



**Annual Report 2020-21**

**NEPAL**

**Big change starts small**

**Practical  
ACTION**



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*A scarecrow in the middle of a wheat field in Makwanpur District to ward off birds and preys/ Prabin Gurung*





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*Front cover image: Our reconstruction project is targeting vulnerable people affected by 2015 earthquake like Bhim Bahadu Kami of Kailash-9, Makwanpur rebuild their houses, in relation to GoN's housing cash grant support/ Prabin Gurung*

# Adapting to a TURBULENT YEAR

**Achyut Luitel, South Asia Regional Director**

The year 2020/21 was challenging primarily due to the coronavirus pandemic. The mobility restrictions curtailed our reach to the partners and communities. We tried to make better use of technologies and invested our efforts and resources on virtual environment to support the partners and monitor the progress. We adapted alternative approaches to deliver our work on the ground and advocacy messages via webinars, media discussions and orientation. One of the newest ways of working was successfully conducting a telephone survey covering more than 400 key respondents, including market actors, government entities and the people we work with across all three change ambitions to assess the effects of the pandemic.

Last year some of our exciting projects came to an end. Our Flood Early Warning System project in Lumbini Province, Coffee and Dairy projects in Bagmati and Gandaki Provinces, Leave No one Behind project in Bagmati and Gandaki Provinces, and Result-based Finance for Promoting Cookstoves project showed promising impacts and contributed in policy inputs for making the system better across our different change ambitions.

Our work on resilience is gradually establishing Practical Action as a 'go to' organisation. Together with ICIMOD, we drafted policy on impact-based flood early warning system for Karnali and Sudur Paschim Provinces. We were also engaged on a research following flash flood in Melamchi River which caused heavy damages to the downstream communities including washing off of the headworks of a major project that supplied water to Kathmandu Valley.

Last year, loss and damage due to monsoon was recorded the highest in the last 10 years. The loss of lives due to flood disasters would have been much higher if our flood early warning systems were not in place. Our study on loss and damage was recognised by the Ministry of Forest and Environment and was incorporated in the Nationally

Determined Contributions (NDC), addressing the adaptation need of the communities including gender and social context.

Our work on coffee sector, though of a small scale has shown huge potential for the coffee farmers. They now understand the value of coffee skins in economic terms, while they also understand how the yield can be improved with soil improvement, shading, irrigation and pest control. Likewise, our work on dairy sector helped us to consolidate our understanding in the sector and helped to strengthen the cooperative model for maximising benefits among the dairy farmers.

We were able to inspire key actors on several fronts. With our lobbying, we were able to include Soil Organic Matter (SOM) target in Nepal's second NDC milestone for the promotion of agroecology in Nepal. Our agroecology practices were eminent in both Coffee and Dairy projects. Moreover, our collaboration with the Government of Nepal was apparent in addressing climate adaptation on Multi-stakeholder Action Plan on enhancing SOM at the global community-based adaptation conference.

The country's economy is in a slowdown stage. We are assessing the situation from climate lens as post monsoon agricultural loss with unexpected rain and floods is adding burden to the poor and vulnerable farmers. Agriculture sector and in particular the paddy harvest plays a significant contribution in Nepal's GDP. Last year the monsoon floods and landslides were devastating resulting in heavy loss of lives, assets and livelihoods. Some of the exciting works we have started, such as index-based flood insurance could be a game changer towards making vulnerable communities resilient to disaster shocks.

We concluded our Result-based Finance project in the clean cooking space and also we were able to win a follow up project for market activation through digital initiatives. Our national apex body is also keen to understand our learning from this exciting piece of work. Our role in the



clean cooking sector was evident in influencing the Clean Cooking Alliance, Modern Energy Cooking Services and Energising Development to implement integrated energy planning and multi-tier framework to reach the last mile. Our engagement as a member of Multi-Actor Partnership platform for 100% renewable energy was crucial to help facilitate knowledge exchange and support in developing a joint vision for renewable energy powered Nepal.

Our evidence-based analysis on electricity tariff was helpful for Electricity Regulatory Commission to promote productive use of electricity and electric cooking to Community Rural Electric Entities for its social and economic sustainability.

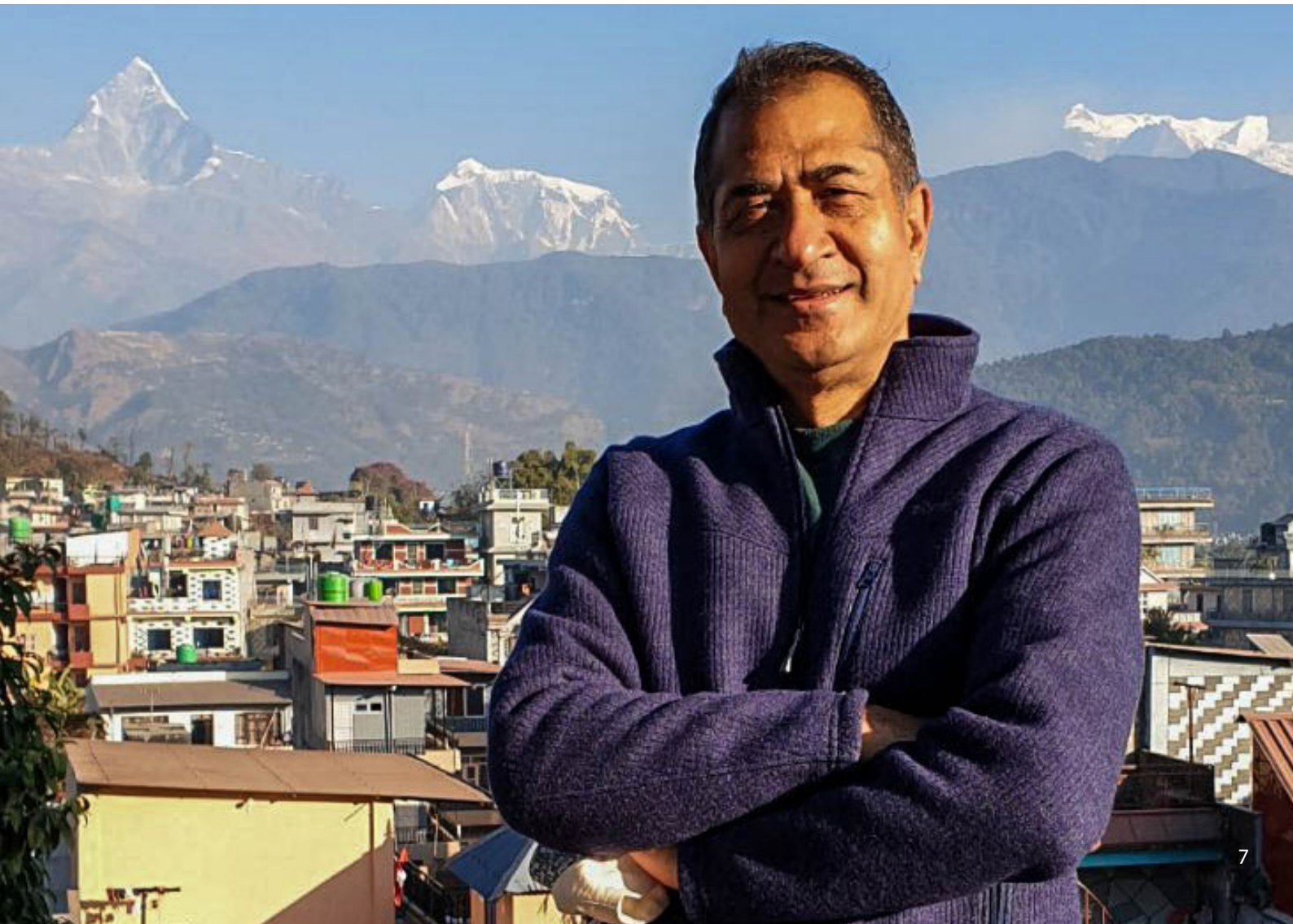
We were able to influence the federal government to include e-cooking targets in the second NDC which was submitted to the United Nations Framework Convention on Climate Change. The NDC targets to reduce about 23 percent of greenhouse gas emissions from residential cooking by 2030 and reach out to 25 percent households using electric cooking as primary cooking mode.

During these unprecedented times, we are very thankful to our donors and clients for showing great flexibility in delivering our projects. Our efforts and contributions are aligned with the vision of the Government of Nepal in improving the living standards of the peoples by maintaining good governance, achieving rapid economic growth, enhancing productive employment, and reducing income inequality. These achievements would not have been possible without the relentless support of the Government of Nepal, media partners, local partners, our community members and the versatile team of our Nepal office.

Thank you for your continued support.



**Achyut Luitel**





# BIG CHANGE

## starts small

At Practical Action we do things differently. We put ingenious ideas to work so people in poverty can change their world. We believe in the power of small to change the big picture.

**Our vision is for a world that works better for everyone.**

We are a global change-making group of problem solvers, knowledge mobilisers and expert advisers. The group consists of a UK registered charity with community projects in Africa, Asia and Latin America, a development publishing company and a technical and specialist consulting service.

We have enabled millions of people to make lasting, positive change to their lives, focusing on where there is greatest need and we can make the biggest difference. We share our experience and expertise through our Consulting, Publishing and Practical Answers services, creating impact far beyond our projects.

**In Nepal,** Practical Action is focused on putting ingenious ideas into work to contribute to poverty reduction and sustainable wellbeing for all through working in three expertise areas: Energy that transforms; farming that works; and resilience that protects.

*Compressed Stabilised Earth Bricks- alternative construction material/ Prabin Gurung*



# Our reach and impact in 2020–2021...

**We raised £1.7 million**

**We spent £1.5 million on our work**

**We delivered**

**14 PROJECTS**

**on the ground covering**

**26 DISTRICTS**

**and all**

**7 PROVINCES**

**reaching out to**

**126,042 PEOPLE** | ♀ 56,998 ♂ 69,044

**directly and**

**620,563 PEOPLE** | ♀ 304,574 ♂ 315,989

**indirectly.**

## **Calculating our reach**

We distinguish between the people we work with directly and those who benefit from the wider impact of our work. We include these numbers for transparency, to offer a glimpse of the impact of our projects. However, our goal is to have an influence that goes far beyond the reach of these projects. We are working on new ways to report the true scale of what we do. In the meantime, you will find evidence throughout this report of the far reaching benefits that our work has on vast regions and populations.

# Overcoming DIFFICULTIES

The ongoing coronavirus pandemic affected every one of us but it did not stop us from carrying our field activities. We adopted the new ways of working and paved ways to reach out to our people and communities.

In the energy sector, we were able to contribute to Sustainable Development Goal 7 target on “affordable and clean energy”, regardless of the ongoing pandemic. Through our Result Based Financing (RBF) project, we were able to provide clean cooking solution to more than 5,500 families in Arghakhanchi, Baglung, Gulmi, Parbat and Syangja Districts. We successfully leveraged investment from a Community Rural Electrification Entity (CREE) to improve electricity supply in one of our research project areas. We hope this will motivate other CREEs to set their priorities not only for lighting but also for productive and cooking purposes, which is also one of our systemic change priorities. We were successful in leveraging public financing from several local governments on clean cooking and accessing appropriate technologies through our evidence based policy engagement and media engagement strategy, which include integrating clean energy in the development plans, investing for the uptake of productive use of electricity and providing subsidy to low income family and disadvantage groups for clean cooking.

Last year, one of the key challenges was the intervention of our Dairy for Development project activities. In dairy sector, there was disruption in value chain, affecting both the buyers and sellers associated with milk production, which had a direct impact on the milk productivity due to the ongoing coronavirus pandemic. The smallholder dairy farmers also had difficulties accessing timely veterinary services during the lockdown period. However, to tackle the situation, we introduced digital means and different strategies to resolve the problems faced by smallholder dairy farmers.

Despite the ongoing pandemic and political reform, our efforts remained crucial in strengthening institutional governance and making accountable federal institutions. At national level, we were engaged in the National Adaptation Plan (NAP) formulation process and National Determinant Contribution (NDC) roll out actions with the Ministry of Forest and Environment (MoFE). We worked with the Department of Hydrology and Meteorology (DHM) in formulating the Early Warning System (EWS) national policy and moving from conventional EWS to impact based forecasting system. At provincial level, we continued our support in drafting EWS Strategic Action Plan. Our work with the DHM helped to increase the coverage of mobile text message outreach to those residing in the flood prone communities, thereby protecting lives, assets, crops, and livestock. Furthermore, to minimise the risk of landslide across the country, we introduced landslide EWS. We also built capacity of the provincial and local governments in Disaster Risk Reduction (DRR) and climate resilience. In order to introduce the risk transfer mechanism, we initiated index-based flood insurance product in five local government institutions of Lumbini and Sudurpaschim Provinces.





*Building homes, instilling hopes-Men at work in one of our reconstruction project sites in Lamjung district/ Prabin Gurung*



# Paving ways for **BRIGHTER WORLD**

Last year, we adapted new practices to tackle COVID-19 impact in our work. In the Energy that Transforms change ambition, we worked closely with 60 Decibels to deliver our field research works through telephone surveys and with Access to Energy Institute (A2EI), to remotely monitor the electricity use through smart meters with data loggers, instead of household (HH) visits. We will continue using such digital innovations in our new projects in the coming years. Policy monitoring, regulatory changes implementation (e.g., electricity tariff) and the real impact on field are the keys to measure progress towards our change ambition. We were engaged in electricity tariff revision with our evidence based advocacy and hypothesis. However, we were not able to analyse how the tariff change will impact the communities and to what extent our

assumptions will work. Therefore, for this, we will include impact monitoring measures through policy changes in our related project designs in the coming future.

We will work closely with Alternative Energy Promotion Centre (AEPD) and local governments in localising and achieving NDC targets on e-cooking. Based on our knowledge and experiences on induction cook tops, with the support of Energising Development (EnDev), we are excited to launch a new project on “electric cooking market activation” to facilitate access to 10,000 households in Bagmati and Gandaki Provinces. We also plan to facilitate demonstration and market introduction of digital solutions to boost e-cooking market. Over the next years, we will focus on energy-agriculture nexus and



Entrepreneur couple from Lalitpur adopting energy efficient technology to prepare noodles/ Rajendra Ghimire, CRT/N



wider productive use. We will continue to adapt our tested methodologies to identify potential resources and possible productive use interventions. We will have a gender transformative approach to our energy work and develop women as entrepreneurs and accelerators of change.

Under our Farming that Works change ambition, we realised the importance of developing resilient and efficient agriculture market systems that can cope with shocks and stress through pandemics. From our own work and consultations with our partners and communities, we found great emphasis and acceptance towards digital solutions in agriculture. We have already initiated implementing digital solutions in our work and have built strategic partnership with private sector-led service providers.

Building on our past efforts to include soil organic matter target in Nepal's second Nationally Determined Contributions (NDC), we will collaborate with Ministry of Agriculture and Livestock Department (MoALD), Ministry of Forests and Environment (MoFE) and other actors to develop strategies and actions for implementation. We will develop and strengthen market and traceability systems on safe food products by promoting regenerative and good agriculture practices, partnering with private sector actors and digitising value chains. We will support to increase women's access to productive resources and build agencies while addressing both market and non-market barriers. We will facilitate the linkages and provide technical assistance to financial, insurance and digital service providers to develop tailored products, addressing the need of women, marginalised groups and people living with disability. Through demonstration and learning, we will promote productive use of energy in agriculture – processing, irrigation and agriculture-based enterprises reducing the work load of women, creating employment opportunities and increasing agriculture and enterprises productivity. We will include climate advisory services as part of the pluralistic extension service provision working

in collaboration with cooperatives and private-public sector actors.

Our Resilience that Protects change ambition focuses on building resilience of people who are both discriminated and situationally vulnerable, and have limited access and benefits from development and climate change related resources and opportunities. Our analysis showed that the voices of marginalised communities, including women and vulnerable social groups are often unheard by the governance system at all levels. They are not prioritised in decision making, therefore, get limited or no benefit they are entitled to. Climate change and DRR agendas are not sufficiently aligned with development priorities at different government levels. More than 70 percent of the population depends on agriculture to meet the livelihood needs but the agriculture sector still lacks a proper risk transfer mechanism. There is a wide gap between the communities, planners, and policy makers on understanding the risk of climate change and natural hazards and the level of considerations for development interventions. The existing system focuses more on post disaster response rather than risk reduction at source. There is a strong need of holistic planning guidelines, therefore, we will continue to work on assessing disaster and climate change risks.

In our experience, disaster preparedness approach is largely overlooked in all sectors. Disaster is also a trans-boundary phenomenon. A lack of adequate coordination between adjoining countries for sharing risk information is one of the causes for increasing disaster risk for communities living in vulnerable geographical areas along the political boundaries in the countries. The communities are not aware of the risks and have poor capacity to respond, recover and rebuild in the event of disaster. As a result, the communities bear increasing loss of lives, livelihood and properties. With our ultimate goal to build resilience of the people to deal with shocks and stresses from multiple hazards, we will continue our work on climate resilience, DRR and good governance.

# Our support SYSTEM

Our powerful community of support is a dynamic team of people who work with us – our generous donors, alternative thinkers and bold partners, standing together for a world that works better for everyone. Our achievement is an outcome of a collective effort. We want to thank Government of Nepal (GoN), donors, individual supporters, consortium partners and implementing partners. It is great to have you alongside us, as we work together to help people tackle some of the toughest challenges in Nepal.



*Happy elderly couple from our reconstruction project site in Makwanpur/ Prabin Gurung*







A happy entrepreneur in Kavre with her new energy efficient mill/ Practical Action

# ENERGY THAT TRANSFORMS

Nepal has made significant progress in electrifying the majority of households. A total of 90 percent of the population have access to electricity and the Government of Nepal (GoN) aims to electrify the remaining 10 percent by 2025, which is well ahead of the SDG targets. However, there has been slow load growth and the availability of affordable clean energy is still not translating into new economic activity. Therefore, we at Practical Action prioritised on using electricity for productive and cooking purposes. Last year was instrumental in terms of our contribution to SDG 7 target on “affordable and clean energy” amidst the pandemic situation. We successfully completed a project on “Result Based Financing for Improved Cookstove Market Development in Nepal” through which the private sectors (local distributors) were able to sell cookstoves, benefitting more than 5,500 families with clean cooking solution. The result based incentives encouraged private sectors to invest in cookstove business and extend the supply chain closer to the users. We also successfully piloted deployment of 500 induction cook tops in Syangja District with the support of EnDev.

Last year was promising in terms of our engagement in research and studies. We conducted an action research on “Acceptance and viability testing of electric pressure cookers and induction cooktop” for Modern Energy Cooking Services (MECS) programme, in partnership with Ajummary Bikash Foundation (ABF) and National Association of Community Electricity Users Nepal (NACEUN). Similarly, we were engaged in landscape study of clean cooking for Clean Cooking Alliance (CCA) and market assessment of electric cooking appliances in Nepal for MECS. Our market assessment study recommended two most critical issues that need to be addressed for unlocking the high potential for electric cooking in Nepal, which are: (i) improving the reliability of electricity supply and (ii) revising the tariff to encourage electric cooking, i.e., increasing the units in the lower bands to accommodate the additional demand created by electric cooking. We were engaged in a study led by ENERGIA in collaboration with 60 Decibels on “Gender responsive electric cooking in Nepal.” The study suggested that men use electric cooking appliances more frequently than traditional stoves and Liquefied Petroleum Gas (LPG). Also, the fact that a number of male respondents chose to identify themselves as main users of the induction stove, reflects an emerging trend of men using induction stove and is not exclusively restricted to women.

# 15,004

people benefitted directly  
from our work including  
14,959 female and 45 male

# 273

people benefitted indirectly  
from our work including  
141 female and 132 male

# £0.2M

spent on our energy that  
transforms programme

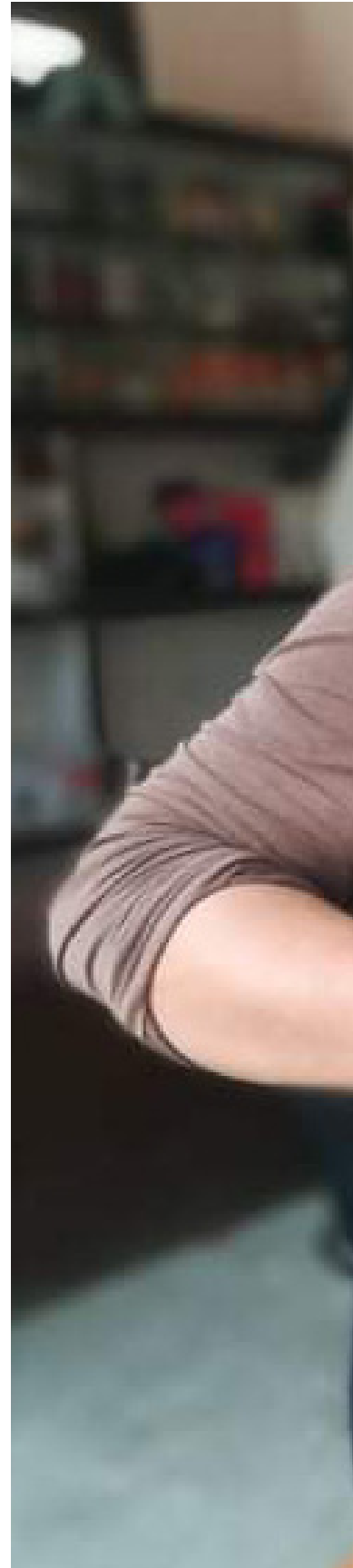


Based on our knowledge gathered through different studies, with the support of EnDev, we launched a project on “electric cooking market activation” to facilitate access to electric cooking to 10,000 households in Bagmati and Gandaki Provinces. Private sector engagement, community engagement, behaviour change campaigns, post purchase reinforcement, agency building, and institutional strengthening of CREE are the major components of the project. Our effort continues to make last mile distributors more accountable in the cook stove market development.

We successfully completed Green and Inclusive Energy (GIE) project funded by the Netherlands Ministry of Foreign Affairs. The GIE project helped to gather evidences and disseminate information to local governments through our local advocacy champions. Similarly, we successfully implemented our work with ENERGIA for Asian Development Bank (ADB) project on ecosystem development achieving a transformative systemic change for productive uses of energy at women led enterprises, which resulted in promotion and development of over 500 empowered enterprises in the rural communities. We helped increase women’s ability to afford appropriate technologies by increasing their access to subsidised loans and collateral free loans. In the coming year, we will be implementing alternative credit scoring, pay as you go, and other financing methods to improve access to finance.

We were able to adapt new practices to tackle COVID-19 impacts on our work by collaborating with other expert organisations. We worked closely with 60 Decibels – an end-to-end impact measurement company to deliver our field research via telephone surveys and with A2EI using smart meters with data loggers to remotely monitor the use of electricity. Our engagement with local electricity service providers has increased significantly in the last year. We supported them with their institutional development, business planning, and engagement in electric cooking research and demonstration

projects. We will continue strengthening their technical, organisational, and human resource capacities, thereby increasing their financial capacity and new service provision in the area of business counselling and development. The overall goal is to make them invest on electric cooking and productive use activities in their service areas.







*Januka Karmacharya of Kavre in her tailoring shop/ Indu Aryal, CRT/N*



# A journey of a struggling farmer to a **SUCCESSFUL ENTREPRENEUR**

**A 33-year-old Sanu Maya Shrestha of Konjyosom Rural Municipality, Lalitpur, Nepal, is a successful entrepreneur engaged in multiple enterprises. Prior to initiating her business, she was engaged in agriculture and vegetable farming, which was not sufficient to meet the increasing family expenses. In 2008, she started a grocery store by taking loan. Thanks to the income from the store, in 2012 Sanu Maya started a small poultry farm with 1,000 to 1,500 chickens. The poultry farming proved to be profitable, which helped her in starting other side businesses like milk collection centre. Now, she has expanded her poultry business to 4,500 chickens. Her total monthly income from all businesses is now above NPR 100,000 (GBP 625). This has not only helped her to meet the family expenses but also to start new ventures like rice mill and cold store.**

Things were not as smooth as it may sound before. She was planning to expand her business but was facing challenges managing her investment. Due to the lack of knowledge and information on subsidised loan, she was obliged to pay high interest loan from the relatives and cooperatives. Similarly, she was struggling with the regular supply of inputs (feed, chicks and medicines) for poultry, high mortality of chicken and secured market. In order to address the challenges, “Strengthening the Capacity of the Energy Sector to Deliver Gender Equality and Social Inclusion Results” project linked her with a leading poultry company of Nepal providing regular supply inputs, technical supports (training and counselling) and buy back guarantee.

In 2019, Ms. Shrestha attended a business management training provided by the project. The training enhanced her knowledge and skills on business operation and management, exploring market opportunities and

building linkages with market actors and eco-system stakeholders. “The business management training I attended was a stepping stone for me. It boosted my confidence in running a business”, says Ms. Shrestha with a smile on her face. The training gave her confidence to leap forward in her business. She has formally registered her business, becoming the only registered commercial poultry farmer in the area.

With the support of Electricity Users Cooperatives, Ms. Shrestha is in the process of obtaining three phase power supply connection to run the rice mill, cold store and poultry farm. Sanu Maya’s plans for the future do not stop here. She wants to add another modern poultry shed for regular production and supply. Similarly, she is also planning to produce poultry feeds using by-products from her mill. She hopes to inspire her fellow farmers and be a role model in her village.

*Sanu Maya attending chickens in her poultry farm/ Gyanu Bishta, CRT/N*





Sanu Maya and her husband posing in front of their grocery store/ Gyanu Bishta, CRT/N

“

*Nothing is impossible for women if they have self-confidence, patience and support from the family. I encourage every woman to give it a try and start up their own businesses.*

*- Sanu Maya Shrestha*





Maya Bashyal, one of the lead farmers from our Dairy for Development project site in Nawalpur posing in front of her cowshed/ Prabin Gurung



# FARMING THAT WORKS

Practical Action prioritise soil health as foundation for agriculture sustainability. Soil health can be ideally improved through the adoption of agro-ecological and regenerative technologies. In collaboration with MoALD and other stakeholders, our evidences and advocacy efforts on soil agenda led to the development of national multi-stakeholder action plan, supporting Agriculture Development Strategy's (ADS) target of reaching 4 percent soil organic matter (SOM). Moreover, our collaboration with MoALD and MoFE helped to include SOM target in Nepal's second NDC, submitted to the United Nations Framework Convention on Climate Change (UNFCCC).

Our Dairy for Development project funded by Jersey Overseas Aid (JOA), implemented in partnership with Forum for Rural Welfare and Agricultural Reform for Development (FORWARD) Nepal helped increase the overall milk production of smallholder dairy farmers by 43 percent in the six rural/ municipalities of Chitwan, Nawalpur and Makwanpur Districts. Key project interventions such as technical training, improved technology demonstration, rural veterinary and artificial insemination services through local technicians, strengthening rural milk collection system via sub-collection points, and cooperative-led feed business resulted in the increased milk production. Three dairy cooperatives equipped with a set of feed mixture and grinder helped smallholder dairy farmers to save an average of NPR 227,250 (GBP 1,420) per month on feed.

Despite the COVID-19 pandemic and subsequent repercussions on dairy farming, the average income of smallholder dairy farmers increased by almost 29 percent. The community level technical training on improved production practices helped more than 5,000 dairy farmers with increased knowledge and skills on balanced feed, improved forage and fodder, sheds and mastitis management. The project helped 75 percent of the farmers to adopt balance feed, improved shed and year round forage production technologies. The project supported dairy cooperatives to establish inclusive dairy value chain for smallholder farmers by strengthening 24 existing collection centres and developing 11 new collection centres in rural areas. The dairy value chain significantly strengthened the market linkages of more than 6,500 dairy farmers. The collaboration with Heifer International provided capacity building training and Information

## 2,584

people benefitted directly from our work including 1,183 female and 1,401 male

## 89,664

people benefitted indirectly from our work including 39,348 female and 50,316 male

## £0.15M

spent on our farming that works programme



and Communication Technology (ICT) based dairy toolkit to dairy cooperatives.

Likewise, the project helped develop 95 lead farmers and 20 Village Animal Health Workers (VAHWs) at local level. Four breed resource centres and four community extension service centres were also established jointly with the local government, linking the Livestock Service Section (LSS) with respective municipalities. One of the key achievements of the project was the active engagement of local government during the project implementation which was really helpful in building government ownership of programmes and securing regular support for the long-term sustainability of the project interventions.

Coffee farming is gaining attention among farmers in Nepal since the last few decades. Under our south-south knowledge exchange project, we leveraged tremendous learning experiences in coffee farming through cross country visit and collaboration with farmers and experts from Peru. We demonstrated several climate smart technologies, which included multi-strata agroforestry model, drip irrigation system with fortification, pest management, Farmyard Manure (FYM) management, waste water treatment, sun drying of coffee and product diversification using cascara and its by-product. The demonstrations were conducted in 24 farmers' fields from our clusters of Sindhupalchowk District. The technologies adopted showed positive signs of changes and improvements to help farmers cope with the decreasing quality, productivity, and pest and disease infestations in coffee.

We demonstrated intercropping and integrating forest trees, fruits trees, leguminous plants, along with coffee plants, which highlights plant diversity and the importance of shade trees in coffee orchard.

Awareness campaigns and training were provided to coffee farmers on soil fertility and productivity. A number of virtual and face-to-face events on sharing technical knowhow on cascara products were organised for wider promotion. Various knowledge products, technical briefs and manuals on climate smart technologies were developed. Our collaboration with key influential actors on coffee such as National Tea and Coffee Development Board (NTCDB), coffee cooperatives and coffee unions were helpful for wider promotion of these technologies. We organised a half day virtual learning and knowledge workshop to 36 participants highlighting our success cases along with examples from other development partners and research organisations, providing insights on future plans and way forward for coffee sector's growth in Nepal.







*A farmer from our Coffee project site in Sindhupalchowk District drying coffee beans inside a solar coffee dryer/ Nagendra Bastakoti*



A photograph of a cow and her calf in a wooden cowshed. The cow is dark brown with large, curved horns, and the calf is a lighter brown. They are standing on a bed of straw. The wooden structure of the cowshed is visible in the background.

# A cattle farmer who avoided migration labour and **TRIUMPHED OVER ADVERSITY**

**“Dairy farming saved me from going for migration labour in Qatar”, says Ms. Mina Bohara with a grin. She is a self-employed farmer and a proud owner of three milking cows. She is happy with the income she makes by selling milk. “I’m glad that I’m able to provide basic necessities like health, food and a pair of cloth to my family and also good education for my children from my dairy farming”, says Mina.**

Ms. Mina Bohara of Madhybindu Municipality-04, Madanpur, Nawalpur District is a single mother and heads the family of five daughters and grandmother-in-law. As a single mother and the only bread winner of the family, she struggled a lot in the initial days. Seeing her neighbours make money by selling milk, Mina also decided to rear cattle. She somehow managed to gather some money and purchased two cows. She invested NPR 70,000 (GBP 437) for a Holstein

cross and NPR 40,000 (GBP 250) for a local breed. She was very happy after getting the cows and started dreaming of a good future for her children. But within few years both the cows died of a disease. “Earlier, I had little knowledge and skills about dairy farming. I used to follow traditional farming practices and due to lack of knowledge and skills, I lost two cows to mastitis. However, I did not lose hope and kept going. I again started off by raising small calves”, she says with a smile on her face. Fortunately, before suffering from the disease, both the cows had given birth to healthy calves.

Mina overcame the sorrow and gave her full effort in raising the two calves. She attended a training on improved dairy farming practices provided by Dairy for Development project and acquired new knowledge and skills on improved feed, grass and animal health management. There were altogether 30 participants in

the training out of which more than 40 percent were women. Mina was selected as one of the leader farmers. After receiving the training, she also started as a trainer in her community and helped her fellow farmers with their problems by sharing her knowledge and skills. “After the training, I learned to prepare good quality balanced feed for my livestock and now I am also able to monitor the health of my cattle with improved practices”, she says.

Now, her daily milk production increased by 42 percent. She sells around 35 litres of milk per day and earns more than NPR 50,000 (GBP 312) per month by selling milk. Ms. Bohara is content with her dairy farming. In the near future, she hopes to expand her business. She is looking forward to adding 10 more milking cows and increase her income even further.

*A cow with her calf at Mina Bohara's cowshed/ Prabin Gurung*





*Mina Bohara ready to deliver milk to the dairy cooperative/ Prabin Gurung*

“

*I am investing NPR 8,000 per month in taking care of the cattle. With the increased income, I am planning to send my 2 daughters, who just completed the secondary school exam to a good college.*

*- Mina Bohara*





*The rehabilitation of Uchha Anarwa Irrigation Canal at Anarwa, Tikapur Municipality/ Janak Ram Chaudhary, CSDR*



# RESILIENCE THAT PROTECTS

As a country with diverse topography, complex geology and highly varying climate, Nepal is exposed to climate induced and natural as well as human-induced hazards. It is estimated that by 2100, about 10 percent of Nepal's total annual Gross Domestic Product (GDP) will be lost directly and indirectly due to climate induced disasters, and more than 80 percent of the population will be exposed to the risk of hydro-climatic hazards. Therefore, our policy advocacy and contribution in strengthening disaster risk and climate resilience at national, provincial, and local level is extremely important for effective and efficient disaster risk management and building community resilience

Our efforts in community level to national level remained crucial in strengthening institutional governance and making local government and federal institutions accountable in mainstreaming climate resilience and Disaster Risk Reduction (DRR). At national level, we were engaged with the National Disaster Risk Reduction and Management Authority (NDRRMA) for making DRR and impact-based forecasting coherent. Our engagement with the DHM was crucial for wider coverage and dissemination of early warning messages leading to impact-based forecasting. Our work with the MoFE was helpful in rolling out the NDC and finalisation of the National Adaptation Plan (NAP). Furthermore, our study on loss and damage also contributed the MoFE in introducing baseline for national framework on loss and damage.

At the local government level, we supported Geruwa Rural Municipality in drafting climate change policy. Geruwa Rural Municipality also decided to waive 75 percent of total land tax to landholders whose land was degraded into riverbed due to flood. Likewise, Janaki Rural Municipality also introduced the Disaster Risk Reduction and Management Act 2077. Furthermore, we supported Rajapur Municipality and Janaki Rural Municipality in drafting Local Disaster and Climate Resilience Plan (LDCRP) aiming to integrate climate and resilience into local planning and budgeting. We supported five local governments in West Rapti and Babai River Basin to formulate DRR policy and Strategic Action Plan 2020-2030. We also conducted orientation on the Nepal Flood

# 108,454

people benefitted directly  
from our work including  
54,902 female and 55,552 male

# 530,626

people benefitted indirectly  
from our work including  
276,500 female and 254,126 male

# £0.7M

spent on our resilience that  
protects programme



Resilience Portal at community level aiming to raise awareness and inform local people with information and knowledge system on flood risk.

We are continuously working on building strong partnership and strengthening collaboration with different stakeholders. At the provincial level, we partnered with International Centre for Integrated Mountain Development (ICIMOD), provincial government, and Nepal Red Cross Society (NRCS)-District chapter to localise EWS. The multi-stakeholder partnership has helped increase the ownership of the initiative and our recognition, which is exemplified by our nomination to the provincial level steering committee of EWS in Karnali Province. Our partnership with Ministry of Federal Affairs and General Administration (MoFAGA) was influential in formulating Municipal Disaster Governance Assessment Tool. The tool will be tested in few local government units and upon approval from the MoFAGA, will be implemented in 753 local government units. Likewise, our partnership

with academic research institutions, NGOs, and local governments on urban resilience was crucial in reducing multi-hazard risks, such as earthquake, flood and landslide. We built partnership with Shikhar Insurance- Nepal's prominent insurance company, Stonestep- a Swiss based insurtech agency and Global Parametrics- the UK based reinsurance company providing technical and innovative solution for insurance market system. These partnerships will be instrumental in developing risk transfer mechanism for the communities at risk of multiple hazards.







Community of Tighra, Rajapur preparing embankment during flood/ Shankar Chaudhary, CSDR





# Irrigation facility fostering **SOCIAL HARMONY AND SUSTAINABLE AGRICULTURE**

**The installation of irrigation facility in Sonahaphanta village is a sigh of relief for 43 farming families residing at the bank of Geruwa Karnali River in Bardiya District of Nepal. Water availability is abundant in the field. The farmers are shifting from subsistence farming to commercial vegetable farming. There is social harmony within the community.**

"After the installation of water irrigation facility last year, rainwater stealing disputes have reduced and also the relationship within the neighbourhood has improved significantly. Now, we've got alternative source of irrigation and is enough for both seasonal and off-seasonal vegetable farming", says Amar Bahadur Khatri, the community leader of Sonahaphanta village.

"This year remained a peaceful year for me and my family because there was no quarrel with the neighbours for irrigation water", says Tara BK, a female farmer who benefits from the water facility. With less disputes, now there is increased support and harmony within the Sonahaphanta community.

However, things were not the same before the intervention of the Climate Change and Fragility Project (CCFP). During the monsoon season, every

household would rush to the field for paddy plantation, but in case of rainfall delay, there used to be disputes between the farmers due to limited water resources. Mr. Amar Bahadur Khatri, the *Badghar*, (community leader) of Sonahaphanta village recalls, "for the past several years, winter rain, pre-monsoon rain and the monsoon rain have been very unpredictable. As a matter of fact, rainwater stealing was in the increasing trend, which led to social disharmony". The community leader, colloquially called *Badghar* is responsible for mediating disputes including water induced skirmishes at the community level.

With the objective to strengthen the resilience to climate change fragility risk at community level in Bardiya District of Province 5 and Kailali District of Karnali Province, CCFP was implemented in these working areas.

The project supported the community with water pump installation which significantly reduced water related disputes within the farming communities. After the project intervention, the farmers who used to harvest one crop a year have now started cultivating three crops a year, such as wheat, paddy and fresh vegetable farming. Moreover, access to

irrigation has motivated some farmers to shift from cereal crops to seasonal and off-seasonal vegetable and spice crops farming at the commercial scale. "In the last vegetable season (three months) I sold fresh vegetables worth NPR 30,000 (GBP 190) which is a big income for my family and from this season's yield I'm expecting around NPR 36,000 (GBP 225)", says Gopal Chand.

Nevertheless, access to irrigation is a long-term solution to agricultural dry spells and droughts for smallholder farmers depending on rain-feed agriculture. In order to reduce social tensions associated with resource use competition and improving climate resilience for agriculture and food security, the use of untapped resources at local level is a dependable climate adaptive measure. In Sonahaphanta, the use of underground water for irrigation is a new adaptive practice, serving as a reliable source for irrigation during both winter and monsoon seasons. However, irrigation infrastructure should be integrated with other complementary interventions such as high value crops based enterprises, seasonal and off-seasonal vegetable farming which generate additional income to the farmers.





*A farmer selling vegetable in Tikapur/ Practical Action*

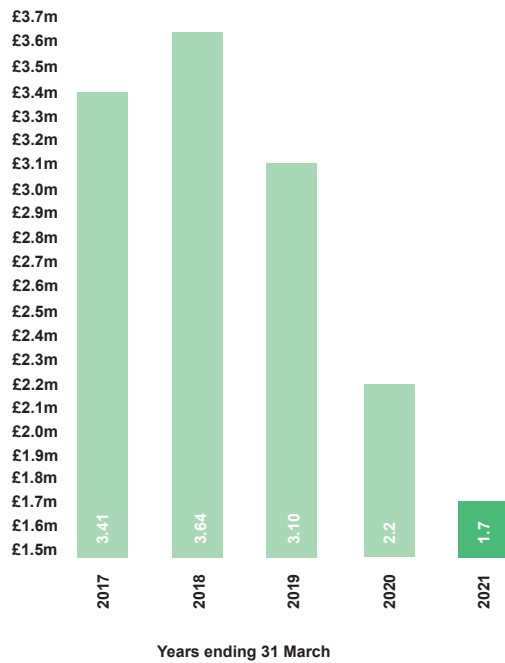
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*We hardly grew vegetables and wheat in the past, but this year the field is lush green with standing seasonal and off-seasonal vegetables and wheat crop.*

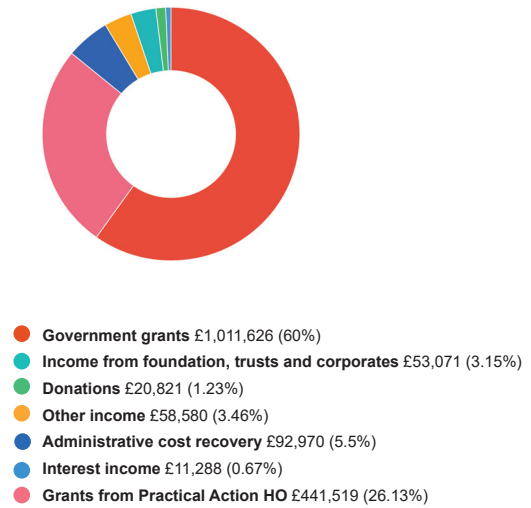
*- Narayan Dutt, CDCRC member*



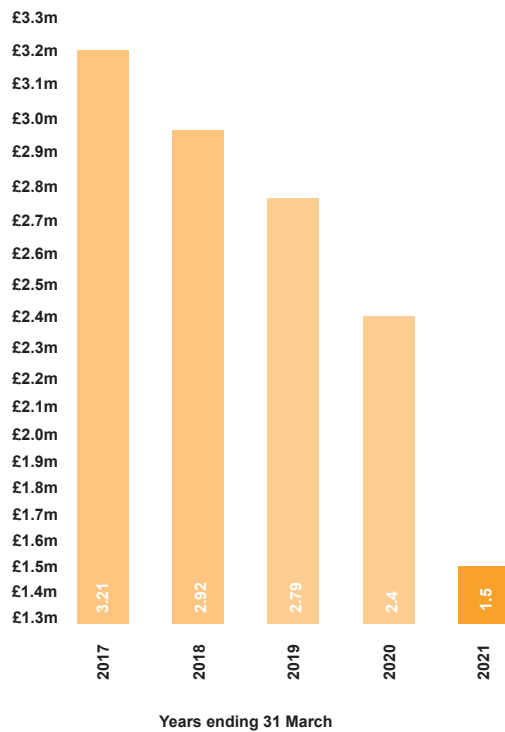
### Total annual income (£m)



### 2020/21



### Total annual expenditure (£m)



# Financial statements

## Consolidated statement of financial activities for the year ended on 31 March 2021 (incorporating the income and expenditure statement)

	Unrestricted £	Restricted £	Total 2021 £
Source of Income			
Government grants	-	1,011,626	1,011,626
Income from foundation, trusts and corporates	-	53,071	53,071
Donations	12,718	8,103	20,821
Other income	44,900	13,680	58,580
Administrative cost recovery	92,970	-	92,970
Interest income	11,288	-	11,288
Grants from Practical Action HO	281,328	160,191	441,519
<b>Total income</b>	<b>443,204</b>	<b>1,246,671</b>	<b>1,689,875</b>
Expenditure			
Energy that transforms	4,985	209,720	214,705
Farming that works	-	147,835	147,835
Resilience that protects	-	718,102	718,102
Cities fit for people	-	-	-
Knowledge and communications	44,189	19,501	63,690
Directorate and management	214,335	150,818	365,153
<b>Total expenditure</b>	<b>263,509</b>	<b>1,245,976</b>	<b>1,509,485</b>
<b>Fund balance</b>	<b>(179,695)</b>	<b>(695)</b>	<b>(180,390)</b>

A consolidated financial statement is signed at organisational level in the UK, the figures provided are part of group report which is related only to Nepal Office.



# Acronyms

ABF	Ajummery Bikash Foundation
ADB	Asian Development Bank
ADS	Agriculture Development Strategy
AEPC	Alternative Energy Promotion Centre
AI	Artificial Insemination
A2EI	Access to Energy Institutes
CCA	Clean Cooking Alliance
CCFP	Climate Change and Fragility Project
CDCRC	Community Disaster and Climate Resilience Committee
CREE	Community Rural Electrification Entity
DHM	Department of Hydrology and Meteorology
DRR	Disaster Risk Reduction
EnDev	Energising Development
EWS	Early Warning System
FORWARD	Forum for Rural Welfare and Agricultural Reform for Development
FYM	Farmyard Manure
GBP	British Pound Sterling
GDP	Gross Domestic Product
GIE	Green and Inclusive Energy
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GoN	Government of Nepal
ICIMOD	International Centre for Integrated Mountain Development
ICT	Information and Communication Technology
JOA	Jersey Overseas Aid
LDCRP	Local Disaster and Climate Resilience Plan

LPG	Liquefied Petroleum Gas
LSS	Livestock Service Section
MoALD	Ministry of Agriculture and Livestock Department
MoFAGA	Ministry of Federal Affairs & General Administration
MoFE	Ministry of Forests and Environment
MECS	Modern Energy Cooking Services
NACEUN	National Association of Community Electricity Users Nepal
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
NDRRMA	National Disaster Risk Reduction and Management Authority
NGO	Non Governmental organisation
NPR	Nepalese Rupee
NRCS	Nepal Red Cross Society
NTCDB	National Tea and Coffee Development Board
RBF	Result Based Financing
SDG	Sustainable Development Goals
SOM	Soil Organic Matter
UNFCCC	United Nations Framework Convention on Climate Change
VAHW	Village Animal Health Worker
ZFRA	Zurich Flood Resilience Alliance





*The aftermath of 2020 monsoon flood in one of our project sites in Tighra, Rajapur/ Shankar Chaudhary, CSDR*







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