Dear Friends,

I present you with January – June 2017 edition of our newsletter featuring the latest news and updates from the period. This time we have been visited by young individuals who have been involved in fund raising and volunteering, the details of which are shared in this issue.

This issue’s key highlight is Heifer’s initiatives in efficient and sustainable irrigation technologies to help smallholders improve family nutrition and increase income. Heifer has supported new and innovative ideas that make vegetable cultivation easy, with technologies as simple as Barsha pump installed in Dang district that directly impacted 175 families, and Drip Irrigation installed in four districts that directly benefitted 100 families.

Heifer has been working to increase farmer’s livestock production and productivity, at the same time reducing related risks. In this viewpoint, Heifer signed an MOU with NLG insurance company and is planning to enter into MoU with three other insurance companies to ensure farmers in the project areas receive benefits of the government policy. A meeting of Technical Coordination Committee was held to inform the stakeholders about USAID/FtF Livestock System Innovation Lab’s research projects, and to finalize goat sub-sector policy study document.

I hope this issue will be insightful read to all our readers. To learn more about our work, you can find us on Facebook, Twitter, Youtube and our website.

Dr. Shubh N. Mahato
Country Director
Heifer International Nepal

Our mission is to end hunger and poverty and to care for the earth
NEWS AND EVENTS

Young Fundraiser Provided Support to Heifer’s Mission in Nepal

Justin Chang from Seoul International School (SIS), Korea is not only a travel and trekking enthusiast but also a social worker. At just 17 years old, Justin has been a fundraiser, raising regular funds to support programs of Heifer International since he was in fourth grade.

This June, Justin along with his mother and friend visited Heifer Nepal. Justin handed over a cheque of approx. 7,000 USD that he raised from his project “Hope for Nepal” through an annual event “Read to Feed” (Read-a-thon). A total of 360 SIS students participated in the event. Justin exclaimed, “Everyone in my school wants to help Nepal. They know where the money is going and how families are supported by Heifer. My visit to Heifer project areas last year has helped a lot in fundraising this year”.

Justin and his team visited project areas in Deurali, Nawalparasi and interacted with Sangam self-help group (SHG) and Lekhbesi Social Entrepreneur Women’s Cooperative. During the household visit, they were excited as well as in awe of all achievements and rural lifestyle of the people. The members of Sangam SHG expressed their sincerest gratitude during the interaction.

Justin hopes to visit next year with more friends, they not only help and support the families but can also take inspiration from the simple life they lead.

LSIL Technical Coordination Committee Meeting Held

A meeting of Technical Coordination Committee (TCC) for livestock research projects implemented by Heifer International Nepal with support from USAID/Feed the Future, University of Florida, Livestock System Innovation Lab (LSIL) was conducted at Heifer Office, Hattiban on 7 June 2017. The meeting was chaired by Dr. Keshav Prasad Premy, Joint Secretary for the Ministry of Livestock Development (MoLD) and the President of the TCC. The objective of this meeting was to inform all the stakeholders about LSIL projects, and to finalize goat sub-sector policy study document.

A presentation was made on the findings of “Nepal Goat Sub-sector Policy Study”, which was conducted jointly by Heifer and MoLD to consolidate and document policy level issues that directly or indirectly influence goat sub-sector in Nepal and prepare a knowledge base for program planning.

The meeting informed objectives and implementation modality of LSIL projects to TCC. A discussion was conducted on modernizing delivery of Village Animal Health Worker (VAHW) training with distance learning-classroom hybrid approach. The key objective of this modernization is to increase percentage of females VAHWs.

There were a total of 27 participants, including officials from MoLD, Department of Livestock Services (DLS), Nepal Agriculture Research Council, National Dairy Development Board, Inter-disciplinary Analyst, Himalayan College of Agricultural Sciences and Technology and Heifer International.
NEWS AND EVENTS

Heifer Nepal Celebrated Nature on World Environment Day

Heifer Nepal celebrated World Environment Day by embracing the 2017 theme “Connecting People to Nature”. This year’s theme encouraged people to get out of their technology-ridden, stressful world, and appreciate the beauty and wonder of nature.

The Heifer team also participated in a tree plantation program and a sharing and learning session. The staff shared about their personal relationship to nature and what steps they’ve taken to reduce waste in their own lives.

The discussion were made on topics including: development without destruction; promoting eco-balance; reduction and reuse; and the role of livestock in environmental changes.

Improving the Environment is one of the 12 Cornerstones of Heifer. The entire Heifer team is committed to bring positive impact on our world and dedicated to uplifting marginalized populations in environmentally-friendly and sustainable ways.

Young Adults Helped Construct School in Dhadhing

With the motive of serving and giving back to the community, fourteen young adults from the Church of Brethren visited Nepal in the month of June. Led by Jay Wittneyer, Board member of Heifer International and Emily Tyler coordinator of the work camp for the church of Brethren, the volunteers helped in setting the foundation of two schools in two sites of earthquake affected district of Dhadhing.

Many schools were destroyed by the powerful earthquake that struck Nepal in the April/May of 2015 and many efforts are required to get the community back in track and students back to school. The volunteers hiked steep hills, hauled rocks and donated their labor to the community. The group also visited a few households and the women’s co-operatives in Chitwan, where they witnessed the daily activities of the beneficiaries of Strengthening Livelihood of Smallholders through Goat and Dairy Value Chain (SLVC) program. The group interacted with the group members of Gaon Sudhar Self Help Group and Upahar Social Entrepreneur Womens’ Cooperative. The team was overwhelmed with the empowerment and strength the women have developed through Heifer’s program and wished them better future for their families and community.
Heifer International Board of Director Steven Yung Visited Nepal Program

Mr. Steven Yung, Heifer Board of Director visited Heifer Nepal project areas in Kaski and Baglung. The objective of his visit was to develop understanding of Nepal program, its operation and impact on ground, and to provide advices for further improvements.

Mr. Yung was impressed with the progress of self-help groups and cooperatives in Mijure, Kaski and Tangram, Baglung. Saptrangi Social Entrepreneur Women’s Cooperative (SEWC) from Tangram, Baglung was one of the cooperative he visited during his stay. He encouraged members of the cooperative to continue striving to work hard and celebrate the power of a blissful gift that keeps on giving.

Tham Kumari Siri, Chairperson of Saptrangi SEWC shares, "our cooperative was established in September 2014 with just 37 share members in the beginning. But now, there are 205 share members and we are putting much effort in encouraging more women to get affiliated because more capital is needed to expand our investment into productive sectors. Our total savings accounts to USD 27,941". Similar to Tham Kumari, there are more than 190 women led SEWC in Heifer’s project areas in Nepal.

Heifer Signed MoU with NLG Insurance Company Limited

The Government of Nepal (GoN) has increased subsidy on crop and livestock insurance premium from 50% to 75% and an additional 15% if a cooperative insures its agribusiness. The GoN has listed 17 non-life insurance companies who are to provide agriculture insurance mandatorily. A major constraint in implementation of this policy is connecting insurance providers’ with the large number of farmers who are scattered throughout the country. Tapping into this opportunity, Heifer signed an MOU with NLG insurance company on 24 February 2017. In its first phase of collaboration with insurance companies, Heifer will also be entering into a MoU with three other insurance companies to ensure farmers in its project areas receive the benefits of the GoN’s insurance policy.

Heifer uses Social Entrepreneur Women’s (SEW) Cooperatives to liaise insurance agents and its members, for better understanding, coordination and to maintain accountability between both the parties. It helps increase awareness on importance of insurance among the farmers and helps them get covered. Heifer Nepal has supported the formation of 190 such cooperatives who have thousands of members, which the insurance companies can access. On the other hand, insurance companies can use the services of Community Agro-Vet Entrepreneurs and technicians mobilized by Heifer for tagging and producing health and death certificates. Through NLG, Heifer is expecting to insure around 100,000 goats in western region.

Nepal has been ranked as the fourth most vulnerable country on impact of climate change. Sustainability and long term viability of Nepal’s agriculture and livestock sector depends on how we address farm risks and encourage farmers to increase their investments for better yields. By bringing insurance companies and smallholder farmers closer, Heifer is helping farmers tackle the adverse effect of climate change.
NEWS AND EVENTS

Nepal Program Hosted Two International Events of Heifer Cornerstone

Heifer Nepal hosted two workshop events including field visit for international staff during the month of January. The first event of 4 days’ Heifer Cornerstones workshop was organized from 9-12 January for 14 participants including Heifer Headquarter (HQ) and field staff from Malawi, Tanzania, Zambia, Senegal and Nepal. The second event was organized from 14-20 January 2017 for 22 participants from East Africa Youth Inclusion Program (EAYIP). The main aim of these trainings was to help participants to go through a journey of personal leadership; positive attitude and behavior; to experience the internalization of Heifer Cornerstones and its impacts; to share the process of PSRP at organization and community level and to share and practice the process of facilitation of Cornerstones training at different levels.

Field visits were organized to project areas in Chitwan, so that the training participants would have a clear understanding about the Nepalese context and application of Cornerstones at different levels for project success. The trainings were co-facilitated by Mr. Buddi Bahadur Khatri, Senior Training Manager of Heifer Nepal and Mr. Paul Maundu Mwilu, Training Manager of Heifer Kenya.

BARSHA PUMP: PUMPING GREEN ECONOMY IN RURAL VILLAGES

By Mandeep Adhikari, Associate Program Officer-Enterprise Development, Heifer International Nepal

Agriculture is the backbone of Nepalese economy contributing more than 30% of the Gross Domestic Product (GDP) and employing a big portion of population. Nepalese farming system is mostly rain fed depending upon seasonal rainfall. Therefore, we are not still able to capitalize the inherent productivity of land for commercial production. Despite enriched water resources with wider catchment area of perennial rivers in the country, we have not been able to use natural slopes and water flowing in these rivers effectively. However, a recently introduced water lifting pump “Barsha Pump” inspired by Nepali landscape is poised to change this. Barsa pump technology has been successfully piloted and promoted in several developing countries including Nepal which is introduced by a Netherland based company named aQysta. Barsha pump converts the kinetic energy of a river into mechanical energy to lift water to a higher altitude. It does not require fuel or electricity to operate and thus has zero CO2 emissions. The amount of energy that can be harvested depends on the volume of water flowing and the velocity (speed) at which it flows. The pump can lift water up to a height of 82 feet at a maximum rate of 1 liter per second. Each pump has a capacity to irrigate 2 hectors of land and its effective lifespan is 10-12 years under good management and handling practices.
Heifer International Nepal has been working in 30 districts of Nepal with the vision of ending hunger and poverty. Goat, dairy and vegetable are the three major domains where Heifer is investing to promote the livelihood of rural farmers. Despite enormous prospects of vegetable production in majority of project sites, scarcity of irrigation water is the limiting factor. Therefore, to overcome this challenge, Barsha pump is identified as a low cost technology to supplement irrigation water. The main purpose of the establishment of Barsha Pump in Rapti River in Dang of mid-western Nepal is to increase farmers’ access to irrigation technology so as to utilize land and water for commercial vegetable production. Four pumps are installed to irrigate 5.5 hectares of land, directly benefitting 175 households under 7 self-help groups.

Barsha pump is widely being preferred by the farmers in Dang, as unlike other irrigation pumps and motors, this pump operates by utilizing natural water current as an energy source. The land that was left fallow is now being irrigated. It has proved to be instrumental in making land favorable for seasonal as well as off-seasonal vegetable production, and has brought a radical change in cropping pattern and cropping cycle by ensuring the availability of water, especially during dry months. Ultimately, the land use efficiency has doubled with significant increase in production and income. Vegetable production has become an entirely new commodity after the intervention. The crop diversification has minimized the risk of crop failure and has become an alternative agro-enterprise to increase the income.

### Economic Analysis

**Cost Analysis:** Each Barsha pump has a capacity to irrigate 2 hectares of land in the project area. A total of four pumps were used in irrigating 5.5 hectares of land. The effective life of Barsha pump is 10-12 years under good management and handling practices. The majority of cost incurred was in pond construction, 39%, followed by cost of seed and input (33%) and maintenance cost at only 2%.
Production and Income:
Barsha pump was instrumental in turning the fallow/barren land into productive one fetching significant economic return. The vegetable was cultivated in 1.5 hectors of land by Ekata Upahar self-help group (SHG) while 1 hector of land was allocated in each of the other four SHGs (Raniyapur, Sagarmatha, Rapti Upahar and Annapurna) for vegetable cultivation.

The members of Ekata Upahar SHG and Sagarmatha Upahar SHG are well adapted to the new technology, and with sound farming skills, were able to produce close to 11 tons of vegetables in 2.5 hectares of land in one cropping season, fetching a return of approx. USD 1,000.

Nirmala Chaudhary, a beneficiary, shares “It was very difficult to carry water in buckets while installation of Barsha pump has made the job far easier. Besides group farming, I am also cultivating water-melon in 6 Kattha of my own land using water from same pump and pond. Vegetable has become alternative source of income in my family”.

The members of Ekata Upahar SHG and Sagarmatha Upahar SHG are well adapted to the new technology, and with sound farming skills, were able to produce close to 11 tons of vegetables in 2.5 hectares of land in one cropping season, fetching a return of approx. USD 1,000.

Barsha pump has proven to be helpful in pumping green economy in rural villages. The intervention has turned barren land into fertile one, and has provided income opportunities to poor farmers. Under good management, the investment on fixed asset could be compensated within four cropping seasons by two years of time.
Farmers in Dhungrekhola, Sarlahi district of Nepal experience drought from January to May each year. This seriously limits the agricultural production and leads to the land being left fallow after monsoon crops. During this dry period, most of the water sources remain dry and irrigation from rivers and streams are inadequate for vegetables and crops. This leads to serious losses in crop production and, as a result, farmers must spend a large portion of their income on buying vegetables and spices. To minimize these impacts and improve family nutrition and income, Heifer Nepal set up 25 drip irrigation systems and introduced a variety of vegetable seeds to 25 members of the Dhungrekhol self-help group. One group member said, “This technique is simple and easy to adopt. One or two days of labor is sufficient to prepare the garden and plantation.” Farmers use biodegradable kitchen waste and livestock waste to prepare manure to use as fertilizer in their kitchen gardens. This helps sustain water longer during dry spells.

Sangita Kyapchaki has successfully adopted drip irrigation technology in her backyard kitchen garden. She explained, “This kitchen gardening technique and drip irrigation system introduced by Heifer has been beneficial to me and my family. I didn’t have to worry about buying vegetables during the lean season this year, which saved me money and, I earned $50 from selling surplus vegetables during the last three months of the dry season, I am able to manage my kitchen garden together with my regular household work. And, my garden is safe from thieves and animals because it’s close to my home.”

Drip irrigation technology is an efficient, controlled irrigation method that can help farmers save time that would have been spent on walking long distances for water. It works by exposing the roots to a direct supply of water, and is facilitated by the use of drip emitters to slowly and steadily release water. It also prevents soil erosion and nutrient runoff. Unlike mainstream heavy farming — which requires intensive labor and high cost — this type of farming is low cost and uses less energy to grow high-quality vegetables. Most vegetables are high yielding and fruit early.

Heifer supported drip irrigation kit to four self-help groups in Sarlahi, Tanahu, Chitwan and Banke districts, directly benefitting 100 families and thousands of farmers indirectly who are encouraged to use the technology. With arable land and water becoming more scarce, drip irrigation technique can be an advantage for production and utilization of every square feet of available land to improve family nutrition and income.