowerment and stopping gender based violence. The project expects to (i) promote employment for girls and young women, particularly from landless, very poor and marginalized families by increasing their access to natural resources, (ii) promote economic opportunities for youths, especially girls and young women through their affiliation with youth groups and networks, (iii) increase social status and participation of adolescent girls/young

women, and (iv) promote commercialization of agricultural enterprises as per comparative and competitive advantages. The target groups of the project are women, landless, Dalit, people with disabilities, marginalized, sponsored families and resource poor communities. The major project interventions include entrepreneurship skill development of the project beneficiaries through need and interest-based vocational training, supporting governance system to young women' organizations, institutional development and leadership training, rights-based advocacy, child protection training, career counseling and interview skill development, and support for different event based activities organized by young women' organizations.



IMPROVING LIVELIHOODS OF SMALLHOLDER DAIRY FARMERS THROUGH FEED MANAGEMENT IN KAILALI DISTRICT

Commercial forage production, Kailali

FORWARD Nepal implemented the project "Improving Livelihoods of Smallholder Dairy Farmers through Feed Management" in Kailali district with financial and technical support from the International Livestock Research Institute (ILRI). The duration of the project was three years (March 2013 to February 2016). The project supported 700 smallholder dairy farmers residing in five VDCs (Beladevipur, Chaumala, Geta, Malakheti, and Shripur) of Kailali district. The project VDCs were selected based on the intensity of smallholder dairy farmers, presence of dairy cooperatives and private dairy entrepreneurs, availability and potentiality of fodder and forage, better access to road and market networks, possibility of partnership with government line agencies, private sectors and other concerned service providers. The project aimed to contribute to enhancing the livelihoods of smallholder dairy farmers through increasing productivity of dairy animals and production of milk. The general objective of the project was to increase productivity of dairy animals and production of milk at farm level through promotion

of crop residue-based feeding interventions including supplementation of compound feeds, nutritious fodder and forage. The expected outputs of the project included existing farmers' practice of feeding dairy animal improved, technical knowledge and skills enhanced for 700 dairy farmers and 700 smallholder dairy farmers in Kailali district adopt appropriate feeding practices.

After the intervention of the project, farmers within and outside the groups have adopted new forage/fodder crops and mineral mixture. Farmers have started growing Mulato, Paspalum, Setaria, Napier, Badame and Teosinte. Farmers have initiated purchasing seeds and saplings of new forage/fodder species from project farmers on their own and cultivated in their farms. Almost 60% of beneficiary farmers are adopting mineral mixture supplement to their animals.

There was demonstrative effect of model animal shed constructed through the project. Farmers from outside the group beneficiaries have

initiated construction of improved sheds on their own. The motivating factors for farmers to improve the animal sheds are ease in collection of dung and urine, ease of feeding the animals, and improved general health of animals.

The project trained farmers on the need of deworming for improving the general health of animals and contribution to the increased milk productivity. After project intervention, farmers within and outside the groups have been convinced on the need of deworming at six monthly intervals. About 99% of project beneficiaries and those outside the target groups have initiated deworming animals with the help of medicines purchased from the Agrovets.

The project has distributed a total of 186 chaff cutters in 5 working VDCs of Kailali district. Those farmers obtaining chaff cutters are directly benefited while the rest among are indirectly benefited through the demonstrative effect

of its use. This indicates the awareness and willingness of farmers to use the chaff cutter. By the end of the project, about 40% farmers within and outside the groups have invested on the purchase of chaff cutters and their use.

Linkage of dairy farmers with district level line agencies particularly DLSO, Agro-vets, Feed suppliers (Western Feeds) and Insurance companies have been strengthened through organization of workshops, interaction meetings, exposure visits at various occasions. The farmers have been capacitated to approach the line agencies and service providers for technical assistance and services for dairy animal raising, milk production and marketing. Farmers have realized the importance of animal insurance scheme offered by banks and private insurance companies including the rules and regulations of such schemes.



Improved livestock shed management

Collaboration and Linkage

FORWARD Nepal emphasizes collaboration and partnership with government organizations, multilateral and bilateral organizations, I/NGOs, research institutions, academia, private sectors and public media at national and international levels and community-based organizations as appropriate for greater impacts of its programs, resource generation/ sharing, knowledge, skills, experience sharing, and learning.

Trainings, Workshops, Visits and Meetings

- Mr. Anup Adhikari (M&E Officer, MSFP) participated on Results-Based Management training organized by South Asia School of Rural Reconstruction (SARR) in Kathmandu on August 21-25, 2015.
- Mr. Roshan Paudel and Ms. Rajani Sapkota (Field Officers, ELIVES project) participated in the Detail Implementation Plan (DIP) preparation meeting held on September 06-11, 2015 at ADRA Nepal, Kathmandu.
- Mr. Ram Dayal Tharu (Assistant Accounts Officer) participated on Finance Training organized by WHH Country Office, Nepal in Kathmandu on 24-25 September 2015.
- Dr. Ujjal Tiwari (Planning Director) and Ms. Ashmita Pandey (Program Officer) attended the project inception and planning workshop hosted by WHH in Kolkata, India on December 02-06, 2015.
- Mr. Ram Krishna Neupane (Program Director) and Ms. Ashmita Pandey attended the workshop on Climate Change organized by ICIMOD in Chitwan on February 15, 2016.
- Ms. Ashmita Pandey participated in a first phase training "Advocacy for Food and Nutrition Security in the context of agenda 2030" organized by Civil Society Academy (CSA) in Kathmandu on March 07-12, 2016.
- Mr. Ram Krishna Neupane participated in the IPNI collaborators meeting in Kolkata, India on April 09-10, 2016.
- Mr. Rishikesh Dhakal (Program Manager) attended the RWEE Program Orientation Workshop to Focal Person, District Coordinators (Engineers) and Nutrition Associates in WFP Country Office, Lalitpur on March 14, 2016.

- The one-day Media Sensitization workshop was organized for reporters and editors in Itahari, Sunsari on March 20, 2016. The main objective of the workshop was to sensitize local media persons on climate change and disaster risk management issues, establish coordination with local media of Sunsari and Morang districts, and create a startup effective media advocacy and public awareness raising on DRR in the local contexts.
- Ms. Asja Hanano (Country Director, WHH Nepal) and Mr. Mathias Moggie (Program Director, WHH Bonn) visited Siddhi and Shaktikhor VDCs of Chitwan district on March 30, 2016 to monitor and evaluate the project activities.
- Mr. Netra Pratap Sen (Executive Director) participated in the exhibition - Hatemalo: Hand-In-Hand - Celebrating the Nepal and UK Development Partnership: 50 years in photographs in Kathmandu on May 20, 2016.
- Mr. Rishikesh Dhakal (Program Manager) and Ms. Ashmita Pandey participated in the International Conference "Global Civil Society Dialogue on Ending Hunger: Making Sustainable Development Goal 2 work", organized by Civil Society Academy (CSA)/ Welthungerhilfe (WHH) in Kathmandu on June 01-03, 2016.
- Mr. Netra Pratap Sen attended a training workshop "Exceptional Civil Society Leadership" CSA/WHH on April 05-10, 2016 in Cambodia. Likewise, he attended the second module of training workshop "How to Become an Exceptional Civil Society Leader" at Hattiban, Kathmandu on June 06-10, 2016.
- Mr. Netra Pratap Sen attended Helvetas Swiss Intercooperation Nepal's 60th Anniversary, celebrating 60 years towards a better Nepal program in Lalitpur on June 21, 2016.
- Dr. Ujjal Tiwari (Focal Person, MSFP) and Mr. Ram Bahadur Bhujel (Area Program Manager, MSFP) participated in the MSFP Cluster/Regional level Exit Workshop organized by the MSFP-Service Support Unit (SSU) Surkhet Cluster in Surkhet on June 02, 2016. They also participated in the MSFP Implementing Agencies (IAs) - SSU meeting in Kathmandu on June 07, 2016 and in the MSFP National level Exit Workshop held in Kathmandu on June 16, 2016.
- Mr. Rishikesh Dhakal attended Emergency Preparedness and Planning meeting at WHH, Country office, Kathmandu on July 06, 2016.

Executive Board Members (2016-2019)

S.N.	Name	Position
1.	Prof. Dr. Madhav Kumar Shrestha	Chairperson
2.	Associate Prof. Dr. Durga Devkota	Vice-Chairperson
3.	Mr. Dharma Prasad Pande	Secretary
4.	Ms. Sunita Shrestha	Treasurer
5.	Mr. Purna Bahadur Chemjong	Member
6.	Dr. Narayan Prasad Khanal	Member
7.	Ms. Madhu Shah	Member
8.	Mr. Krishna Bahadur B.K.	Member (Farmers' representative)
9.	Ms. Sabita Chepang	Member
10.	Mr. Dinesh Babu Thapa Magar	Member
11.	Ms. Maiya Giri	Member

FORWARD'S Honorary Member

SN	Name	Address	Email
1.	Prof. Dr. John R. Witcombe	Centre for Advanced Research in International Agriculture Development (CARIAD), Bangor University, UK	j.r.witcombe@bangor.ac.uk; jrwitcombe@yahoo.com
2.	Dr. Dave Harris	Principal Scientist (Agro-ecosystems / Climate Change), ICRISAT -Nairobi(Regional hub ESA)PO Box 39063, Nairobi, Kenya	daveh548@gmail.com
3.	Dr. Krishna Dev Joshi	Wheat Improvement Specialist International Maize and Wheat Improvement Center (CIMMYT) NARC CSI Complex, Park Road, Islamabad, Pakistan	kdjoshi@mos.com.np

Founder Members

S.N.	Name	Current Address	Expertise
1.	Mr. Netra Pratap Sen	FORWARD Nepal	Management/Rural Development
2.	Mr. Gam Bahadur Gurung	Rural Reconstruction Nepal (RRN)	Soil Science
3.	Mr. Yam Bahadur Thapa	FORWARD Nepal (part-time)	Natural Resource Management
4.	Dr. Ramesh Raj Pokharel	Currently in USA	Plant Science
5.	Mr. Dinesh Neupane	Currently in Denmark	Livestock
6.	Mr. Ram Mani Poudel	Himali Project, Kathmandu	Livestock & Dairy Production and Management
7.	Mr. Krishna Bahadur Bhandari	FORWARD Nepal	Management

FORWARD Nepal's Advisory Board

S.N.	Name	Current Address	Expertise
1.	Shyam Prakash Chand, PhD	Currently in U.K.	Natural Resource Management
2.	Sharan Kumar K.C., PhD	Cambodia	Sustainable Development, Labor Management & Trade Union
3.	Devendra Chapagain, PhD	Kathmandu	Socio-economics

FORWARD Affiliated Professionals

S.N.	Name	Current Address	Expertise
1.	Jagadish Timsina, Ph.D	Advisor to NRNA Australia & Honorary Principal Fellow - University of Melbourne	NRM/Agronomy
2.	Narayan Prasad Shrestha, PhD	Currently in UK	Livestock
3.	Mr. Toya Gautam	Freelancer	Publication/Media

S.N.	Name	Current Address	Expertise
4.	Luni Piya, PhD	Associate Professor, Hiroshima University, Japan	Rural Economics
5.	Miraj Prakash Joshi, PhD	Hiroshima University, Japan	Agri. Economics
6.	Naba Raj Devkota, PhD	Professor, AFU, Rampur	Animal Science
7.	Shyam Sundar Shrestha, PhD	Currently in USA	Social Science

FORWARD's Statutory Auditor (2015/16)

S.N.	Name	Engagement Partner	Address	Contact phone and email
1.	CA. Anil Joshi	MJ Associates	Kathmandu, P.O.Box 890	Tel: 4416547, kuber@wlink.com.np

FORWARD Nepal's Staff 2015/16

At present FORWARD Nepal has different professional, administrative and finance staff. A list of key staffs who worked for FORWARD Nepal in 2015/16 is given below.

S.N.	Name	Position
1	Mr. Netra Pratap Sen	Executive Director
2	Mr. Ram Krishna Neupane	Program Director
3	Mr. Ujjal Tiwari, PhD	Planning Director
4	Mr. Rishikesh Dhakal	Program Manager
5	Mr. Yam Bahadur Thapa	NRM Specialist (Part-time)
6	Mr. Krishna P. Paudel, PhD	GMP Team Leader
7	Mr. Krishna Bahadur Bhandari	Senior Admin Officer
8	Mr. Ram Shankar Thapa	Finance Officer
9	Mr. Satish GC	Finance Officer
10	Dr. Nirmal Katuwal	Project Coordinator
11	Dr. Dipesh Kumar Kshetri	Field Coordinator
12	Mr. Anup Adhikari	Monitoring and Evaluation Officer
13	Mr. Sachit Neupane	Consultant-Dairy Technologist
14	Mr. Hare Ram KC	Field Coordinator
15	Mr. Rajesh Shrestha	Field Coordinator
16	Mr. Madan Kumar Karki	Field Coordinator
17	Mr. Krishna Prasad Sharma	Field Coordinator
18	Ms. Ashmita Pandey	Program Officer
19	Mr. Ram Bahadur Bhujel	Area Program Manager
20	Mr. Laya Prasad Subedi	Area Program Manager
21	Ms. Manita Ale	Field Manager
22	Mr. Bed Prasad Bhurtel	Project Coordinator
23	Mr. Uttam Aryal	Project Coordinator
24	Ms. Prstistha Thapa	Project Coordinator
25	Mr. Ram Narayan Chaudhary	Filed Manager
26	Dr. Anita Ale	Project Coordinator
28	Mr. Bramanti Prasad Mahato	Field Manager
29	Dr. Saroj Chaudhary	Project Coordinator

S.N.	Name	Position
30	Ms. Swati Shrestha	Information and Publication Officer
31	Mr. Santosh Adhikari	Information and Publication Officer
32	Er. Jeewan Chaudhary	District Coordinator
33	Mr. Uttam Kandel	District Coordinator
34	Mr. Shyam Sundar Rajbhandari	District Coordinator
35	Mr. Ashok Kumar Gurung	District Coordinator
36	Er. Dilli Raj Limbu	District Coordinator
37	Ms. Heman Paneru	Monitoring and Verification Officer
38	Mr. Manoj Singh Dhami	Monitoring and Verification Officer
39	Mr. Krishna Bhatta	Monitoring and Verification Officer
40	Mr. Durga Bahadur Basnet	Project Officer
41	Mr. Pradeep Lamichhane	Project Officer
42	Mr. Samir Sharma	Project Officer
43	Mr. Sudarshan Bista	Project Officer
44	Mr. Tanka Prasad Acharya	Project Officer
45	Ms. Rajani Sapkota	Project Officer
46	Ms. Asmita Baral	Project Officer
47	Ms. Kiran Kuwar	Program Officer
48	Er. Hari Krishna Acharya	Field coordinator
49	Mr. Suraj Khanal	Field Officer
50	Mr. Shambhu Chaudhary	Field Officer
51	Mr. Ram Pukar Jaisawal	Sub-Engineer
52	Ms. Sumitra Simkhada	Art. Engineer
53	Mr. Pukar Pahari	Sub-Engineer
54	Mr. Suman Subba	Overseer
55	Mr. Pheru Lal Chaudary	Overseer
56	Mr. Dibash Khanal	Overseer

S.N.	Name	Position
57	Mr. Sanjaya Sharma	Overseer
58	Mr. Subid Ghimire	Overseer
59	Mr. Bijaya Adhikari	Overseer
60	Ms. Raj Rani Rana	Nutrition Associate
61	Mr. Bijaya Chaudhary	Nutrition Associate
62	Mr. Nar Bahadur Auji	Nutrition Associate
63	Mr. Ram Dayal Tharu	Asst. Account Officer
64	Ms. Sunita Shrestha	Senior Accountant
65	Mr. Bipin Kumar Manandhar	Senior Accountant
66	Ms. Sakchha Timilsina	Program Accountant
67	Ms. Anupama Katwal	Admin/Logistic Assistant
68	Ms. Saharsha Ojha	Project Account Officer
69	Ms. Hira Dhakal	Finance and Admin Assistant
70	Mr. Puskar Kandel	Finance and Admin Assistant
71	Mr. Manoj Kumar Sutihar	Finance and Admin Assistant
72	Ms. Yamuna Dulal	Finance and Admin Assistant
73	Ms. Geeta Gurung	Admin Associate
74	Mr. Shree Ram Chaudhary	Admin Assistant
75	Ms. Archana Kafle	Warehouse Associate
76	Ms. Mina Paudel	Warehouse Associate
77	Ms. Alka Dahal (Dhakal)	Warehouse Associate
78	Ms. Rashu Thakali	Admin Assistant
79	Mr. Bhim Bahadur Thapa	Driver
80	Mr. Umesh Kattel	Field Technician
81	Mr. Prem Bahadur Chaudhary	Field Technician
82	Ms. Kshmata Gurung	Field Technician
83	Ms. Yabati Kumari Chaudhary	Field Technician
84	Ms. Yog Maya Kunwar	Field Technician
85	Mr. Chhalu Prasad Chaudhary	Field Technician
86	Mr. Pramod Sah	Field Technician
87	Mr. Rohini Raj Rijal	Field Technician
88	Mr. Mohan Kumar Basnet	Field Technician
89	Ms. Bimala Shrestha	Field Technician
90	Mr. Chhon Bahadur Chepang	Field Technician

S.N.	Name	Position
91	Mr. Kshitij Raj Sharma	Field Technician
92	Ms. Renuka Neupane	Field Technician
93	Mr. Jhapta Bahadur Bashnet	Field Technician
94	Mr. Prasanta Nepal	Field Technician
95	Mr. Niranjan Kumar Mandal	Field Technician
96	Mr. Damar Prasad Mandal	Field Technician
97	Ms. Tara Rai Chaudhary	Field Technician
98	Mr. Dornacharya Poudel	Social Mobilizer
99	Ms. Sabita Biswas	Social Mobilizer
100	Ms. Debaki Kumari Nepal	Social Mobilizer
101	Ms. Hira Kumari Dulal	Social Mobilizer
102	Mr. Ram Balak Sharma	Social Mobilizer
103	Mr. Shyam Charan Mochi	Social Mobilizer
104	Mr. Chandra Bahadur Chepang	Social Mobilizer
105	Mr. Bharat Lal Shrestha	Office Boy
106	Mr. Rajesh Shrestha	Office Boy
107	Ms. Alina Katuwal	Office Helper
108	Ms. Olisha Katuwal	Office Helper
109	Mr. Dipendra Chaudhary	Security Guard
110	Mrs. Laxmi Singh Thakuri	Cook

Intern

S.N.	Name	University	Country	Duration
1.	Ms. Louise Legein	Brussels University	Belgium	8 th July - 7 th October 2016
2.	Mr. Santosh Bhandari	Agriculture and Forestry University	Nepal	May-October 2016

Staff on Study Leave

S.N.	Name	Position	Country
1.	Dr. Deep Narayan Sapkota	Sr. Programme Officer	Ireland

Audit Report 2072/73 (2015/16)

Forum for Rural Welfare and Agricultural Reform for Development
Bharatpur-2, Chitwan

Statement of Financial Position
As at 31 Ashad 2073 (Financial Year 2072-73)

Particulars	Schedule	Current Year 2072-73	Figure in NPR Previous Year 2071-72
Assets			
Non Current Assets			
Non Expendable Assets	1	10,938,902.15	9,530,602.62
Investment		12,197,681.96	12,197,681.96
		23,136,584.11	21,728,284.58
Current Assets			
Cash & Bank	2	21,664,157.38	4,399,040.21
Advance Receivable	3	17,781,070.31	2,293,690.16
		39,445,227.69	6,692,730.37
Total Assets		62,581,811.80	28,421,014.95
Fund and Liabilities			
Fund Balance			
Unrestricted Fund			
Unrestricted Fund	4	23,351,465.19	17,740,994.62
Gratuity Fund		3,483,196.00	3,393,622.00
		26,834,661.19	21,134,616.62
Restricted Fund			
Capital Asset Fund	1	1,114,879.51	1,450,553.18
Restricted Fund	5	26,443,892.43	4,042,077.01
		27,558,771.95	5,492,630.19
Liabilities			
Current Liabilities	6	8,188,378.67	1,793,768.15
		8,188,378.67	1,793,768.15
Total Fund and Liabilities		62,581,811.80	28,421,014.95

Schedules 1 to 9 form an integral part of financial statements

Satish G. C
Finance Officer

Prof. Dr. Madhav Shrestha
Chairperson



Netra Pratap Sen
Executive Director

As per our report of even date



CA. Anil Joshi
Partner
MJ Associates
Chartered Accountants
Date : 10.01.2017

Forum for Rural Welfare and Agricultural Reform for Development
Bharatpur-2, Chitwan

Income and Expenditure Statement
for the Period ended on 31 Ashadh 2073

Particulars	Schedule	Figure in NPR	
		Current Year 2072-73	Previous Year 2071-72
Income Under			
Unrestricted Fund	4	17,566,477.78	12,161,143.69
Restricted Fund	5	165,354,885.64	55,956,282.32
Total Income		182,921,363.42	68,117,426.01
Expenditure Under			
Unrestricted Fund			
Employee Cost	7	10,740,594.00	6,952,848.00
Office and Administration Cost	8	6,190,734.98	4,845,540.93
Depreciation Cost	1.1	635,148.80	362,754.76
		17,566,477.78	12,161,143.69
Restricted Fund			
Programme Expenses	9	165,354,885.64	55,956,282.32
Total Expenditure		182,921,363.42	68,117,426.01

Satish G. C
Finance Officer

Prof. Dr. Madhav Shrestha
Chairperson



Netra Pratap Sen
Executive Director

As per our report of even date



CA. Anil Joshi
Partner
MJ Associates
Chartered Accountants
Date : 10.01.2017

Forum for Rural Welfare and Agricultural Reform for Development
Bharatpur-2, Chitwan

Fund Accountability Statement
for the Financial Year ended 31 Ashadh 2073 (F/Y 2015-16)

SN	Particulars	Schedule	Figure in NPR	
			Current Year 2072-73	Previous Year 2071-72
A.	Opening Fund Balance		21,783,071.63	10,876,071.68
	Adjustments		-	(362,761.96)
	Adjusted Opening Balance		21,783,071.63	10,513,309.72
B.	Sources of Fund			
	Unrestricted Fund	4	23,176,948.35	13,464,411.12
	Restricted Fund	5	187,756,701.06	65,922,776.79
	Sub Total (B)		210,933,649.41	79,387,187.91
C.	Total Fund (A+B)		232,716,721.04	89,900,497.63
D.	Application of Fund			
	Employee Cost	7	10,740,594.00	6,952,848.00
	Office & Administration Cost	8	6,190,734.98	4,845,540.93
	Program Expenses	9	165,354,885.64	55,956,282.32
	Depreciation	1.1	635,148.80	362,754.76
	Sub Total (D)		182,921,363.42	68,117,426.01
E.	Closing Fund Balance (C-D)		49,795,357.62	21,783,071.62
F.	Represented By			
	Cash Balance		137,508.11	9,094.00
	Bank Balance		21,279,233.69	4,389,946.21
	Receivables		17,781,070.31	2,678,829.20
	Non-Expendable Assets		9,824,022.64	8,080,049.44
	Investment		12,197,681.96	12,197,681.96
	Gratuity Fund		(3,483,196.00)	(3,393,622.00)
	Payables		(8,188,378.67)	(2,178,907.19)
	Total		49,547,942.03	21,783,071.62

As per our report of even date


Satish G.C.
Finance Officer


Prof. Dr. Madhav Shrestha
Chairperson


Netra Pratap Sen
Executive Director




CA. Anil Joshi
Partner
MJ Associates
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Date : 10.01.2017

Publications

FORWARD Nepal has published 137 publications, 80 in English, of which 20 are in international publications and 57 in Nepali language. Among them, publications during 2015/2016 are as follows:

- Forest-Based Enterprises and Success Cases (under Implementation of Forest-Based Enterprise Promotion Programme in Bajura and Doti), FORWARD Nepal (2016).
- Neupane RK and R Shrestha (2016). Pulses as a Climate Resilient crop: Technology for Climate Smart Agriculture in SAARC countries. SAARC Information Centre, Dhaka, Bangladesh. In Press.
- Shrestha R and RK Neupane (2016). Agronomic management and cropping systems of pulses. In: Pulses for sustainable food and nutrition security in SAARC region. SAARC Information Centre. Dhaka, Bangladesh.
- Neupane RK, DB Basnet, S Bista, K Majumdar, J Timsina, L Legein (2016). Piloting of Nutrient Expert Tool in Rice, Wheat and Maize: FORWARD Nepal's Experience in the Eastern Terai. Proceedings of the National Conference on Climate Smart Agriculture organized by MOAD/CCAFS/LIBIRD on 25 September 2016, Kathmandu. LIBIRD Pokhara. In Press.

फरवार्डद्वारा प्रकाशित प्रविधि बुलेटिन तथा पुस्तिकाहरू (२०७२/७३)

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| १. कृषकहरूका लागि तालिम निर्देशिका | जेठ २०७३ |
| २. आधारभूत मौरीपालन पुस्तिका | पुस २०७२ |
| ३. दूध संकलन, चिस्यान र ढुवानी व्यवस्थापन प्रशिक्षक प्रशिक्षण पुस्तिका | वैशाख २०७३ |

Geographical Coverage of FORWARD Nepal



Projects on-going

Projects phased out





FORWARD Nepal



Executive Board of FORWARD Nepal FY 15/16 - 17/18