



CEAPRED

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**Annual Report
2015-16**



FOREWORD

This Report provides a brief account of the projects implemented by CEAPRED during Nepali Fiscal Year 2015- 2016 (16 July 2015 to 15 July 2016). Nepal suffered serious political, economic and social setbacks during the reporting period.

Amid continued political instability and unrest, agitation in Terai districts coupled with border blockade for more than six months severely disrupted normal supply of goods and services and caused unprecedented economic loss to the nation. This exacerbated the misery of the people whose livelihoods were already damaged by the devastating earthquakes of April-May 2015.

Our programs were also affected to some extent. The fuel shortage affected staff mobility and timely delivery of program inputs and services. Despite these constraints, the field programs were implemented and targets were achieved, as planned. The USAID's KISAN project was successful in enhancing production and

improving the market environment in the project districts. Similarly, the SAMARTH-Pig sub-sector project initiated some pioneering activities, including the fresh semen AI, which will revolutionize the improved breeding practices in pigs. The Climate- Smart Agriculture practices and their up-scaling have been very successful, and resilient technologies are being developed and tested in the select sites.

CEAPRED's projects and programs have contributed significantly to rural poverty reduction and livelihood improvement, along with sustainable eco system and environmental management. At the beneficiary level, these projects have contributed to increased household income, improved food security and narrowing down of social discrimination and inequality. We strive to further these impacts in the future with continued support from our national and international development partners, donors and well wishers.

Hari Krishna Upadhyaya, PhD
Executive Chairperson



ACRONYMS

ANEP	Agriculture and Nutrition Extension Project
CBS	Central Bureau of Statistics
CC	Collection Centre
CEAPRED	Center for Environmental and Agricultural Policy Research, Extension and Development
CO	Community Organization
CPBF	Commercial Pig Breeder Farmers
CSV	Climate Smart Village
CRMV	Climate Resilient Mountain Village
DADO	District Agriculture Development Office
DAG	Disadvantaged Groups
DAO	District Administrative Office
DDC	District Development Committee
DFID	Department for International Development
DoA	Department of Agriculture
EU	European Union
FFD	Farmers' Field Day
FG	Farmer's Groups
FM	Frequency Modulation
FTF	Feed the Future
FYM	Farm Yard manure
GoN	Government of Nepal
HH	House hold
HORT CRSP	Horticulture Collaborative Research Support Program
ICIMOD	International Centre for Integrated Mountain Development
IDE	International Development Enterprises
IFAD	International Fund for Agriculture Development
IFCAS	Integrated Floating Cage Aquaculture System
IPM/IL	Integrated Pest Management/Innovation Lab
IPM	Integrated Pest Management
IQC	Internal Quality Control
IRRI	International Rice Research Institute
IT	Information Technology
ICT	Information Communication Technology
KISAN	Knowledge based Integrated Sustainable Agriculture and Nutrition
ASIA	Association for the International Solidarity in Asia
M4P	Making market work for the poor
MFI	Microfinance Institute
MIT	Micro Irrigation Technologies
MoAD	Ministry of Agricultural Development
MOU	Memorandum of Understanding
MPC	Market Planning Committees
MT	Metric Ton



NARC	Nepal Agricultural Research Council
NEAT	Nepal Economic Agriculture and Trade
NGO	Non Governmental Organization
NRs	Nepalese Rupees
NSB	National Seed Board
PAF	Poverty Alleviation Fund
PBPF	Pure Bred Pig Farmer
PEAN	Pig Entrepreneurs Association Nepal
PMCA	Participatory Market Chain Approach
SDC	Swiss Agency for Development Cooperation
SIS	Small Indigenous Species
SQCC	Seed Quality Control Centre
TG	Thematic Groups
USAID	United States Agency for International Development
USD	United State Dollar
VDC	Village Development Committee
VHPS	Village Hybrid Pig Seed
VSP	Vegetable Seed Project

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ABOUT CEAPRED

Established in April 1991, the Center for Environmental and Agricultural Policy Research, Extension, and Development (CEAPRED) is a leading national NGO in Nepal. It is one of the first non-governmental organizations in the country to work in agriculture sector. CEAPRED's programmatic focus since its inception has been on sustainable poverty reduction, livelihood enhancement and improvement in food security. This has been made possible through creation of new and sustainable economic opportunities and development of new market infrastructures and channels to strengthen commodity value chains for poor and disadvantaged rural communities in Nepal. CEAPRED's work in the past two-and-a half decades has taken a number of pioneering initiatives ranging from the commercial off-season vegetable farming in the early 1990s to vegetable seed production and livestock farming in recent years. An integral part of CEAPRED's approach consists of maintaining close cooperation, collaboration and working relationship at both central and local levels with related government, non-governmental and private sector agencies to ensure smooth and effective implementation of program activities and sustainability of the impacts. Over the past 25 years, CEAPRED has successfully implemented 90 development and research oriented-projects in 61 of the 75 districts of Nepal, directly benefiting over 300,000 households and generating incremental incomes valued at billions of rupees annually. In the process, a large number of social, physical and economic infrastructures have been developed, the benefits of which have been reaped by a much larger mass of population. A large number of our projects concern income generation activities through commercial high-value agriculture and agro-enterprise promotion and the creation and expansion of new market infrastructures and channels to strengthen community value chains. Over the years, CEAPRED has grown into an institution of international repute and considerable strength, size, and coverage. In addition to our fully-equipped central office in Lalitpur, our 32 operational field offices and over 250 full-time staff manage our entire outreach. Our current financial turnover is valued at US\$ 2.3 million during the year.

CEAPRED has its own statute and regulations in compliance with government regulations and approved by its General Assembly. The Executive Board consists of seven members elected every four years by the General Assembly and is led by a Chairperson, who is also the Chief Executive of the organization. The Executive Board, including the Chairperson, has always worked on a voluntary basis. CEAPRED has sustained its institutional status as a non-political, inclusive and value-driven organization. Transparency, accountability and service constitute the core elements of CEAPRED's organizational values and norms. It was registered with the District Administration Office of Lalitpur (Registration number 130/047/48) and with the Social Welfare Council (Registration number 478.). CEAPRED is a non-discriminatory and equal opportunity employer.

CEAPRED has been implementing its program mainly under three thematic areas:

Poverty Reduction and Livelihood Enhancement; Sustainable Ecosystem and Environmental Management and Action/Policy Research adopting a three pronged strategy (Social Mobilization, capacity development and local institution building and strengthening) to implement most of its program. CEAPRED has evolved over the past two decades to a large national level non-state development actor in Nepal and is one of the most well known professional developmental NGO's of Nepal with impressive and proven track record on contribution to poverty reduction and livelihood improvement of rural poor in Nepal, which has been viewed as a hallmark of CEAPRED's institutional development. CEAPRED's organizational behavior and functions have been consistently guided by its core values of transparent and voluntary governance, non-partisan and human-centered development, and fully accountable and responsive operation. CEAPRED's core values have guided the work of CEAPRED and defined the code of conduct of its staff at all levels of its operation.

Poverty Reduction and Livelihood Enhancement:



Major bulk of CEAPRED's initiatives are directed towards rural poverty eradication and livelihood enhancement through economic empowerment of the rural poor, and the associated activities have been focused on high-value commercial agriculture, including vegetable seeds, off-season vegetables, aquaculture and livestock.

CEAPRED has been heavily involved in market oriented production system in agriculture sector, thus providing access to market for the produce of rural poor. CEAPRED's work with landless and near-landless families comprised activities such as home gardening, group savings, small livestock rearing, and micro-enterprise development. CEAPRED's livelihood enhancement programs have brought visible changes in the household economy of beneficiaries, and contributed to significant improvements in the social, economic and psychological conditions of the poor and disadvantaged families. Women, ethnic minorities and vulnerable groups are CEAPRED's primary target groups. Many members of such groups, who hardly participated in public activities in the past, are now holding executive positions in community organizations and are able to claim their share of development benefits. In most of the areas, social and gender discriminations have been reduced, and the poor are making their voices heard. Increased household incomes have contributed to improved food security and nutrition, education, health and sanitation.



Knowledge-based Integrated Sustainable Agriculture and Nutrition Project (KISAN)

USAID's Knowledge-based Integrated Sustainable Agriculture and Nutrition (KISAN) project was implemented with WINROCK International as Lead organization and CEAPRED implemented the agriculture component of the project. The project works with the Government of Nepal (GoN) and other partner organizations to sustainably improve food security and increase incomes through integrated agriculture activities. The project seeks to reduce poverty and hunger in Nepal sustainably by achieving inclusive growth in the agriculture sector, increasing income of farm families and improving nutritional status, especially of women and children in over 160,000 households of west, mid-west, and far-west regions of the country targeting to impact one million Nepalese. CEAPRED is contributing in the agriculture component of the project in close coordination with Ministry of Agriculture Development (MoAD). Moreover, KISAN engages with a wide-range of public, private and civil society stakeholders that include farmers, NGOs, academic and research institutions, businesses, training centers and media partners. This project is also closely aligned with the other USAID projects in Nepal: the various innovation lab (IL) programs and Cereal System initiative for South Asia (CSISA). The project has provided short-term agricultural sector productivity/food security training (cereal crop and lentil seed as well as grain production, maize seed production, vegetable production, nursery management, crop production management, plant protection, post-harvest), marketing as well as saving, credit and basic book-keeping orientation to the farmers. Local service providers were trained on improved agriculture production, business planning, gender sensitivity and environmental impact. In collaboration with line agencies irrigation schemes were constructed and maintenance training to irrigation user groups has been provided. Likewise, dissemination messages related to improved technologies and market price through FM/radio and other media helped farmers

to get right information at right time. It has further enhanced agri-input distribution system through establishment and training of private sector input and other local service providers.

The key achievements of KISAN project has been in capacity development of the farmers on various skills and techniques related to agricultural operations and linking the farmers to markets and market players. During the year 54 events were conducted to firmly link existing KISAN seed production groups to seed buyers and 135 lead farmers of seed producing groups were trained on seed production and marketing. Similarly, five memorandum of understanding (MOU) were signed between KISAN and farmer groups for the installation of schemes and 466 irrigation schemes were installed.

- A total of 412 training events for farmer group were conducted to maximize agriculture production through irrigation facility. In addition, 1767 events were conducted to strengthen saving and credit capacity of farmers groups and 4500 events were conducted to prepare and distribute educational materials for managing savings and credit groups. During the year, a total of 90 interaction meetings were conducted in KISAN VDCs with cooperatives, MFIs, other private sectors and KISAN farmers' group representatives and 4 events of exposure visits of coops members were conducted with 80 participants. Twenty five district level interaction meetings were conducted with MFIs, cooperatives, banks, vendors, leader farmers, LSP and KISAN staffs on financial service expansion and product diversification and two one-day workshops were conducted to link banks/MFDBs/Coops, with larger agri. traders, agro based entrepreneurs, commercial farmers and agriculture market center operators to facilitate commercial large loans.



Commercial Off-season vegetable production at Baghmare (Hariyali Farmer Group), Dang



Unloading of vegetables by KISAN farmers at Ghorhi MPC

Improved capacity of agriculture extension workers, service providers and farmers has been one of the outputs of KISAN project, in which, 62 persons from each agro vet were trained in Pesticide Retailer training and seed retailer training, 100 participants from each agro vet were trained in need based capacity building and 58 participants were trained on agribusiness entrepreneur. Similarly, 109 existing local service providers (LSPs) along with 47 new LSPs were trained and 97 LSPs participated in CTEVT Level Skill Test followed by refresher training program.

A total of 370 training events were organized for farmers by private sectors (agro vet, coop, processor, company) and 3201 fee charged training events to farmers by private sectors (agro vet, and LSP) were organized along with 2277 training events by KISAN project staff. In addition, 224 farmers groups were facilitated for registration with district agriculture development office.

Various demonstrations were organized for the farmers to encourage them to adopt improved and sustainable agriculture production and post harvest technologies, which included 206 demonstrations on improved rice production, 184 demonstrations on maize production, 92 demonstrations on lentil production, 335 demonstrations on vegetable production under plastic house/tunnel and 334 in open fields, 60 demonstrations in bio-pesticides, 201 in supper bags, eight on vermi-compost and 152 farmers' field days were organized.



Irrigation Support to Seed Production Group at Satbariya

To improve the market efficiency, 132 meetings of farmers with private sectors were organized at the district level and 16 meetings were organized at cluster level. In addition, exposure visits of traders and private sector to visit farmers' groups were organized for 76 persons.

A migrant Laborer who changed his life for better due to KISAN's support

SUCCESS STORIES

Krishna is one of the progressive farmers at Palpa who is enthusiastic to work in the vegetable field. He used to work at India and Saudi Arabia for 10 years. After he returned from the foreign, he started to work at his own kitchen garden. After introduction with KISAN project, he started getting various trainings on nursery management of vegetables to disease and pest management. He has also got the training on post harvest handling. These trainings from KISAN have encouraged him to start cultivation in larger area. Since there was difficulty in irrigation (source being far), KISAN has supported 330meter long pipe with 32mm diameter. Additional, cost was contributed by farmer themselves. Now, he is getting benefits from vegetables like cauliflower, Cabbage, Tomato, chilly. The last season he earned NRs. 1, 20,000 by selling vegetables to various VDCs like Aryabhanjang, Geja, Tansen. He said "the production was possible only due to support of pipe for irrigation from KISAN project". As his land was completely dry before, he says he had never imagined there would be any vegetables in those lands. He also added: 'Garyo vane k hudaina rahecha' (What cannot be done if a person has will to do)

Rupak Baniya now owns an agro-vet centre

SUCCESS STORIES

Rupak Baniya used to have small business of seeds, pesticides, fertilizers and similar agricultural inputs in weekly market (Hat Bazar). After the support from KISAN project, he has started the agro-vet center of his own at Taulihawa, Kapilbastu. He has given 6 events of one day training to KISAN beneficiaries in case of safe handling of pesticides, disease and pest management in plants and so on.

His initial expenditure was 8 lakh. His starting transaction was 30 Lakh and now his present transaction is more than 40 Lakh. He has participated in interaction meeting and pesticide retailer training conducted by KISAN. After linkage with KISAN project, his customer has increased to 1200-1500 of which KISAN's direct beneficiaries are more than 150. He has now supplied the agricultural inputs to 27 agro-vets and 5-7 cooperatives.



SAMARTH- Nepal Market Development Program (NMDP) – Pig Sub sector

The program focuses on the pig sub sector to help pilot, scale-up and bring about systemic changes that helps the market system to function effectively and inclusively creating right condition for improved economic growth and poverty reduction. In addition it also provided linkages to basic services to build capacity and opportunities for the poor to bring about sustainable and systemic changes in the pig industry of Nepal. The project was designed to realize systemic change by unlocking key systemic constraints in the pig and pork market system,

facilitating to improve the capacity and incentive of key market system players to expand their business services especially in the pig rearing areas by piloting pig and pork related innovative business models that ensure win-win relationship in demand, supply and transaction side of the service market. It has facilitated a sustainable pig-breeding system wherein the private breeder farmers produce pure as well as crossbred piglet for fatteners mediated by local Agro-vet/VAHW working with small village pig breeder group at the VDC level.

KEY ACHIEVEMENTS

Fresh Semen AI in Pigs

The project has pioneered on artificial insemination (AI) using fresh semen of boars in the major pig pockets of the country. This program was initiated with training on Fresh Semen production of boars at Pokhara Livestock Pvt. Ltd., Kaski from 12th Jan 2016 to 17th Jan 2016 with the expert assistance of Dr. Kevin Rozeboom, Swine Genetic International, USA. A total of 19 participants including six female participated in this training. The participants were provided with skills on boar training, use of dummy for semen collection and processing of semen. The participants were also demonstrated to identify sows in heat and inseminate at the proper time with proper insemination techniques.



Semen Collection boar

They were made familiar with the equipments being used in collecting, filtering and processing of semen and testing of semen for sperm motility using microscope. The trainees were acquainted

with the use of slide warmer, micropipette, metrosperm; processing equipments using mixing vat; packaging using sealing machine and storing unit.

Following the TOT, three trainings were organized for the commercial farmers to make them acquaint with the technology and use it in their own farm for breeding/upgrading of their stocks. The first training was organized at Kulung Bangur farm (12th -17th April, 2016) through project facilitation. This training was followed by a second training (2nd May-7th May, 2016) at Regional Agriculture Research Station, Pig Research Unit Tarhara, Sunsari on the same modality and a third training at Pokhara Livestock Private Limited Kaski (16th May-21st May, 2016). These trainings were participated by 12, 13 and 14 participants including 6 women participants. All trainings were successful to impart new technology and skills to the farmers on pig breeding and reproduction. The training on semen production has been aimed to disseminate the technology for genetic improvement in pigs quickly and cheaply as fresh semen is 70% cheaper than natural insemination. The collected and processed fresh semen can be used within 5 days of collection when stored at right temperature and one ejaculation can inseminate 10-15 sows. This technology is cheaper and can be carried out after simple training. This technology will reduce the cost of boar rearing by individual farmers and promote the selection of boars with genetic merits, which will ultimately contribute to disseminate the higher genetic potential of the breeding animals in the population quickly and easily.

Disease screening in the GPS farms selected for fresh semen AI

Introduction of artificial insemination technology for genetic improvement requires strict adherence to disease control strategy, especially the control of diseases having potential to transmit through semen. Hence, the animals in GPS farms selected for fresh semen AI program were screened for Brucellosis and Porcine Respiratory and Reproductive Syndrome (PRRS). On initial screening, all farms were negative for Brucellosis but all farms except one (RARS, Tarahara) were positive for PRRS on Rapid test on PRRS-Ab test card using Colloidal Gold immunochromatographic card (Shenzhen Lushiyuan Biotechnology Co. Ltd, China). The test positive percent ranged between 40-70% among the collected samples. The test positive and negative animals of these farms were segregated and managed separately according to their test result status and the farm animals were further subjected to real time RT-PCR test using serum/saliva/ semen samples from the required sample size of animals. The samples



Demonstration of semen collection in boar

collected were brought to the diagnostic laboratory (Intrepid, Nepal) on liquid nitrogen immediately after collection to adhere to maintain the cold chain as required. On real time RT-PCR test, none of the tested animals showed the presence of virus, thus indicating that there was no circulating virus in the farms at the time of sampling and the positive rapid test result might reflect earlier exposure to the virus.

The market situation assessment of pigs and pork in Nepal: Situation analysis following the earthquake and blockade

This study commissioned by CEAPRED/SAMARTH NMDP Pig sector project and conducted through Pig Entrepreneurs Association, Nepal (PEAN) was to analyze the market situation on pig and pork in the country on the backdrop of the marketing constraints following the devastating earthquake and border blockade, which resulted to market collapse of pigs, pork and pig feed in the country. This study was aimed to analyze the market systems and its dynamics, so that the short term measures and long term strategies could be recommended and adopted for promotion of pig and pork industry in the country. The study was based on the market assessment in the major pig pockets of the country, namely Jhapa and Sunsari in the eastern, Kathmandu valley, Nuwakot and Rasuwa in the central, Kaski in the western and Banke and Bardiya in the mid-western regions. Primary market information were gathered through interaction/interview with the pig producer farmers, pork sellers (butcher, whole seller, retailers), departmental stores, processing industries and hotel/restaurants through checklist, while secondary information were collected from respective DLSOs, livestock quarantine offices, Livestock and Poultry Market Promotion Directorate and Central Pig and Poultry Promotion Office (CPPPO) of the Department of Livestock Services(DLS) and Trade Promotion Centre.

The study recommended that, to increase the share of pork in the internal market and for export, there is an urgent need for quality improvement of the products, hence the slaughter houses should be established in the major production hubs and meat inspection and slaughter house act should be implemented by the government to produce certified quality pork for the market. Good husbandry practice (GHP) and good manufacturing practice (GMP) should be adopted by the producers and processors to meet the international standards. Pig and pork export can be possible with the implementation of meat inspection and stamping practices by the government and adoption of GHP and GMP by the producers and processors. Disease free status of the animals is crucial for the export market. DLS needs to initiate appropriate measures to achieve this status and is hopeful to get the required support from other partners as well. To make the production system self dependent, it is also necessary to produce major feed ingredients (maize and Soya) within the country, so that the import of these items could be minimized. Regulatory mechanisms for quality feed production and adherence to quality standards needs to be strengthened. Hence, a concerted effort of different market players, supporting organizations and the government is required to develop the sector to the required standard for increasing the volume of internal consumption and export to the potential buyer countries

Infrastructure development: Support to establish Slaughter houses

Two slaughter houses, one in Saranamati, Jhapa and the other at Dharan, Sunsari were established with the facilitation, technical and partial financial support from the project. Both of these slaughter houses have become fully operational and catering to a large number of pig producers to slaughter their animals for market.

The policy level interventions:

The project supported to develop code of practice for slaughter house operations and transport of pigs and pork, which was endorsed by the Department of Livestock Services (DLS), developed Good Husbandry Practices (GHP), Pig Breeding strategy for endorsement by DLS and Good Manufacturing Practices (GMP) for processing of meat to be endorsed by DFTQC.

Promotional activities through Pork festival in Pokhara

The Second National Pork Festival organized with slogan of “Healthy pork white meat” by Pigs Entrepreneurs’ Association of Nepal (PEAN) was a three day long festival organized in Pokhara stadium. The festival was thronged with heavy participation from local people, Chiefs of Department of Livestock Services, Ministry of Agriculture Development as well as other related institutions.

The festival inaugurated by Hon. Vice-president Nanda Bahadur Pun, was able to attract the surfeit of visitors with its main attraction as pork cuisine training to cooks/chefs, free of cost for preparing variety of pork meat items. A total of 230 chefs/cooks participated the pork cuisine trainings provided by the experienced and renowned chefs of Gate College, Kathmandu. This training was supported by CEAPRED/ SAMARTH pig sub sector program. Many people purchased meat from Thapa Meat House, the distributor of Pokhara Livestock Pvt. Ltd. which is also Nepal's only largest and modern technique pork producer. “It was difficult for us to manage the crowd. People not only bought the meat but also attended various trainings with enthusiasm” stated Raju Thapa, owner of Thapa Meat House. The cuisine competition sponsored by CEAPRED/ SAMARTH was also held on Sunday among the trainees of Saturday.



2nd National Pork Festival held in Pokhara

Building Community Enterprises for Smallholders (BCES)



Demonstration of Sprayer Use

Building Community Enterprises of Small Holders (BCES) is designed to improve income and livelihood of vulnerable sections of the society along Tulsipur-Rolpa road corridor VDCs of Salyan district. Federal Ministry of Economic Cooperation and Development (BMZ) and Deutsche Welthungerhilfe (WHH) Germany have jointly supported this project to combat poverty and food insecurity of the most vulnerable sections of the society in Salyan contributing to improvement of

income and livelihood of the target groups. The intervention focuses in vulnerable zones of Salyan district with high incidence of food insecurity. The main objectives of the project are as follows:

- To combat poverty and food insecurity of the 2700 HHs from the most vulnerable sections of the society in Salyan district.
- Contributes to improvement of income and livelihood of the target group.

KEY ACHIEVEMENTS

- Resource Farmers and 30 Community Resource Persons were trained to provide extension support with technical advisory, value addition and marketing to other farmers.
- The target farmers were organized in three Community Enterprises (seed production enterprise, fresh vegetable production enterprise and spices enterprise in order to achieve economies of scale by acquiring sufficient marketable surplus and strengthen value chains of selected products and establish strong market linkages. The CEs were involved as economic and social platforms for the small farmers to negotiate, demand and attract government, buyers and suppliers. Three business plans were developed for selected three enterprises to finalize the strategy on collection of marketable quantum of the product for value chain development like semi-processing of farm produce, packaging and branding.
- The resource farmers conducted 24 Farmer Field Schools (FFS) for the target group of 2700 farmers, which helped to vegetable production of 5 varieties (Brinjal, Bitter Gourd, Tomato, Bean and Bottle gourd) in 4 VDCs. The production of Brinjal, Bitter gourd,



Nursery Bed Preparation, Shivarath

Tomato, Bean and Bottle gourd was recorded to be 11 MT, 3.5 MT, and 30 MT, 1.8 MT and 6 MT respectively, that resulted in an income of NRs. 675000 by the farmers.

Nepal Agricultural Markets Development Program (NAMDP) Phase 1

CEAPRED as consortium partner with Swiss Contact has been implementing NAMDP–phase 1 program under SDC’s Nepal Agriculture Growth Initiative (NAGI) with the objective to remove the agriculture market system deficit and improve livelihoods of rural smallholders, especially disadvantaged groups and women-headed households sustainably, through participation in commercial agriculture and interconnected markets. The project will be implemented in eight districts of Nepal (Ramechhap, Okhaldhunga, Khotang, Surkhet, Jajarkot, Dailekh, Kalikot, and Achham). The objective framework of NAMDP is based on a long term vision of thriving and inclusive agriculture markets that develop the comparative advantages for import substitution and export growth and thus contribute to poverty reduction. Three commodities: Meat (goat and pig), Fresh vegetables and Spices, and Maize, and two cross sectors from among post-harvest practices; crop protection and mechanization are to be selected for intervention. The project aims to increase the additional net annual income of 25,000 semi commercial and commercial production units by NRS 20’000 (approximately \$200), of which 30% are women led production units and create 1600 new employments for poor and disadvantaged people.

The first phase of NAMDP will cover initial 8 months’ preparatory period from March to October 2016. The preparatory period will allow the elaboration of the comprehensive and final program document which will guide the implementation period. The program during the 1st half of Phase 1 will be concentrated in two spatial clusters, namely, in the Eastern cluster: including

Ramechhap, Okhaldhunga and Khotang districts, and the Western cluster: including Surkhet, Jajarkot, Dailekh, Kalikot, and Achham districts.

During the 2nd half of Phase 1, the program is to expand to other important and promising road corridors; these may include parts of the Terai region. During the subsequent Phases 2 and 3, it is expected that program interventions will be fully driven by dynamics and opportunities in selected commodity markets and cross sectors without explicit geographical focus; the emphasis then will be on reaching broad coverage and achieving deep and systemic impact in the selected commodity markets and cross sectors.



Interaction with Extension Officer of DADO, Okhaldhunga



Interaction with vegetable trader in Haat Bazar, Okhaldhunga

UNNATI

Key Impacts

Ensuring sustainability was the major thrust of Unnati project. Activity planning and implementation was carried out in such a way that the project results are sustained and project participants are capable of continuing the improved practices introduced by the project. Following are the initiatives undertaken by project to ensure sustainability at each level:

- At farmers' level, farmers were organized into groups and groups into cooperatives. They were made to follow rules of saving/credit schemes. To ease the access to input supply, farmers were linked with agro-vets. Most importantly, skill development of farmers to adopt improved production technologies for safe food production was given priority ensuring participation of women.
- At group level, all groups were linked with agro-vets and cooperatives for input supply and product sales. Likewise, these groups were linked and registered in DADO too. For the smooth and independent group management, effort was given for groups' capacity enhancement in leadership, group management and saving/credit management.
- At cooperative level, each cooperative were supported in preparation and operation of their business plan as guide for proper functioning. Furthermore, these were support in construction of cooperative building, furniture, equipment, other logistics support, establishment and operation of collection centre. Priority was given to link cooperatives with development agencies like DADO, DDC and District Cooperatives etc for services, banks and finance organization for credit/microfinance and district/regional and national markets for product supply. A marketing committee in each cooperative was developed and strengthened to promote input supply and sales of the products. For enhancing capacity of the committee members exposure visits and trainings were also provided. The project incorporated mainstreaming of gender and social inclusion concept in each cooperative to safeguard interest of women, poor and socially excluded people.



Packaging of potatoes for marketing

Emergency Response to the Nepal Earthquake 2015

Key Impacts

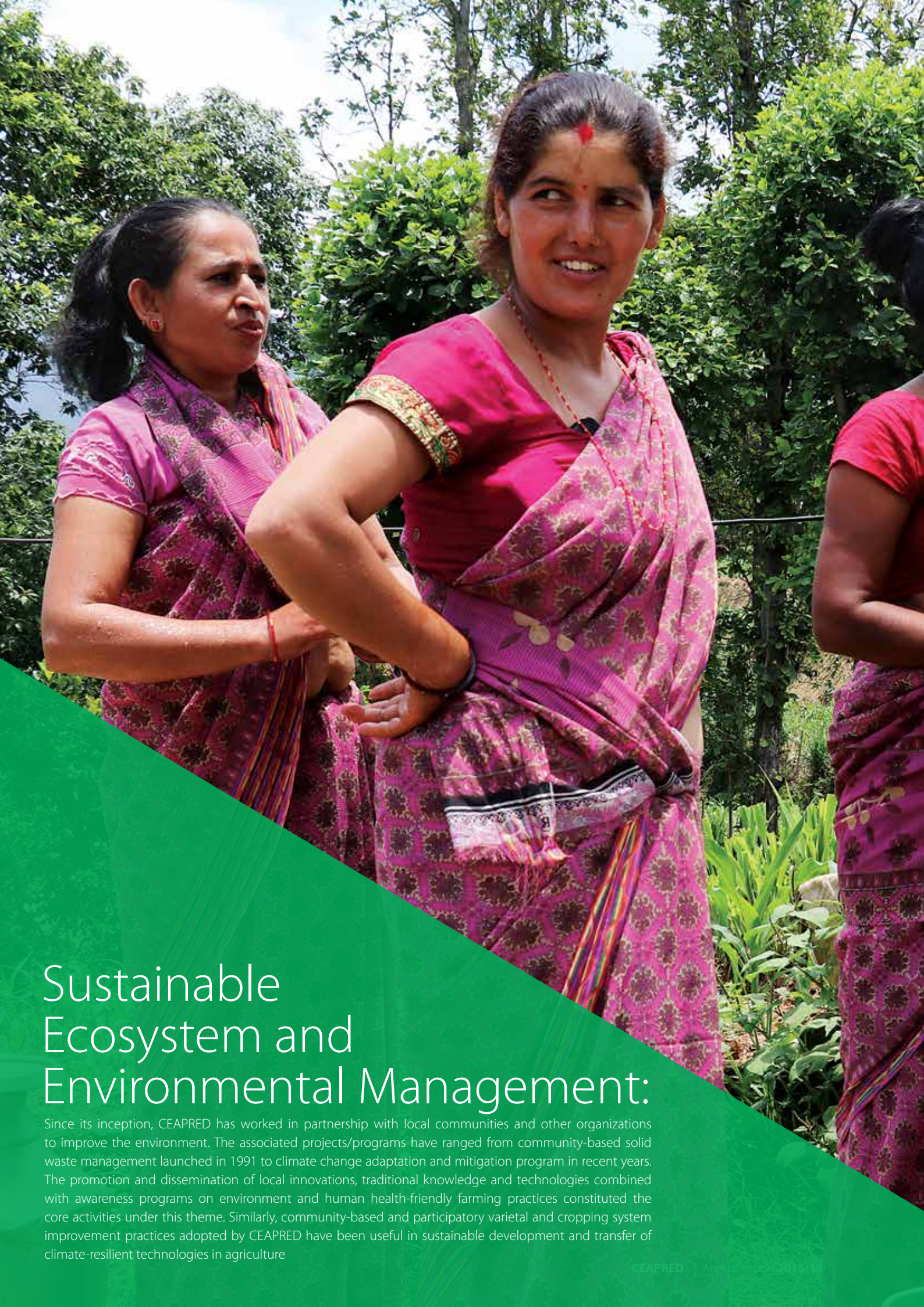
The project was being implemented to support earthquake affected 1,500 HHs for home gardening and 800 HHs for commercial vegetable farming in 3 wards (9, 10 and 11) of Panchkhal municipality of Kavre district. The project supported the affected HHs to increase consumption of nutritious vegetables through home gardening and increase income through commercial vegetable farming and was successful in achieving the targeted goal.

The project was successful to mobilize the targeted HHs, organized them in group and motivated the selected leader farmer to act as resource person in technical aspects

- Provided technical knowledge through orientation and practical trainings on home gardening, nutritional benefits of vegetables for healthy living, commercial fresh vegetable production for income generation, preparation and application of organic pesticides and organic fertilizers for safe food production, tunnel farming for off season vegetable production and waste water collection for irrigation.
- Provided inputs – improved seeds, plastic drums for organic pesticide and fertilizer preparation, Material for tunnel house preparation for off-season vegetable farming, jeevatu for Jholmal preparation and reference training materials etc. for improved home gardening and commercial vegetable farming.



Mr. Motiman Limbu providing Kitchen Garden training to the farmers in Kavre



Sustainable Ecosystem and Environmental Management:

Since its inception, CEAPRED has worked in partnership with local communities and other organizations to improve the environment. The associated projects/programs have ranged from community-based solid waste management launched in 1991 to climate change adaptation and mitigation program in recent years. The promotion and dissemination of local innovations, traditional knowledge and technologies combined with awareness programs on environment and human health-friendly farming practices constituted the core activities under this theme. Similarly, community-based and participatory varietal and cropping system improvement practices adopted by CEAPRED have been useful in sustainable development and transfer of climate-resilient technologies in agriculture



Rural Livelihoods and Climate Change Adaptation in the Himalayas (HIMALICA)

The Rural Livelihoods and Climate Change Adaptation in the Himalayas (HIMALICA) Initiative funded by the European Union and managed by ICIMOD aims to support poor and vulnerable mountain communities in the Hindu Kush Himalayan region in mitigating and adapting to climate change. This Initiative has been working to reduce poverty, increase the resilience of local communities, and ensure the equitable and sustainable wellbeing of men and women in the Hindu Kush Himalayas by building the capacity of local institutions, promoting new livelihood options, and encouraging regional cooperation in the promotion of equitable approaches to sustainable mountain development.

The following are the expected outcomes of the project:

- **Increased income** of target households through improving productivity and production system, strengthening linkages (both horizontal and vertical) among value chain actors and reducing post-harvest losses thereby promoting value adding activities in vegetables and spices. Finally, 50% of selected beneficiaries (minimum 250 households) will be able to increase their income by 30% by the end of the project life.
- **Better resilience** of local stakeholders in dealing with effect of climate change and other risks associated with livelihood sources. This will include unlocking of livelihood opportunities, community based micro planning with a focus on climate change adaptation and management, private sector engagement and improving access to market information and business services.



Monitoring Field visit from the District Stakeholders at Udayapur

Achievements

1. Capacity Building:

- Social mobilization training: 23 farmer groups have been formed and mobilized comprising of 512 HHs of Triyuga, Rauta and Saune VDCs. Till date NRs 68,810 is being collected and mobilized among the farmer group members for the various objectives.
- Nursery management trainings and crop management trainings provided for two times during the crop season to all 512 HHs
- Post harvest training and market training was organized two times to orient the farmers about the post harvest handling techniques and to develop marketing linkages among producers and traders

2. Uptake of technologies/practices:

Fifteen plastic houses have been established by the farmers with project support for energy smart demonstrations.

Demonstrations on leguminous crops, compost pit and on jholmal was organized and 44 small plastic ponds were made for efficient and rationale use of water.

3. Resource management improvement:

75 farmers prepared Jholmal on their own after the initial training, and 73 improved compost pits were made along with improvement of 18 cowsheds for urine collection and its use later. 107 leader farmers participated in the improved use of ICT services which will be passed on to other group members

4. Gender and social inclusion:

In all the planned programs, female participation was more than 67 per cent in all trainings (production and post production trainings). A total of 61 % of the total households comprised of Janajatis, while 12 percent of the participating households comprised of Dalits



Cabbage crop demonstration at Bagaha, Udayapur

Milan dropped the idea to go abroad for jobs

Milan Shrestha -37, is an inhabitant of Triyuga Municipality -8 Salghari Udayapur and is an active farmer of Bargachhi Farmers Group supported by CEAPRED/HIMALICA. He has 4 members in his family - his spouse, father and mother and is the sole earning member in the family.

As the only one earning in the family, he faced a major financial crisis that nearly compelled him to go abroad to work as a migrant laborer. But fortunately he came to know about HIMALICA project supported by CEAPRED in time; where he registered as a member of a farmer's group and participated in nursery management and other demonstration trainings provided to the farmers. Mr. Shrestha then established vegetable nursery of crucifers (early season) in 4 katthas of land. The nursery turned out to be very successful which motivated him to plant cauliflower and cabbage. The benefit he reaped from the cultivation was amazing as he earned Nrs, 95,000 from the sale.

Realizing the brilliant scope of vegetable cultivation, he has now planted onion, tomato, beans in 1.5 kattha where he earns Nrs. 35000 or more. The earning he makes at present helps him look after his family. He says "he doesn't have to worry about making end meets anymore"

He now wants to become a successful commercial vegetable farmer and set his example to all the other struggling villagers who plan to migrate to foreign land looking for job opportunities. Mr. Shrestha now participates in all the trainings provided by HIMALICA. He has also given 2 kattha of land to Farmers Field School (FFS) purpose.

Before the intervention of HIMALICA he didn't have any idea of producing vegetables using modern technologies. Now he has actively participated in formation of new market based Agriculture cooperative and also in cooperative training. The village now has 2 local vegetable collectors, who collect and sell vegetables of Bagaha cluster. Mr. Shrestha expressed his happiness saying he is very grateful for the technical support of HIMALICA project that has changed his life for better.



Action/Policy Research:

CEAPRED has also accorded priority to Action/Policy Research in the areas of agriculture and environment. In addition to generating policy recommendations through various action research and studies, CEAPRED has mobilized them to plan, priorities and implemented the policies in their respective areas.



Himalayan Climate Change Adaptation Program (HICAP)

Aiming to help address Climate Change issues and implement the concept of "Climate Smart Village" through introduction of climate smart technologies in agriculture, ICIMOD and CEAPRED jointly designed a pilot project under HICAP in Kavre district. After the implementation of CSV program farmers are encouraged and motivated to cultivate seasonal vegetables in their own farm which has doubled their income as compared to the past. Capacity building as well as orientation to farmer groups in climate change, IPM Technology, Jholmal Preparation, Waste Water Collection, Crop Rotation, and Mixed Cropping etc. Exploration of farmer to Biogas Company and Livestock Insurance Company had been conducted. It has been found that there is 100% adoption of Jholmal practice in the project sites. The 1st year result had shown that Srijana and Dalila tomato varieties are found to be the best varieties in the lower



A farmer harvesting Cauliflower in Mahadevsthan VDC -9



Compost preparation using EM by Kavre farmers

sites during the rainy season than other varieties: Sudha and Kiran. Farmers have realized the importance of plastic tunnel and cowshed management and have scaled it up by their own. With the tremendous efforts of the project, it has also been revealed that there has been gradual decline on the demand of chemical fertilizer in the agro-vets nearby the project sites. Demonstration on varietal testing of wheat as well as Jholmal demonstration in potato, mustard and wheat has been set up in the project sites. To learn about the importance of residue management, demonstrations comparing it with farmers' practices have been conducted. Farmers in the project site were provided with ICT services through SMS in mobile about market price of agriculture product in every three day interval, weather forecast in every seven days interval and technical issue and solution of agriculture crop and livestock in every three days interval.

KEY ACHIEVEMENTS

Water conservation and management:

- A total of 96 orientation trainings on climate change were organized for the farmers, which included 2599 farmers (545 male and 2054 female participants and 106 events of inter-cluster visit of farmers to demonstration plots were organized for 2892 farmers, which included 493 male and 2399 female farmers. In addition, 12 farmers (5 male and 7 female) visited climate smart village in Baisali, Bihar, India to enrich their knowledge on climate smart agricultural practices.
- A total of 2137 farmers were trained on integrated water management techniques including mulching, and water collection and utilization. A total of 380 small plastic ponds were built for harvesting rain water and kitchen waste water for using it in home gardens. Due to the increased availability of water, 380 home gardens were built around households on about 248 ropani of area of land for the production of fresh vegetables. Similarly, 128 communities managed earthen and plastic ponds were constructed for harvesting rain water, which provided irrigation to 576 ropani of land for fresh vegetable production.



A community plastic pond in Raviopi VDC-2

- Water conservation through mulching resulted significantly higher yield in bitter-guard production during drier February-March season than non-mulching practice, which resulted the increased income by 25%. Farmers learnt that, with mulching, irrigation frequency could be delayed at 4-5 days interval instead of daily under non-mulching conditions.

Soil Nutrient management

- A total of 2404 farmers were trained on preparation of Jholmal-1, 2 and 3 at 94 events (559 male and 1845 female trainees). The effect of Jholmal application was clearly demonstrated with increased yield from Jholmal application (Table).

Yield difference with Jholmal application in different crops

Crops	Mean Yield (Mt/ha)		
	Jholmal application	Farmers Practice	Difference (%)
Rice	4.87	4.15	17.34
Wheat	2.65	2.1	25.54
Potato	14.13	13.08	8.2
Tori	1.42	1.07	34.32

• Production demonstration of off-season tomato inside polyhouse:

Altogether 52 poly houses with average size of 12m x 5m for 125 plants of off-season tomato were built, which produced an average of about 586 kg tomatoes in one poly house, which earned from NRs. 15,000-53,000 during one season (Jul-Feb). Sirjana was the preferred variety of tomato in poly house while Dalila is also grown in some of the tunnels.

IPM/safe food production technology

Ninetyfour training events were organized on IPM/safe food production technology for 2498 participants (607 male and 1891 female) to minimize/avoid hazardous chemical pesticides in vegetable production and to ensure safe food production. The results showed increased yield (up to 25%) with IPM practice to reduce the use of chemicals.

Various Crop Smart Technologies trainings were accomplished as below.

Trainings	Events	Farmers involved
Crop rotation, mix cropping and legume integration	43	1105
Home garden	41	1072
IPM technology	58	1270

The increased use of bio-insecticides and pesticides:

Increased application of Jholmal (a locally made insecticide and pesticide) has minimized the use of hazardous chemical pesticide and increased yields in many crops. Jholmal was also found to be effective in reducing the damage caused by rust and borer in coffee resulting good plant growth in nursery and orchards.



Increased yields in vegetables by the use of Jholmal.

Naubise farmer intensified her land with climate smart practices

Ms. Sita Neupane is one of the members of Janajagriti IPM group in Naubise, Mahadevsthan-7 of Kavre district. She has been active member in her group and practicing various climate smart practices. Climate smart practices are the technologies for adapting with the climate change and building resilient agriculture system. Ms. Neupane's effort on intensification of her land with no-pesticides had been talk of the town this summer. She earned NRs. 70,000 from cucumber production in about 375 square meter of land. The crop was grown without use of any chemical pesticides but with the bio-pesticides called "Jholmal".

Naubise is one of the villages in Mahadevsthan with high pesticides use. Farmers are normally small holders and have limited knowledge about pest management with no chemical pesticide. During a consultation workshop organized by CEAPRED in 2014 September farmers had demanded for the alternative to chemical pesticides. With objective to develop adaptive practices for Climate Smart Village project, ICIMOD with its partner organization CEAPRED started to demonstrate technologies in participation with the farmers. Since the beginning Ms. Sita Neupane started demonstrating various practices, among which mulching practices with Jholmal application she admired most.

This summer she continued her demonstration of cucumber production with mulching practice and application of Jholmal. The year had prolonged drought condition that ever had happened she knew. However, her straw mulching practice around the canopy of cucumber plant had saved the cucumber vine even in the water scarce condition. She managed to grow cucumber in 375 square meter of land with the available water collected as waste water in plastic pond. With mulching, the water evaporation was checked and the soil demanded less water than without mulch during hot days. Because of no rain since September, the area had high water scarcity. The situation of higher demand, favoured her crop for getting good price that ranged NRs. 70-50 per Kg. She grew 1400 Kg out of the small land, the part she consumed, gifted to neighbours and served her guests.

She says, she had sprayed only Jholmal as the agriculture input which she did 5 times during the crop cycle of three months. The most demanded Bhaktapur Local allured many vendors and could fetch double price than last year. With her smiling note on her face Neupane says, "Name in Society, Income in Pocket, farming gives us satisfaction when done with smart practices."

Completed Projects 2015-2016

IPM-IL

Key Impacts

- IPM demonstration and learning centre has been well established and gaining popularity among the farmers along with everyone who visited the center. To date, more than 400 visitors have visited the center in Banke, and more than 800 in Surkhet, which were both established in January 2015.
- Establishment of learning center at DADO Surkhet with technical assistance of IPM IL team.
- 17,546 KISAN farmers have adopted IPM packages and technologies. Meanwhile, more than 8,000 farmers from MAWTW and IAPAC project using IPM tools and technologies.
- Technology like use of plastic tray and coco-peat, bio-pesticides (*Trichoderma*, *Psuedomonas*) and netting materials in nursery getting popularity and increased farmers adoption in larger level both within the project districts and beyond.



Display of IPM tools and components

Using ICTs to enhance adoption of new agricultural technologies and innovations

This research explored the roles of ICT in improving the livelihood of rural farmers in South Asia. The scope of the study included India, Nepal and Bangladesh. A total of 431 respondents were involved in key informant interviews, farmer FGDs and rural advisor FGDs.

Most sources of information utilized by farmers included television, radio, and mobile phones, while smart devices, the internet and video shows were considered emerging tools for ICT. Among the information acquired by farmers through ICTs were price information, weather information, and the introduction of new technology or incentive programs. More complex information such as pest and disease management, production enhancement and constraints required the traditional use of communication such as group meetings, awareness campaigns and face-to-face contact with extension workers and rural advisors. Most of the ICT business models are public-led and free of charge, however, emerging models offered by NGOs and private sectors were also documented in Bangladesh.

The extent of ICT used in agriculture was overall modest. A high potential to increase this number was also observed as the farmers were already well aware of ICT use in agriculture and were interested in these technologies. Also, the farmers were willing to pay for these services, a good indicator for future improvements.

Overall, ICT services should be effective, current, and of high value for farmers for them to patronize these services. A number of recommendations were offered to improve the ICT use and contribute to improving the livelihood of rural farmers in South Asia.



ICT survey in Sunsari district.

The Asian Vegetable and Mango Integrated Pest Management (AVMIPM)-Innovation Lab Nepal



Women preparing Coco-peat bed in Surkhet

The Asian Vegetable and Mango Integrated Pest Management–Innovation Lab (AVMIPM-IL) an USAID funded program under the IPM Innovation Lab (IPM IL) has been implementing ecologically-based, participatory IPM, with a focus on pests (insect pests, pathogens, weeds) of tomato, eggplant, cabbage, cauliflower, beans, cucurbits, onion, and mango. CEAPRED has been implementing the program with International Development Enterprises (iDE).

The AVMIPM-IL project of four years duration (2015 to 2019) has been building on previous IPM IL research and capacity building

program, which developed and released IPM packages in Bangladesh and Nepal. The project will undertake adaptive research to tailor IPM practices and packages to local conditions, especially in the Feed-the-Future regions and districts. The IPM IL will develop, adapt, and diffuse IPM technologies through close interaction among international and host-country scientists in public and private institutions and with the Feed the Future activities.

AVMIPM-IL program is working in 9 VDCs with 10 working sites in Banke district and in 5 VDCs with 6 working sites of Surkhet district.

Key Achievements

- Pest and disease surveillance in onion and capsicum/chillies and IPM learning centre at RPPL Khajura, Nepalgunj has been established.
- There is an increased awareness among farmers toward IPM technologies and its benefits. Many of the farmers from various farmers groups have started using some kind of IPM technologies, such as pheromone traps, use of Trichoderma in compost, cocopeat, nylon net etc



Programs in 2015-2016

SN	Projects	Duration	Donor	Funding Amount	Districts	Beneficiaries
Thematic Area: POVERTY REDUCTION AND LIVELIHOOD ENHANCEMENT						
1	Nepal Agricultural Markets Development Program (NAMDP) -	March 2016- Dec 2019	SDC	CHF 374,030	8 districts	N/A (still in preparatory phase)
2	Building Community Enterprises for Smallholders (BCES)	Oct 2015 – Sept 2018	Deutsche Welthungerhilfe (WHH)	Euro 240,594	1 district	2737 HHs
3	Knowledge base Integrated Sustainable Agriculture and Nutrition (KISAN) Project					
	March 2013 to June 2017					
	USAID/WI	USD 5.9 million	20 districts	84,000 HHs		
4	SAMARTH- Nepal Market for Development Project (NMDP)					
	March 2013 to Dec 2017					
	DFID/ASI	GBP 844,713	9 districts	28,408 HHs		
5	UNNATI	Dec 2012 to Dec 2015	EC/CARE Nepal	Euro 328,399	2 districts	1216 HHs
6	Emergency Response to Earthquake 2015	Jul 2015- Oct 2015	Association for the International Solidarity in Asia (ASIA)	NRs. 5,331,000	1 district	
Thematic Area: SUSTAINABLE ECOSYSTEM AND ENVIRONMENTAL MANAGEMENT						
7	HIMALICA	July 2015 – Nov 2017	EU via ICIMOD	USD 400,000	1 district	509 HHs
Thematic Area: ACTION/POLICY RESEARCH						
8	Himalayan Climate Change Adaptation Program (HICAP)	May 2014 to Dec 2017	EC/ICIMOD	USD 288,145	1 district	1094 HHs
9	Asian Vegetable and Mango Integrated Pest Management (AVM-IPM-IL)- Innovative Lab Nepal	Feb 2016- March 2019	USAID	USD 35,258	2 districts	
10	ICT in Agriculture	Sep 2015 – May 2016	ACIAR	AUD \$15,000	2 districts	312 HHs
11	IPM –IL	Mar 2013- Sept 2016	USAID	NPR 13.4 Million + USD 352,258	2 districts	



Upcoming Projects

Nepal Seed and Fertilizer Project (NSAFP)

CEAPRED as a consortium partner with the International Maize and Wheat Improvement Center (CIMMYT), International Rice Research Institute (IRRI) and Nepal Agricultural Research Council (NARC). In the seed sector, four institutions will lead crop-specific activities: IRRI for rice, NARC for lentils, CEAPRED for vegetables (tomato, onion and cauliflower) and CIMMYT for maize and overall coordination.

NSAFP is a USAID funded project (April 2016 – March 2020), with a budget of USD 296,962, operating in 20 KISAN districts and five earthquake affected districts: Sindhuli, Kavre, Makawanpur, Nuwakot and Sindhuplachok.

The project aims to critically address the prevailing gender and social inequality in the agriculture sector that disproportionately limits disadvantaged groups (including women, disadvantaged castes, ethnic and religious minorities) access to improved agricultural technologies. The project is designed to fully align and support the Feed The Future (FTF) goal of sustainably reducing global poverty and hunger through inclusive agricultural sector growth. Specific project contributions to FTF outcomes of improving agricultural productivity, expanding markets and trade, increasing investments, employment opportunities, and resilience. The goal of the FTF NSAFP project is to build a competitive and synergistic seed and fertilizer value chains for inclusive and sustainable growth in agricultural productivity, business development and income generation in Nepal. The FTF Nepal Seed and Fertilizer project activities will focus on strengthening the rice, maize, lentil and high-value vegetable value chains in the FTF Nepal Zone of Influence (ZOI) districts as well as five earthquake-affected districts. After the successive strong earthquakes that struck the central mid-hills region of Nepal in April and May of 2015, the United States Agency for International Development (USAID) expanded the FTF 'zone of influence' to incorporate several of the most affected districts.

Asia Innovative Farmers Activity (AIFA)

Pest Exclusion Net (PEN) component under Asia Innovative Farmers Activity (AIFA) is a one year initiative in Nepal funded by USAID and implemented by Center for Environmental and Agricultural Policy Research Extension and Development (CEAPRED) in partnership with Winrock International (WI) in the Mid-Western part of Nepal namely Dang and Surkhet. The project has been partnering with universities, private sector actors, Feed the Future (FTF) projects, and others to increase food security, reduce poverty, and improve environmental sustainability by facilitating agricultural innovation and technology diffusion in the Asia region. AIFA carries out activities to increase agricultural productivity in primarily horticulture. The role of AIFA is to facilitate the exchange of agricultural innovation and technology and promote proven technologies largely through market-led approaches that rely on viable private sector partnerships. This project includes five vegetable crops namely, tomatoes, brinjal, cucumber, cauliflower and leafy vegetables, which are highly demanded in market and have high value.

The project has identified pest exclusion nets on horticultural crops as the first technology for AIFA to support in Nepal. In Nepal, the use of pest exclusion nets is very limited as there are only a few farmers that started testing the use of the nets for commercial production of vegetables, mainly capsicum.

Based on field research on the application of these nets, AIFA has identified a gap of knowledge on the technical and financial viability of the nets in Nepal. The project aims to include cost sharing arrangements between the participating farmers and project in order to increase buy-in and uptake of the pest exclusion nets.

**INDEPENDENT AUDITOR'S REPORT
OF
CENTER FOR ENVIRONMENTAL AND AGRICULTURAL POLICY RESEARCH,
EXTENSION AND DEVELOPMENT (CEAPRED)**

To, The Board and Members

We have audited the accompanying financial statements of **Center For Environmental And Agricultural Policy Research, Extension And Development (CEAPRED)**, which comprise the Balance Sheet as at July 15, 2016 (Ashad 31, 2073), Income Statement, Statement of changes in fund and Statement of cash flows and Fund Accountability Statement for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with general accepted accounting principles. This responsibility include designing, implementing and maintaining internal control relevant to the preparation and presentation of financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility

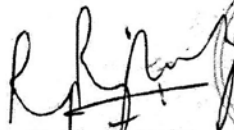
Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Nepal Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

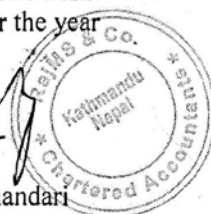
An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, based on the information and explanation provided to us and our audit, the financial statements present fairly, in all material respects, the financial position of **CEAPRED** as at July 15, 2016 (Ashad 31, 2073), and its financial performance and its cash flow for the year then ended with applicable general accepted accounting principles.

Date: September 27, 2016
Place: Kathmandu, Nepal


CA. Rabindra Rajbhandari
Partner



Balance Sheet
As at 31 Ashad 2073 (15 July 2016)


(Amount In NRs.)


Capital and Liabilities	Sch.	As at Ashad 31, 2073	As at Ashad 31, 2072
Un-Restricted Fund			
General Fund	1	70,201,445	60,282,721
Restricted Fund			
Capital Fund		7,257,911	8,277,805
Staff Welfare Fund	2	1,625,890	1,691,310
Dr. H.K. Upadhyaya Trust Fund	3	2,765,025	2,638,262
Staff Severance	4	13,867,821	6,722,665
SEED Revolving Fund	5	1,041,311	1,030,049
Total Liabilities		96,759,403	80,642,813
Asstets			
Fixed Assets	6	24,571,373	24,115,112
Investments	7	14,648,600	12,648,600
Current Assets			
Cash and Bank Balances	8	34,113,178	20,628,677
Advances & Receivables	9	45,202,411	39,603,374
Grant Receivable	10	22,946,780	15,764,026
Total Current Assets (A)		102,262,370	75,996,078
Less: Current Liabilities			
Payables	11	32,112,985	30,501,350
Deferred Income	12	12,609,954	1,615,626
Total Current Liabilities (B)		44,722,940	32,116,977
Net Current Assets (A-B)		57,539,430	43,879,101
Total Assets		96,759,403	80,642,813

Accounting Policies and Notes to Accounts

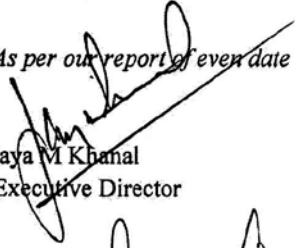
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Schedules 1 to 18 form an integral part of the Financial Statements.



Naresh Joshi
Finance Manager



Basu Upadhyaya
Senior Manager (Admin. & Finance)

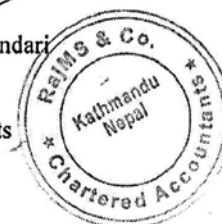
As per our report of even date


Jaya M Khanal
Executive Director

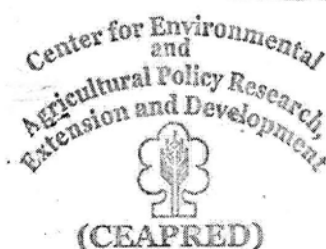

Dr. Pius Raj Mishra
Treasurer


Dr. Hari K. Upadhyaya
Chairman


CA. Rabindra Rajbhandari
Partner
RajMS & Co.,
Chartered Accountants



Date: 2016-09-27
Place: Lalitpur, Nepal




**Center for Environmental and Agricultural Policy
Research, Extension and Development (CEAPRED)
Cash Flow Statement**


For the Period 1 Shrawan 2072 to 31 Ashad 2073 (17 July 2015 to 15 July 2016)

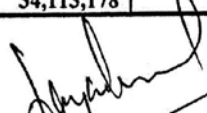
(Amount In NRs.)

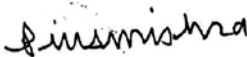
Particulars	As at Ashad 31, 2073	As at Ashad 31, 2072
Surplus during the year	9,918,724	(1,151,642)
Adjustments		
Capital grant income	(928,299)	(621,107)
Assets written off	115,726	93,572
Adjustment in General Fund	-	(432,192)
Depreciation of property, plant and equipment	1,988,907	1,720,196
Sub Total	11,095,058	(391,173)
Changes in Working Capital		
Net decrease/(increase) of account receivable	(5,599,037)	(1,425,277)
Net increase/(decrease) of accounts payable	1,611,635	(1,481,629)
Net increase/(decrease) of deferred income	10,994,328	(11,710,194)
Net decrease/(increase) of grant receivable	(7,182,754)	6,740,843
Sub Total	(175,828)	(7,876,258)
Total Cash Flow from Operating Activities	10,919,230	(8,267,431)
Cash Flow from Investing Activities		
Purchase of Fixed Assets	(2,652,490)	(1,892,786)
Investment in Fixed Deposit	(2,000,000)	(2,000,000)
Fund received towards H.K Upadhyaya Trust Fund	20,000	116,113
Staff Welfare Fund Refunded	(100,280)	(106,745)
Contribution towards Staff Severance Fund	7,145,156	6,722,665
Interest received on Staff Welfare and Dr. H.K Upadhyaya Trust Fund	141,624	89,276
Contribution to Farmers from Seed Revolving Fund		-
Interest Earned on SEED Revolving Fund	11,262	14,574
Total Cash Flow from Investing Activities	2,565,271	2,943,097
Total cash Flow from Financing Activities	-	-
Net Increase/Decrease in Cash and Cash Equivalents	13,484,501	(5,324,334)
Cash and Cash Equivalents at the Beginning of Period	20,628,677	25,953,012
Cash and Cash Equivalents at the End of the Period	34,113,178	20,628,677


Schedules 1 to 18 form an integral part of the Financial Statements.



Naresh Joshi
Finance Manager


Basu Upadhyaya
Senior Manager (Admin. & Finance)


Jaya M Khanal
Executive Director


Dr. Pius Raj Mishra
Treasurer


Dr. Hari K. Upadhyaya
Chairman


CA. Rabindra Rajbhandari
Partner
RajMS & Co.,
Chartered Accountants



Date: 2016-09-27
Place: Lalitpur, Nepal



**Center for Environmental and Agricultural Policy
Research, Extension and Development (CEAPRED)**

Income and Expenditure Statement
For the Period 1 Shrawan 2072 to 31 Ashad 2073 (17 July 2015 to 15 July 2016)


(Amount In NRs.)


Income	Sch.	Current Year	Previous Year
Net Grant Income	13	276,604,465	217,627,489
Management Cost/Overhead	14	19,155,862	11,970,788
Capital Grant	6	928,299	621,107
Other Income	15	2,083,885	2,639,594
Total Income (A)		298,772,511	232,858,978
Expenditure			
Program Expenditure	16	276,604,465	217,627,489
Operating Expenses	17	10,260,415	14,662,936
Depreciation	6	1,988,907	1,720,196
Total Expenditure (B)		288,853,787	234,010,620
Surplus (A-B)		9,918,724	(1,151,642)
Appropriation of Surplus:			
Surplus during the year		9,918,724	(1,151,642)
Transferred to Staff Welfare Fund		-	-
Surplus Transferred to General Fund		9,918,724	(1,151,642)

Accounting Policies and Notes to Accounts

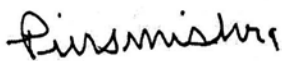
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Naresh Joshi
Finance Manager

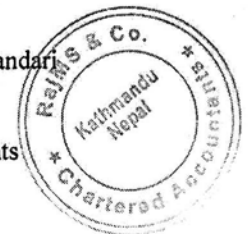

Basu Upadhyaya
Senior Manager (Admin. & Finance)


Jaya M Khanal
Executive Director

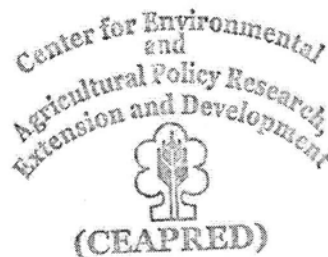

Dr. Pius Raj Mishra
Treasurer


Dr. Hari K. Upadhyaya
Chairman


CA. Rabindra Rajbhandari
Partner
RajMS & Co.,
Chartered Accountants



Date: 2016-09-27
Place: Lalitpur, Nepal







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