



2021

Annual Report



Centre for Rural Technology, Nepal
(CRT/N)

Towards Action for Development...since 1989

Annual Report

2020/21

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Cover Photo: From TA 9334-NEP Project

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Message from the Chairperson

The whole world is in chaos this year due to the outbreak of Corona Virus, because of which the countries across the globe had announced lockdown and isolation. Nepal also could not stay untouched from this pandemic. In Nepal, the lockdown came into effect on 24 March 2020, and uplifted slightly on 14 June 2020. The pandemic disrupted the movements, meetings, seminars/workshops resulting in halt of most of the activities planned by CRT/N like all other development organizations in Nepal. However, we are trying our best to accomplish possible tasks with the support of our management, consortium partners and other stakeholders.

CRT/N has completed 31 years in serving local communities by developing and promoting rural appropriate technologies. It has been working in the area of Gender Equality and Social Inclusion (GESI) in the energy sector; Productive end-use, employment and income generation, Community water management; Climate change – adaptation and mitigation, advocacy in the sector of green energy.

CRT/N is working in 12 districts of Nepal through various projects. Since establishment, we have developed 2800 women entrepreneurs, carried out advocacy and lobby activities from central level to local level on green and inclusive energy, implemented eco-village development projects, provided awareness about renewable energy, climate change, and environment-friendly technologies to around 5,000,000 people, constructed and promoted more

than 3,50,000 ICSs (Mud and Metallic), built 9000 Improved Water Mill (IWMs), 43 Improved Water



Mill Electrification (IWME) and 30 Hydraulic Ramp Pumps in the past 31 years.

One of our big achievements is that many of the rural municipalities are now giving space to green energy programmes and eco-village development programmes & also promoting women economic empowerment activities in their policy and programmes. In addition to this, CRT/N is advocating for renewable energy at the school level, which has made possible the development of curriculum for class 1-5 in renewable energy, which is now being implemented in 28 schools of Mahankal Rural Municipality, South Lalitpur and being replicated in other Municipality areas.

On behalf of CRT/N Board of Directors, I am thankful to the Government of Nepal (Central, Provincial, and Local), our national, international development partners and communities for the continued support and cooperation. We look forward to delivering quality services to local communities for improving their livelihood.

Dr. Ananda Shova Tamrakar
Chairperson

Foreword from the Executive Director

“We are fully committed in promoting renewable energy/appropriate technology delivering quality services to local communities for improving their livelihood. This is a long term process and a joint effort, requiring trust and support from all our stakeholders”

Dr. Purushottam Shrestha, Executive Director



In reflecting back on the year 2020, and the fact that we’re still facing with uncertainties related to COVID-19, however with the support from all the stakeholders we could move forward toward our goal. Therefore, first of all we would like to express sincere gratitude to everyone who supported us in this difficult pandemic situation.

This report highlights major milestones of the year and achievements of CRT/N on Gender Equality and Social Inclusion (GESI) in Energy Sector, productive use of energy, eco village and climate change issues contributing to achieve Government of Nepal’s National Goal on “Clean Cooking Solutions for All”, Sustainable Development Goals (SDGs), United Nation’s Sustainable Energy for All (SE4ALL). This year we worked more in advocating for improving access to green and inclusive energy, promoting women entrepreneurship through capacity building and promoting energy efficient technology. Another important achievement of CRT/N is that after Eco-Village Development in Bethanchowk, Kavre District, we are now scaling up this concept in other areas of Kavre and Sindhuli district.

One of key highlights of the CRT/N is that, it is demonstrating Municipality Energy Planning tool under Solar Electrification of a Remote Village and Promoting Energy Planning Based on Reliable Data Collection in Nepal project with the financial support from Simenpuu Foundation, Finland and EKOenergy, Finland in coordination with Renewable Energy for Rural Areas (RERA) programme Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ-Nepal) and Khanikhkola Rural Municipality, Kavrepalanchok. This is a GIS based analytical tools which helps to perform preliminary analysis of energy options. With this tool, CRT/N will support local governments to integrate renewable energy options into their planning process. With the support from same project CRT/N has also initiated solar project. Under this, Solar Mini-Grid of 10 kWp capacity has been installed providing access to modern electricity services to 96 households.

Since its establishment in 1989, CRT/N has been engaged in developing and promoting appropriate rural/renewable energy technologies effective in meeting the basic needs and improving livelihood of rural

communities. By realizing the importance of mainstreaming gender in the energy programmes, CRT/N has dedicated itself by integrating gender issues in its programmes since 2004.

This year, CRT/N in collaboration with partner organizations, has successfully completed one major programme: Green and Inclusive Energy Programme (October 2016- September 2020). This programme has prioritized in mass education and awareness, developing technical skills and institutional capabilities of the rural communities and stakeholders to support and ensure increased access to rural and renewable energy services and continued GEWNet as a knowledge platform sharing knowledge under gender, energy and water sector.

CRT/N has continued to be actively engaged in the implementation of new programmes such as: Eco-Village Development through Integration of Renewable Energy Solutions and Climate Friendly Activities for Enhancing Livelihood of Rural Communities in Bethanchwok Rural Municipality (January 2020- April 2021), Strengthening the Capacity of the Energy Sector to Deliver Gender Equality and Social Inclusion Results (TA 9334- NEP) (January 2019- August 2021) The emPOWER Collective Project- Phase II (January 2020- December 2021), Solar Electrification of a Remote Village and Promoting Energy Planning. Based on Reliable Data Collection in Nepal (July 2020- November 2021), Self-help Eco-Village Development Project (August 2019- February 2022), Next Generation Low Carbon, Climate-resilient Eco-Village Development in South Asia (July 2020-December 2022).

Finally, I would like to take this opportunity to express my sincere gratitude to all the Government organizations, sponsors, collaborators, development partners and well-wishers for their continuous cooperation, support and encouragement especially to National Planning Commission, Ministry of Population and Environment, Ministry of Energy, Water Resources and Irrigation, Alternative Energy Promotion Centre, Social Welfare Council, Nepal Electricity Authority, ENERGIA/ Hivos, GEF/SGP/UNDP, the World Bank, SNV/Nepal, EnDev/GIZ, CISU, DIB, INforSE, Clean Cooking Alliance, Asian Development Bank, Siemenpuu Foundation and EKO energy, University of Illinois, Bhutan Water partnership (BhWP), Royal Society for Protection of Nature (RSPN), Renewable World, Bhutan, NEFEJ, NACEUN, PAC, PA, RECoN, IAPHF, Agricultural Development Bank Ltd., BFIs. Centre for Self-Help Development (CSD), Manushi Nepal, Kathmandu University, Federal Government, Provincial Government, Urban and Rural Municipalities, National and Local Partner Organizations, Community Rural Electrification Entity (CREE) Local Communities and Community Based Organizations (CBOs), Civil Society Organizations (CSOs) and Private Sector Organizations.

My special thanks to the CRT/N's General Assembly and Governing Board for continued cooperation and support and sincere appreciation to all the staff members and consultants for their cooperation, hard work and dedication.

Introduction to CRT/N

Background

Centre for Rural Technology, Nepal (CRT/N) is a professional non-governmental organization engaged in developing and promoting appropriate rural technologies effective in meeting the basic needs and improving livelihood of rural people. Established in August 1989 under the Company Act, CRT/N has been re-registered with Government of Nepal (GoN) under the Social Organization. Registration Act 2034 since October 1998. The organization is actively engaged in upgrading traditional technologies as well as developing new technologies with diversified and versatile applications to meet rural needs.



Vision

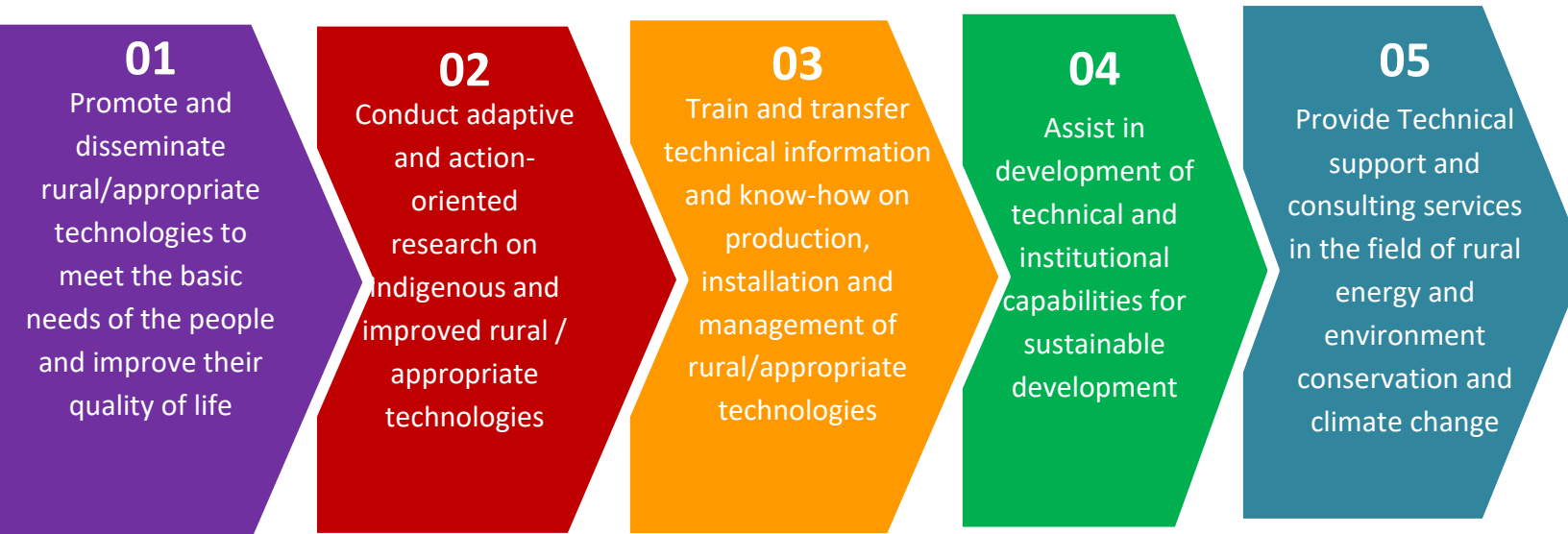
CRT/N as a professional / innovative organization and knowledge centre in renewable energy /appropriate technology delivering quality services to local communities for improving their livelihoods.



Mission

Develop, promote and disseminate environmentally sound rural / appropriate technologies and strengthen capability of rural communities in creating better opportunities through mobilization of local resources to improve their livelihood conditions.

Objectives



Area of Specialization

Development and promotion of rural /appropriate and Renewable Energy Technologies (RETs):

- Household, commercial and institutional
- Improved Cookstoves (ICSs) (fixed type, prefabricated portable rocket stoves, metallic stoves);
- Briquette, pellet and charcoal;
- Improved Water Mill (IWM) with diversified end uses including electrification;
- Hydraulic ram pump;
- Solar cookers / dryers;
- Other appropriate and rural technologies

Regional / International Activities

CRT/N has been involved at the regional and international level activities through the following networks, extension of technical supports and services:

- International Network on Gender and Sustainable Energy (ENERGIA), the Netherlands: ENERGIA links individuals and groups concerned with energy, sustainable development and gender;
- Gender, Energy and Water Network (GEWNet): In the capacity of the National Focal Point of ENERGIA for Nepal, CRT/N has been managing the GEWNet since 2002;
- International Network for Sustainable Energy (INforSE), Denmark: CRT/N is the National Focal Point for Nepal since 2005;
- Clean Cooking Alliance formerly known as Global Alliance for Clean Cookstoves (GACC)

CRT/N's Priority Themes



Membership

- Energy for All Partnership
- Gender and Water Alliance (GWA), the Netherlands
- Clean Cooking Alliance, USA
- Nepal Alliance for Clean Cookstoves (NACC) Nepal
- Global Village Energy Partnership (GVEP), UK
- International Union for Conservation of Nature (IUCN), Switzerland
- Partnership for Clean Indoor Air (PCIA), USA
- Solar Cookers International Association, USA
- World Council of Renewable Energy (WCRE), Germany
- Global Gender and Climate Alliance Nepal (GGCAN)
- Indoor Air Pollution and Health Forum, Nepal
- The Alliance of Civil Society Organizations for Clean Energy Access (ACCESS Coalition)
- Climate Action Network South Asia (CANSA)

Programme/Projects

TA-9334 NEP: Strengthening the Capacity of the Energy Sector to Deliver Gender Equality and Social Inclusion Results

Background

The TA 9334-NEP entitled 'Strengthening the Capacity of Nepal's Energy Sector to Deliver Gender Equality and Social Inclusion (GESI) Results' is piggy backed to the loan project, 'Loan 3542-NEP: Power Transmission and Distribution Efficiency Enhancement Project'. It is funded by Asian Development Bank (ADB) with support from the Japan Fund for Poverty Reduction (JFPR) to ensure GESI mainstreaming in the loan project. The scope of the project covers three key outputs:

- Strengthened capacity of the Nepal Electricity Authority (NEA), and National Association of Community Electricity Users-Nepal (NACEUN) in mainstreaming GESI in energy programmes and projects,

Output 1



- Productive use of clean energy technologies and services by poor and vulnerable households and,

Output 2



- Developed capacity of NEA staff in new energy technology applications

Output 3



Supported by: Asian Development Bank with support from the Japan Fund for Poverty Reduction (JFPR) and Swedish International Development Agency (Sida).

To ensure the effective and efficient execution of Output 2, the project received complementary funding from 'Empowering Women Engendering Energy' project supported by the Swedish International Development Agency (Sida).

Project Area:

Dolakha, Ramechhap, Sindhupalchowk, Kavre, Lalitpur, Dhading, Chitwan and Sindhuli

International Partner: International Network on Gender and Sustainable Energy (ENERGIA)/ Hivos (People Unlimited)

Partners: The output 2 of TA project is being implemented by a consortium the International Network on Gender and Sustainable Energy (ENERGIA)/ Hivos (People Unlimited), the lead, Centre for Rural Technology, Nepal (CRT/N), Practical Action Consulting (PAC) Nepal and National Association of Community Electricity Users Nepal (NACEUN) (Strategic Partner).

Project Period: January 2019-December 2021

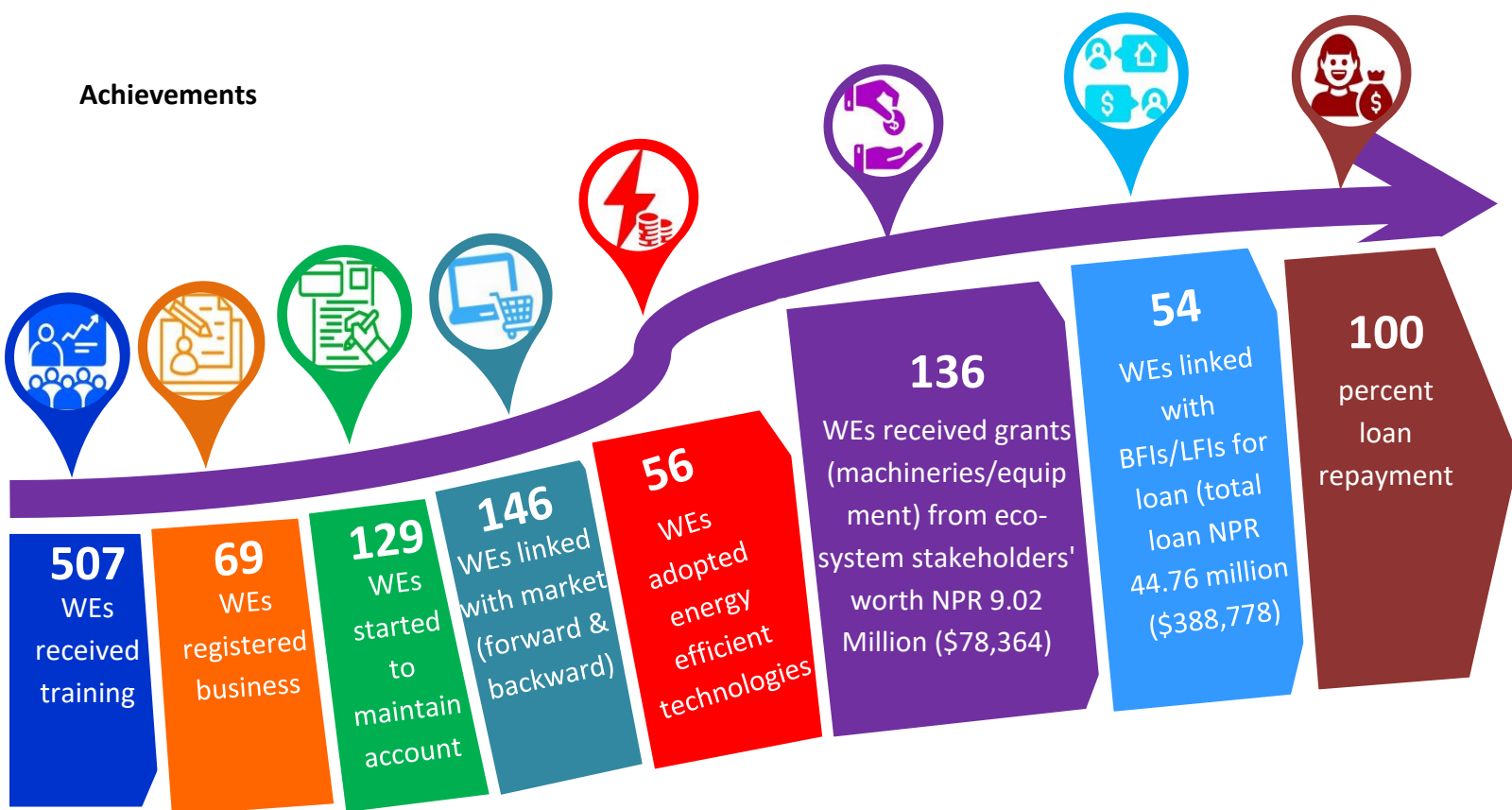
Project Objective

The objective of output 2 is to promote GESI in accessing and supporting productive use of clean energy technologies and services by women, the poor and vulnerable households of Electricity User Cooperatives (EUCs). Output 2 aids the women from poor and marginalized communities, in a holistic manner, in achieving their potentials of enterprise creation/ development through various livelihood and businesses opportunities. This encourages women to engage in productive use of energy thus increasing their electricity demand from EUCs and thereby enhancing their sustainability.

Key Activities/Targets

- Institutional capacity development of 15 EUCs from seven districts on Productive Use of Energy Promotion, Energy Efficiency and Electrical Safety;
- Provide entrepreneurship development, business management and technical skill training to 500 women from poor and marginalized groups;
- Provide post-training supports for accessing finance, market and appropriate technologies, and establishing linkages with eco-system

Achievements



ENERGIA Covid-19 Solidarity Fund for Women Entrepreneurs

Background

PAC and CRT/N with Strategic Partner NACEUN and led by ENERGIA/Hivos has been implementing the TA 9334-NEP entitled "Strengthening the Capacity of Nepal's Energy Sector to Deliver Gender Equality and Social Inclusion (GESI) Results" project with the funding support by ADB and co-funding by SIDA. Output-2 of TA project is supporting 500 women members from marginalized groups in energy-based enterprises development in the above-mentioned areas. Due to COVID and lockdown these women entrepreneurs are highly affected. They are struggling to operate due to the lockdown, resulting in significant loss of income and limitations in last-mile communities' access to renewable energy products.

Women are disproportionately affected by economic shutdowns because they are more likely to run the smallest, most vulnerable businesses, especially as informal and self-employed workers. Informal sector and low-income, female-headed households and women living in rural and remote areas, are among the most vulnerable groups affected by social distancing and unemployment.

ENERGIA together with six of its implementing partners (i.e. Centre for Rural Technology Nepal, Practical Action Consulting Nepal, National Association of Community Electricity Users Nepal; Energy 4 Impact; Practical Action East Africa; and Solar Sister) wish to act now, to support the WEs engaged in the Empowering Women, Engendering Energy (EWEE) program. This will be done through the ENERGIA COVID-19 Solidarity Fund for Women Entrepreneurs. The Fund aims to support 3,000 women entrepreneurs to recover from the crisis and build resilience.

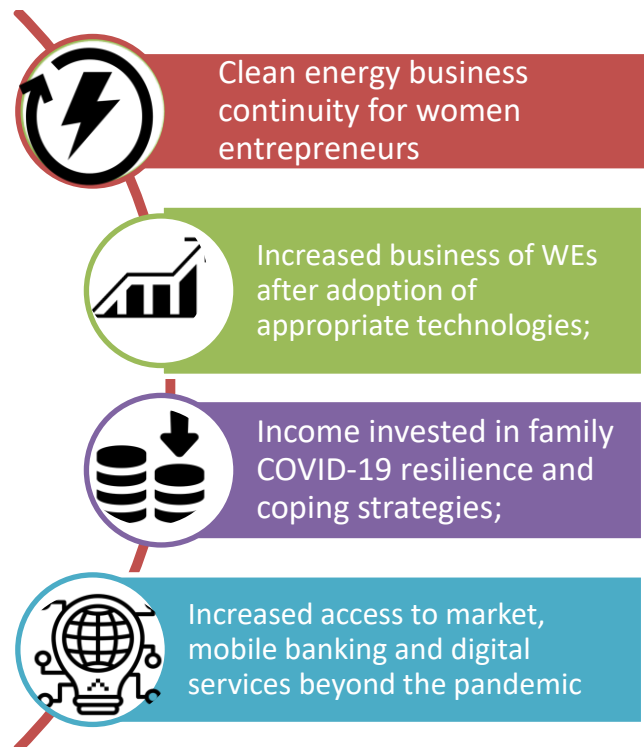
Supported by: International Network on Gender and Sustainable Energy (ENERGIA)/ Hivos

Project Duration: February-December 2021

Objectives:

- The overall objective of the Solidarity Fund is to support WEs in recovering from the crisis brought upon by COVID-19 and building resilience for continuation and growth of enterprises. The specific objectives are:
- To support WEs to continue their businesses based on clean energy;
- To support them to adopt appropriate technologies to increase future business success, income and growth;
- To enhance their access to market and facilitate their reach in mobile banking and digital services beyond the pandemic.

Expected Outcome



Next Generation Low Carbon, Climate-resilient Eco-Village Development in South Asia



Participants with facilitators after the completion of the session

Background

Among the 1.6 billion people in the four South Asian countries Nepal, Sri Lanka, India and Bangladesh 2/3 are living in the rural areas, and that poverty is still widespread in many rural areas, even though total poverty in the region is decreasing. The region is also very climate vulnerable with Bangladesh being the most climate vulnerable country according to Climate Change Vulnerability Index (CCVI-2011) while Sri Lanka ranked second in the Climate Risk Index 2017 (by Germanwatch). All four countries are among the most climate vulnerable countries in the world. The environmental context is that in addition to climate change, there are deforestation in many area and lack of wood for cooking and other purposes. Much of the deforestation is caused by inefficient use of wood for cooking and village industries.

This intervention is being implemented in Nepal, Sri Lanka, India and Bangladesh on several levels. It will focus on development in those rural areas, where poverty is still widespread. Poverty is linked with many problems, including lack of energy and water, poor health and education, as well as migration out of the areas.

In Nepal, the local target area is Bhalumara, in the Marin Rural Municipality in the lower plain area of Nepal. The inhabitants have acute water scarcity problems and increasing temperatures, which affects their livelihood mainly with lack of water for irrigation and thereby lower harvests. The local water resources are quickly drying up due to climate change and remaining water resources are further away

from the village area. Due to dwindling agricultural income, villagers are increasingly migrating away, in particular younger men. Other problems include high wood consumption and indoor air pollution with inefficient cookstoves.

The current situation calls for interventions that enable villagers to adapt to climate change impacts and to improve agriculture and livelihood. A number of different opportunities exist for this, from improved water access over diversification of crops, to alternative income opportunities such as food processing and non-farming income. The firewood-based cookstoves can be improved significantly through the introduction of efficient and cleaner improved cook stoves. These interventions can contribute to improve lives and livelihoods, and thereby reducing migration. This will make the village a model village that can be used for learning and as a demonstration point for the local government.

Supported by: Civil Society in Development (CISU), Denmark

Local Partner: Collective Development Expedition Centre (CODEC Nepal), Sindhuli

Project Period: July 2020-December 2022

Project Area:

Bhalumara-3, Marin Rural Municipality, Sindhuli district, Bagmati Province.

Objectives:

1. Develop a model village adopting Eco-Village Development (EVD) Concept in all the project partner countries.
2. Establish a Social Enterprise Modal (SEM) for at least one EVD solution to improve market access and introduce business opportunities for the local communities and stakeholders.
3. Advocate and promote EVD concept at sub-national, national, regional and international level.

COVID-19 Support in the Project Area

In response to the outbreak of COVID-19 pandemic in the project area, CRT/N in coordination with DIB-Denmark and CODEC-Nepal handed over the medical support package to Marin Rural Municipality. The packages with medical supplies were provided under the project “Next Generation Low Carbon, Climate-resilient Eco-Village Development in South Asia” supported by Civil Society in Development (CISU) Denmark.

The support package includes Thermal Gun (6 pcs), Oximeter (6 pcs), PPE Set (12 set), Surgical Mask (20 boxes), Oxygen Mask (100 pcs), Thermometer (10 Pcs), Face Shield (100 Pcs), Antiseptic Soap (100 Pcs), Sanitizer (4 units of 5 Liter gallon), Isolation Kit (50 units), 5Lit-Oxygen Concentrator (2 Units), BP Meter (2 Pcs) and Gloves (6 boxes). The package was handed over to Mr. Paniraj Bomjan Chairman, Marin Rural Municipality in the presence of Mr. Madhu Lakhe Chief of Health Department, Mr. Bimarsa Moktan Ward Chairman of Ward Number 3, and Mr. Rampukar Shaha Health Post-Chief on July 6th, 2021.

The medical supplies handed over to the municipality will be divided among two health institution Kalpabrikshya Health Post at Matheuli, Marin-3 and COVID Isolation Hospital at Kapilakot, Marin-6, Sindhuli.

Expected Outcomes:

- The local communities have defined and presented their needs and asks for development in their community.
- The EVD model villages will be established in Marin Rural Municipality, Sindhuli and agreed on EVD indicators.
- Minimum one Social Enterprise Model (SEM) of EVD solution(s) will be developed and rolled out in three villages of Marin Rural Municipality, Sindhuli. Furthermore, it will provide additional market access and business opportunity to local stakeholders and community members.
- The partners will share their knowledge of EVD to other CSOs, local governments, other regional governments.
- The INFORSE South Asia, CAN South Asia will increase its membership and participation due to participation in project outreach.
- Stakeholders and networks will take up the EVD concept by including the EVD approach in their development plans and budget.
- Willingness of stakeholders will increase to provide matching funds or co-finance EVD concept.
- The EVD concept and the value of local initiatives will recognize as climate solutions by national and international climate bodies and negotiations.



Women Group Participating in a Group Work during VDP Session in Bhalumara, Marin, Sindhuli

Eco-Village Development through Integration of Renewable Energy Solutions and Climate Friendly Activities for Enhancing Livelihood of Rural Communities

Background

The least developed country cannot inhibit developmental activities whereas on other hand Nepal has to deal with vulnerabilities associated with global climate change phenomenon. Also, the development in growing economies are bound to be centralized therefore development tends to leave large part of the poor rural populations. In Nepal, about 25 percent of the population is still below the poverty line. Major chunk of this population resides in rural sector of the country. These poorest groups of rural Nepal are most vulnerable to the effects of climate change; therefore intervention has to be made in a way that can address poverty reduction, mitigate or adapt climate change impacts and promote sustainable development of rural sector of the country while producing a result where development activities aimed at poverty reduction and climate mitigation/adaptation does not need to be in conflict.

The climate related vulnerabilities and rural development related issues can be addressed by development of eco-village. Eco-Village can be developed by following Eco-Village Development (EVD) Concept which emphasizes combination of both climate adaptation and mitigation measures. The EVD concept involves use of EVD solutions which includes optimum utilization of available resource and implementation of appropriate, affordable, renewable energy technology, climate resilient agro-practices and capacity building activities for climate change adaptation and mitigation in villages. The bundle of EVD solutions includes mitigation technologies like small, household-sized biogas plants, smokeless stoves, solar-energy technology, improved water mills to generate electric power, stand-alone systems like pico/micro-hydro power for rural electrification, and solar based drying units. It also includes adaptation technologies such as organic farming, plastic tunnel farming, roof-rain water harvesting and water-lifting technologies like hydraulic ram pumps. An important part of EVD is planning of the right solutions for each area and each village, to be chosen according to climate, livelihood, and available resources. The EVD solutions are not just introducing a climate friendly technologies; they also include the training and support for permanent use and maintenance as well as other frameworks such as funding mechanisms in order to have a long-term progression of living standards in a sustainable way.

The concept of “Eco-Village” for country like Nepal is very pertinent when we envisage impacts of climate change on small mountainous country. The impact of global emission resulting in climate change is affecting geographically and ecologically fragile landscapes and rural dwellers of Nepal where livelihoods are extremely sensitive to climate variances. Given that about 82 percent Nepalese are residing in rural parts of the country, the climate change impacts are more severe in rural Nepal. Thus Eco-Village Development (EVD) could be one such intervention which can address rural development as well as climate related issues.

Supported by: GEF/SGP/UNDP

Project Period: December 2019 – April 2021
(Extended till October 2021)



Bimala Khatri from Bhangala, Kavre Preparing liquid fertilizer

Project Area: Bethanchowk Rural Municipality, Kavre

Primary Objective:

To develop eco-village by integrating eco-village development solutions with agro-based livelihood to enhance income of rural community of Kavre district

Specific Objectives:

- Creating enabling environment for local financial institutes to finance EVD solutions.
- To develop and demonstrate eco-village to district and national level line agencies.
- To integrate EVD solutions with agro-based livelihood for strengthening rural development to reduce poverty in ways that limit greenhouse gas emission and adapt climate change impacts.



Ms. Khatri Using Liquid Fertilizer in Tunnel Farming

Project Activities:

- Plantation of saplings of Avocado fruit and Dante Okhar in each 100 household as planned.
- Mapping and MoU with MFIs/Saving and Cooperatives and beneficiary community Installation of Eco Village Technologies like Biogas, Improved Cook Stoves, Plastic Tunnels, Drip Irrigation System:
- Installation of EVD solutions like Biogas (10 HHs), Improved Cook Stoves 49 HHs, Plastic Tunnel and Drip Irrigation (47 HHs) Repair improved water mills(2 Nos)
- Trained 29 households (HHs) including 18 Women and 11 Men on biofertilizer/bio pesticides and bio composting through Jholmal and 36 households (HHs) including 28 Women and 8 Men, i.e. majority of participants were female members (78%) on Vermi composting: Activities planned to be completed in the Extension period.
- Vegetable farming and agro-enterprise and farming in plastic tunnel, Solid Waste and Water Resource Management, Biogas Slurry Management Training
- Development of Eco Village Development Plan (EVDP)
- Development of knowledge products and publication and project documentary
- Exchange Visit and Demonstration & Orientation to Stakeholders

Solar Electrification of a Remote Village and Promoting Energy Planning Based on Reliable Data Collection in Nepal

Background

Energy sector is one of the major pillars of development. In Nepal, there are some areas that are still dwelling in absence of electricity. In such areas, decentralized sources of electricity can provide access to electricity. This project has therefore aimed to provide access to electricity for a rural village that is deprived of electricity from national grid. The project is funded by Siemenpuu Foundation and EKOenergy, Finland. Furthermore, the concept of this project emerged as there was additional demand for community rural electrification put forward by Khanikhola Rural Municipality. In this context, the project introduces solar mini-grid for electrification of the village deprived of access to electricity.

Apart from installation of solar mini-grid, the project will support in advocacy Municipal Energy Planning (MEP) in Federal Context. The MEP tool is Geographic Information System (GIS) based MEP tool, developed by Renewable Energy for Rural Areas (RERA) program jointly implemented by GIZ-Nepal and Alternative Energy Promotion Center (AEPC). The advocacy aspect of this project will emphasize on building capacity of the Local Government and energy professionals to develop robust energy plans and policies for their municipality. To facilitate evidence based advocacy regarding need of energy plans and policies to improve rural access to sustainable energy sources, a planning document along with policy brief will be developed based on the results of MEP tool for the Local Government. Advocacy efforts will also aim at building capacity of the relevant stakeholders on the concept and importance of net metering and Multi-Tier Framework (MTF) developed by the World Bank and its adaptation in rural Nepal context to measure quality of electricity access.

Supported by: Siemenpuu Foundation and EKOenergy, Finland

Project Area: Saurya Bhangtarbesi village-3, Khanikhola Rural Municipality, Kavrepalanchowk district, Bagmati Province, Nepal

Project Duration: July 2020 to November 2021

Project Objectives

- Installation of 10 kWp solar Mini-grid at Saurya Bhangtarbesi village-3, Khanikhola Rural Municipality, Kavrepalanchowk district, Province 3, Nepal to improve electricity access in the village.
- Capacity building of relevant stakeholder from Khanikhola Rural Municipality and energy sector stakeholders from local, provincial and national level on application of Municipal Energy Planning (MEP) Tool.

- Advocate on need and use MEP tool to develop energy plans and policies to relevant stakeholders representing local, provincial and national level Government CBOs/CSOs and private sector.

Major Project Activities

- Detail Feasibility Survey and installation of Solar Mini-grid system
- Sampling and data collection from all wards of the rural municipality to facilitate use of MEP tool
- Municipal Energy Planning (MEP) tool application and develop energy plan for Khanikhola Rural Municipality
- Capacity building of stakeholders and enumerators on use and application of MEP process and tool.
- Consultative workshop with energy sector stakeholders at all three levels of the Government to promote and advocate MEP process and tool.

Expected Output

- Beneficiary community and respective rural municipality will have Solar Mini-Grid of 10 kWp capacity
- Improved access to modern electricity source and service for 96 households
- Establish or upgrade at least one micro-enterprise using electricity from solar Mini-Grid to realize productive end use of modern sources of energy
- Ten to Fifteen energy sector professional representing various private sectors and I/NGOs, CBOs from local, provincial and national level will be trained to use Municipal Energy Planning (MEP) Tool.
- Seven CSOs/CBOs at local level, relevant department and official representing Khanikhola Rural Municipality and its wards will benefit from the advocacy activities which includes topic such as Renewable Energy Technologies, Municipal Energy Planning Tool, net metering and Multi-Tier Framework for measuring electricity access.
- Manual on Municipal Energy Planning process and tool will be developed for the stakeholders.
- Document tangible energy plan and policy brief that will contribute to improve access to modern energy sources
- Sensitization on renewable energy technologies to local ward representatives on modern energy sources, renewable energy technologies and importance of energy planning for local development.

Achievement

- Solar Mini-Grid of 10 kWp has been installed providing lighting service to 96 households Saurya Bhangtarbesi village-3, Khanikhola Rural Municipality, Kavrepalanchowk
- During the day time, electric Huller and Expeller are being operated from the solar mini-grid.
- Successfully organized four days capacity building training for renewable energy sector professional on Municipal Energy Planning (MEP) process and tool. Altogether, participants from 13 different organizations representing government, I/NGOs and private sector were trained to use and apply MEP process and MEP tool.
- The questionnaire incorporated in the MEP tool was modified further based on the feedback received from the capacity building training participants. The enumerators have been trained to collect the data as per the protocol mentioned in the MEP guideline and manual. 400 households samples will be collected from all wards of the Khanikhola Rural Municipality. However due to COVID-19, lockdown and restrictions along with landslides induced by the monsoon on the way to the project area, all the other activities have been postponed for now.



Power Testing of Installed Solar Mini Grid at Khanikhola, Kavre

Self-help Eco-Village Development Project

Background

On 13th August 2019, (28th Shrawan 2076) Centre For Self-help Development (CSD) organized an interaction programme on "Current Challenges in Microfinance and Way Forward" where Centre for Rural Technology, Nepal (CRT/N) presented the concept of Eco-Village Development (EVD) model launched in various places of Bethanchowk Rural Municipality, Kavre. The discussion was held with the participants about materializing the concept by implementing the Self-help Eco-Village Development project. If we take in account of our present activities, the planet Earth is and will be harshly affected by climate change; the impacts might be a cataclysm. After deep discussion during the interaction programme, it was concluded that Self-help Eco-Village Development project is advantageous to rural areas where a happy life is defined by Energy, Food and Water, importantly agriculture and food security. Therefore, the Centre for Self-help Development (CSD) presented a proposal to organize such concept in five different rural villages of Nepal by granting a sum of Rs.5,00,000 for each village which makes Rs. 25, 00,000 of total financial support.

After the interaction programme CRT/N, CSD and Manushi Laghu Bitta Bittiya Sanstha, Banepa, Kavre discussed and reached to the decision that Manushi Laghu Bitta will act as first partner for organizing the Self-help Eco-Village Development project by signing the triparty agreement.

Supported by: Center for Self-Help Development (CSD)

Project Period: It is aimed to implement the project from August 2019 to February, 2022.

Project Area: Presently, the project is organized in Barabise-3, Dharpa of Sindhupalchowk district

Project Objectives:

- To develop Eco-friendly concept as a best model for Sustainable Rural Development and for better quality of life,
- To coordinate with local microfinances institutions (MFIs) for convenient and appropriate investment in order to add and boost the Eco-friendly technologies

Project Goal: The primary goal of Self-help Eco-Village Development Project is to investigate the alternatives and solutions to enhance the eco-friendly situation in order to reduce the Green House Gases effect and to minimize the impacts of Climate Change for better quality of life.

and to improve income oriented mechanism,

- To encourage to utilize the local resources and skills predominantly,
- To help for formulating plans and policies with local decision making offices and microfinances institutions (MFIs) for discouraging foreign employment and for increasing the employment opportunities at a local level

Project Partners:

- Centre for Self-help Development (CSD), Kathmandu
- Centre for Rural Technology, Nepal (CRT/N), Kathmandu
- Manushi Laghu Bitta Bittiya Sanstha Ltd., Banepa, Kavre

Planned Activities:

- Capacity Building Training on improved cooking stove for five participants.
- Vegetable Farming Training for 25 participants.
- Waste & Water Management Training for 25 participants.
- Pesticides Free Farming Technique & Market Linkage Training for 25 Participants
- Plantation
- Develop ECO -Village Planning Document.

- Installation of EVD Solutions as per need of Community (financial support through loan linkage).
- Monitoring & follow up.
- Development of knowledge products.

Completed Activities in Dharpa

- Dialogue meetings with local community.
- Prepared questionnaire for baseline survey.
- Training for Social Mobilizer of Manushi Laghu Bitta Bittiya Sanstha Ltd.
- Developed Digital Survey System through the use of Mobile.
- Baseline Data Collection and Need Assessment in line with EVD Concept and Finalization of EVD Solutions
- Three Days Capacity Building Training on Vermi-Composting for 26 women participants.

emPOWER Collective Research Project Phase II

Background

Nepalese society is characterized by a social construct based on gender and caste-based hierarchy governed by patriarchal values and norms. With growing interest in creating a just and equitable society, a number of efforts are being made at different levels nationally and internationally to empower women and historically marginalized population. Historically, it is surmised that reservation policies and provision of resources (financial, educational, quota systems, property ownership, energy technologies etc.) results into contribute towards empowerment of women and excluded groups. However, emerging evidence suggests that gender and socially inclusive policies and access to opportunities and resources alone may not be sufficient to ensure marginalized group's participation in decision making at household or outside (Kabeer 2005; Shah et al. 2007; Heise 2011). In community development efforts, marginalized groups and women's participation is often labeled as silent or passive participation. This suggests a need for not just empowerment through access to resources but also from within (by sparking desire to change and voice concerns) for women and the excluded groups.

Supported by:

Climate and Health Research Network (CHeRN), USA. This research project has been facilitated by Dr. Tami Bond (Colorado State University), Dr. Anita Shankar (John Hopkins University) and in joint collaboration with Minergy.

Project Objective:

This research project is designed to assess the impacts of a personal empowerment programme designed to increase rural community specially women's voice and agency as a means of improving rural development activities through making them capable for choosing the suitable renewable energy technologies to improve their livelihood. Changes and progress in individual and community action plans will be compared at end line.

Project Location:

Ward no. 5, Chyasingkharka, Bethanchok Rural Municipality, Kavre

Project Duration: January 2020 – December 2021.

Project Target Groups:

Local women of Chyasingkharka, Bethanchok Rural Municipality, Kavre

Project Activities:

- Finalization of English version of the emPOWER training;
- Baseline study, and identification of emPOWER training participants;
- The emPOWER Training in Bethanchok Rural Municipality;
- Follow-up visit for personal agency session;
- Tracking of progress in emPOWER Project.

Gender, Energy and Water Network (GEWNet)

Background

The Gender Energy and Water Network (GEWNet) was established in Nepal as an output of the National Consultative Workshop held in August 2002 in Kathmandu. It was initiated with support from ENERGIA (International Network on Gender and Sustainable Energy). The network hosted by Centre for Rural Technology, Nepal (CRT/N) has been designated as a partner of Green and Inclusive Energy (GIE) Programme, which was financially supported by ENERGIA/Hivos. The network focuses on specific lobby and advocacy goals (influencing policies and practices of market and government actors) as well as on strengthening advocacy capacities of civil society actors. It will also contribute in increasing gender inclusive use of renewable energy and water including appropriate technologies which will complement and contribute to Government of Nepal's initiatives like Clean Cooking Solution for all by 2030, and Sustainable Development Goals (SDGs).

Objective:

- Create an effective network platform (for sharing of knowledge and information, promotion and collaboration);
- Achieve evidence to establish a firm evidence-based influential system for Gender inclusivity awareness/Action in energy and water sector;
- Sensitize and enhance capacity of network and network members and target groups on gender issues;
- Social and economic empowerment of women based on commercial and social enterprise development through supporting and initiating research, workshops and campaigns.

Major Activities Carried Out During the Year 2020-2021

- Developed 10 years Strategic Plan of GEWNet;
- Developed the Student Support Manual;
- Conducted Interaction Meeting with GIE consortium partners to strengthen further cooperation and collaboration to continue working together with the GIE Consortium Partners in future;
 - GEWNet conducted two presentations on the theme of gender, energy and water during the period of June-July 2021. Individual members and institutional partners of GEWNet as well as other interested individuals engaging in the related fields participated in the presentation. The presentations that were delivered by the experts of respective fields are:
 - The presentation on “Gender Equality and Masculinity in Energy and Water Sectors” was delivered by Ms. Urmila Simkhada, GESI Expert on 15 June, 2021;
 - The presentation on “Redefining Communication/s” was delivered by Mr. Sumiran Shrestha, Development Expert on 5 July, 2021.

The Green and Inclusive Energy (GIE) Programme in Nepal

Background

The objective of this programme was to “support a transition towards green and inclusive energy systems not only to better meet the energy access needs of the poor and reduce climate change, but also lead to improvements in family health, food supplies, income and opportunities for women in order to allow them to participate more productively politically, socially and economically”. The GIE Programme in Nepal was led by Centre for Rural Technology, Nepal (CRT/N). It is implemented in partnership with Indoor Air Pollution and Health Forum (IAPHF), Nepal Forum of Environmental Journalists (NEFEJ), Renewable Energy Confederation of Nepal (RECoN), National Association of Community Electricity Users Nepal (NACEUN), Practical Action Nepal and Gender, Energy and Water Network (GEWNet).

Project Duration: October 2016- September 2020

Project Area:

	District	Urban Municipality	Rural Municipalities
1.	Udaypur	Katari	Udaypur Gadhi Rampur
2	Sindhuli	Dudhauri Kamalimai	Marine
3	Kavre	Baluwa	Temal Bethanchowk
4	Nawalpur	Gaidakot	Binay Tribeni
5	Palpa	Tansen	Raina Devi Chahara
6	Gulmi	Musikot Resunga	Chandrakot
7	Lalitpur		Gotikhel

Activities

- Build capacity of project partners to contribute to execution and operationalization of the theory of Change.
- Raise awareness on GIE and GESI at National, Province and local level through multi-partnership strategy
- Working together to develop and implement joint transparency and accountability activities
- Develop and implement Lobby and Advocacy strategy at National, Province and local level
- Identify focus of private sector engagement in the renewable energy sector

Financially Supported by: International Network on Gender and Sustainable Energy (ENERGIA)/ Hivos

Policy Support: Alternative Energy Promotion Centre (AEPCC)

National Partners: NACEUN, IAPHF, NEFEJ, RECoN, Practical Action Nepal and GEWNet.

Project Objective: To contribute to the development of an enabling policy environment to meet the domestic and productive energy needs of the socially disadvantaged groups, women, and marginalized groups through decentralized renewable energy and clean cooking energy solutions.

- Develop communication strategy,

Expected outcome

- Network strengthened in terms of enhanced ownership feeling and active participation of the members
- Knowledge and skill enhancement of network members along with encouragement to involve in gender and energy arena.
- An effective contribution to the development of an enabling policy environment to meet the domestic and productive energy needs of the poor, women, and marginalized groups through decentralized renewable energy and clean cooking energy solutions in Local, Provincial and Central level.
- Bringing customer oriented electricity bill and energy policy
- Replacement of wrecked wooden electricity poles with the steel tubular ones
- Mainstreaming GIE agendas in local government plans with the allocation of budget for clean cooking solutions and other energy activities
- Mobilization of Female Community Health Volunteers (FCHVs) for educating women household heads on clean cooking solutions which proved to be effective throughout the project period
- Declaration of smoke-free villages at Musikot and Chandrakot municipality in Gulmi district
- Support in the dissemination of over 25,000 improved cook stoves in Sindhuli district alone, and
- Reach out over 15 million people by creating awareness on RE and GESI
- Engagement with media for the broader knowledge transfer using different media tools

Achievements

- The development of course curriculum on renewable energy for school students of class 1-5
- Advocated and recommended in “Energy White Paper” declared the period 2018-2028 as “Energy Decade” with a slogan ‘Every House: Energy House’;
- The revision of bylaws on “Renewable energy subsidy delivery mechanism 2013”



Student's Participation in School Awareness Programme on Renewable Energy and GESI Organized by GIE Project

Financials Updates

ग्रामीण प्रविधि केन्द्र

Centre for Rural Technology, Nepal
STATEMENT OF FINANCIAL POSITION
As at 31st Ashadh 2078 (15th July 2021)

Particulars	Notes	Current Year	Previous Year
ASSETS			
Non-Current Assets			
Property, Plant and Equipment	4.1	1,428,280.70	1,705,044.54
Intangible assets		-	-
Investment property		-	-
Long term investments	4.2	6,163,198.02	7,249,990.50
Other non current assets		-	-
Total Non-current Assets		7,591,478.72	8,955,035.04
Current Assets			
Account receivable	4.3	32,018,925.55	22,854,900.20
Cash and cash equivalents	4.4	19,158,479.21	14,089,715.05
Total Current Assets		51,177,404.76	36,944,615.25
Total Assets		58,768,883.48	45,899,650.29
LIABILITIES & RESERVES			
Accumulated reserves			
General Reserve Fund	4.5	8,155,493.54	8,127,204.84
Technology Study & Research Fund	4.6	310,829.00	310,829.00
Fixed Assets Reserve Fund (Projects)	4.7	1,171,436.73	1,378,028.57
Total Accumulated Reserves		9,637,759.27	9,816,062.41
Non-Current Liabilities			
Loans & Borrowings		-	-
Employee Benefit Liabilities	4.8	3,887,831.45	5,565,463.13
Deferred Revenue		-	-
Other Non-current Liabilities		-	-
Total Non-current Liabilities		3,887,831.45	5,565,463.13
Current Liabilities			
Account Payables	4.9	45,243,292.76	30,518,124.75
Loans & Borrowings		-	-
Provisions		-	-
Total Current Liabilities		45,243,292.76	30,518,124.75
Total Liabilities		49,131,124.21	36,083,587.88
Total Liabilities & Reserves		58,768,883.48	45,899,650.29

The notes on accounts form an integral part of financial statements

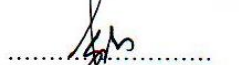

Dr. Ananda Shova Tamrakar
Chairperson


Dr. Parushottam Shrestha
Executive Director


CA Narayan K. Joshi
N.K. Joshi & Company
Chartered Accountants


Hari Gopal Gorkhali
Treasurer
Date: 2078/06/17




Pawan K. Singh
Sr. Account Officer

Financials Updates

ग्रामीण प्रविधि केन्द्र

Centre for Rural Technology, Nepal

STATEMENT OF INCOME AND EXPENDITURE

For the year ended on 31st Ashadh 2078 (15th July 2021)

Particulars	Notes	Current Year	Previous Year
INCOME			
Incoming Resources	4.10	10,485,292.81	10,820,864.03
Received From Projects	4.10A	49,027,510.00	55,730,259.09
Financial Income	4.10B	722,502.52	284,568.49
Other Income	4.10C	20,040.00	1,438,343.47
Total Income		60,255,345.33	68,274,035.08
EXPENDITURE			
Staff cost/ Expenses	4.11	7,807,634.32	10,344,502.12
Project Expenses	4.12	48,977,550.00	54,710,975.04
General Administrative Expenditure	4.13	3,361,061.15	3,104,149.61
Staff Training/Development		-	-
Depreciation	4.1	77,972.00	99,452.00
Total Expenditure		60,224,217.47	68,259,078.77
Surplus before exchange gain/loss		31,127.86	14,956.31
Exchange Gain/ (Loss) in Euro A/c		303.84	1,673.97
Net Surplus/(Deficit) before taxation		31,431.70	16,630.28
Income Tax Expenses		-	-
Surplus /(Deficit) for the Year		31,431.70	16,630.28
Appropriation of surplus for the year			
Allocation to reserves		28,288.70	14,967.28
Allocation to Staff Welfare Fund		3,143.00	1,663.00

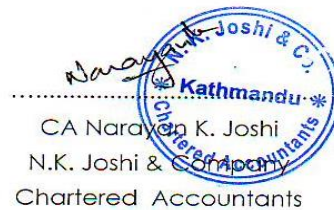
The Notes on accounts form an integral part of the financial statements



Dr. Ananda Shova Tamrakar
Chairperson



Dr. Purushottam Shrestha
Executive Director



CA Narayan K. Joshi
N.K. Joshi & Company
Chartered Accountants

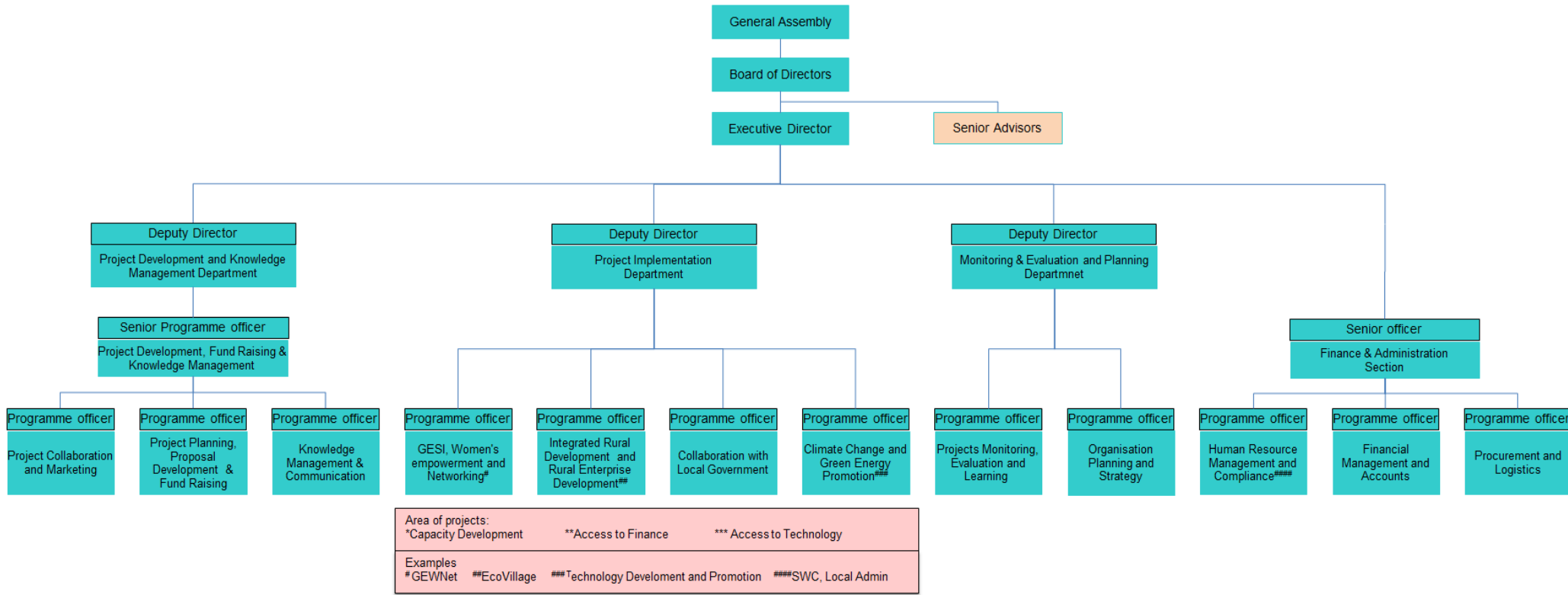


Hari Gopal Gorkhali
Treasurer
Date: 2078/06/17




Pawan K. Singh
Sr. Account Officer

Organizational Chart (FY 2078-79)



Board of Directors

Dr. Ananda Shova Tamrakar, Chairperson

Dr. Tamrakar was a professor at Tribhuvan University. She has served Tribhuvan University for 37 years. Besides teaching, she is conducting researches on pest management, water management, vermin composting and biodiversity. She has pursued Ph.D. from India. She has completed her Diploma of Environmental Management and Protection from University of Technology, Dresden, Germany. She has been awarded US-AEP Fellowship by Asia Foundation in USA. She remained Board Member of CRT/N since 2002 and also served as a Board Member of Mahila Sahayogi Bachat Tatha Rin Sahakari Sanstha Ltd. Besides, she is the president of Trans-Himalayan Environment and Livelihood Programme (T-HELP). She is also the member of Federation of Women Entrepreneurs Association (FWEAN). She has about 100 research publications (includes both national and international publication).



Mr. Ganesh Ram Shrestha, Member Secretary

Mr. Shrestha is one of the founder members of the Centre for Rural Technology, Nepal (CRT/N) established in August, 1989. He has served as Executive Director of CRT/N till January, 2021 and has more than 3 decades of experience in the development and promotion of the renewable energy and appropriate / rural technologies and contributed his expertise towards enhancement of rural livelihoods and sustainable development in Nepal through working with rural communities, government institutions and international organizations. He has also worked with the Agricultural Development Bank from 1970 till 1988. He holds Post Graduate Diploma in Rural and Agricultural Project Planning from Institute of Social Studies (ISS), the Netherlands in 1980 and Bachelor's Degree in Agricultural Engineering from Technion, Israel Institute of Technology, Israel in 1968. He has also been granted an Overseas Fellow of the Economic Development Institute (EDI) of the World Bank in 1977.

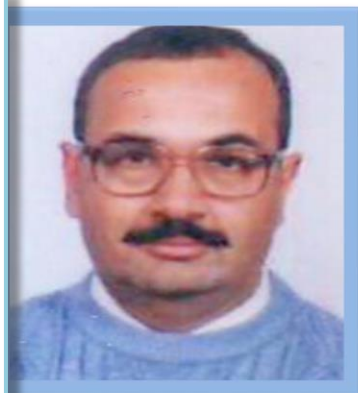


Mr. Hari Gopal Gorkhali, Treasurer

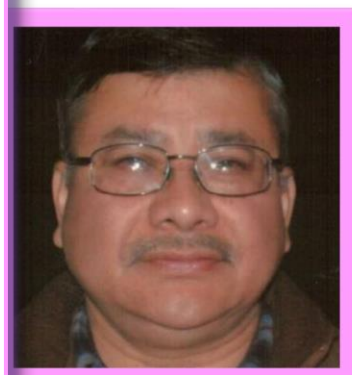
Mr. Gorkhali holds Bachelor's Degree in Agriculture (B.Sc.Ag.). He is the Chairman at Rural Energy and Technology Service Center (RETSC). He worked for more than 34 years in the Agricultural Development Bank, Nepal in various capacities such as General Manager (CEO), Deputy General Manager (Deputy CEO), Regional Manager, etc. He has 26 years of experiences in renewable energy sector with key experiences on guiding in promotion and development of various Renewable Energy Technologies such as Improved Cookstove (ICS), Improved Water Mill Technology (IWM), Briquette Technologies and Hydraulic Ram Pump for the benefit of rural communities.

**Mr. Lumin Kumar Shrestha, Member**

Mr. Lumin Kumar Shrestha holds M.Sc. Degree in Agriculture Economics from University College of Wales, UK. He is one of the founder members of CRT/N. He holds more than three decades of experiences in various rural and appropriate technologies during his tenure at CRT/N. He also had experiences of agricultural financing while working in various capacities in the Agricultural Development Bank, Nepal for 20 years.

**Dr. Krishna Raj Shrestha, Member**

Dr. Shrestha was a Professor at Research Centre for Applied Science and Technology (RECAST), Tribhuvan University. He has more than 35 years of professional experience in the field of renewable energy and holds a Ph.D. Degree in Chemical Engineering from Indian Institute of Technology Delhi, India. After serving RECAST for 38 years, he has been teaching in the Central Department of Environmental Science (CDES), Tribhuvan University as a Visiting Professor and has supervised a number of students for their Master's Thesis. He has published a number of papers in various national and international journals. Dr. Shrestha has participated in several national and international seminars, conferences, workshops and training programmes pertaining to energy and environmental issues. He has coordinated several national level projects funded by INGO's and Government agencies and successfully conducted a number of training programmes on energy saving devices such as improved cook stoves (ICS), biomass briquettes and management of domestic wastes through Composting and Vermicomposting at different parts of the country.



Mr. Vishwa Bhushan Amatya, Member

Mr. Amatya has over 35 years of professional experiences in public, private and development sector. His recent works spanning over 18 years are in the field of project/programme development, planning, implementation and monitoring and evaluation towards energy access improvements in Nepal. He has an Engineering Bachelor degree from University of Jodhpur, India and Master in Applied Science in Systems Design Engineering from University of Waterloo, Ontario, Canada. Some of his recent assignments as a team leader are, i) Result Based Financing (RBF) project for cook-stove market development and access to Finance, ii) imparting training of trainers on Energy Access and Climate Data to Faculties of University of DAWEL, Tanantheri, Myanmar, iii) GEF Project formulation for UNDP, RERL GEF/UNDP, on Mini Hydro and Large scale solar PV system for livelihood applications, etc.



Ms. Shova Bajracharya, Member

Ms. Bajracharya has over two decade of experience in the microfinance sector and currently leads the Manushi Laghubitta Bittiya Sanstha Ltd. as Chief Executive Officer (CEO). She started her professional career as an Assistant Lecturer at the Hiralal Multiple Campus and working in development organization such as SEARCH and IIDS thus contributing to her experience in the education and development sector. She is equipped with a Master's Degree in Economics from Tribhuvan University. Her educational qualification is further enriched with her experience of managing microfinance and community development programs exclusively focusing on women. Ms. Bajracharya takes keen interest in learning from other institutions successfully implementing microfinance and development programs by participating in study visits, seminars and workshops.



CRT/N Personnel

Senior Advisors

1. Mr. Ganesh Ram Shrestha, Senior Advisor
2. Mr. Hari Gopal Gorkhali, Senior Advisor
3. Mr. Lumin Kumar Shrestha, Senior Advisor

Management Team

1. Dr. Purushottam Shrestha, Executive Director
2. Mr. Shyam Rai, Deputy Director*

Account & Administration Team

1. Mr. Pawan Kumar Singh, Senior Accounts Officer
2. Mr. Raju Maharjan, Accounts Officer
3. Ms. Gita Subedi, Senior Assistant
4. Mr. Ram Krishna Dawadi, Driver
5. Mr. Sudesh Man Singh, Messenger*
6. Mr. Ramesh Khadka, Messenger
7. Ms. Sanu Maiya Singh, Messenger

Programme Implementation Team

1. Dr. Indira Shakya, Consultant
2. Dr. Ashma Vaidya, Consultant
3. Ms. Ashma Pakhrin, Senior Officer
4. Mr. Niraj Shrestha, Senior Officer
5. Mr. Prabin Shrestha, Officer
6. Ms. Seeta Pandey, Officer
7. Ms. Gyanu Bist, Officer
8. Mr. Sanubabu Pandit, Officer
9. Ms. Kaushila Rai, Officer
10. Ms. Cheeja Adhikari, Officer
11. Mr. Subas Lamichhane, Officer
12. Mr. Farsha Bahadur Tandan, Senior Technical Assistant
13. Mr. Rajendra Ghimire, National Social Mobilizer
14. Mr. Bodhraj Bhandari, National Social Mobilizer
15. Mr. Khadga Bahadur Thapa, National Social Mobilizer
16. Mr. Likh Ram Chaudhary, National Social Mobilizer
17. Ms. Indu Aryal, National Social Mobilizer
18. Ms. Mina Basnet, National Social Mobilizer
19. Mr. Deepak Bohara, National Social Mobilizer
20. Mr. Rup Bahadur Deuba, National Social Mobilizer

* Left during FY 2020/21

CRT/N Working District

S.N.	Name of Project	Working District/Area
1.	Eco-Village Development (EVD) through Integration of Renewable Energy Solutions and Climate Friendly Activities for Enhancing Livelihood of Rural Communities	Chyasingkharka-5, Bethanchwok Rural Municipality, Kavrepalanchwok
2.	emPOWER Collective Project –Phase II	Chyasingkharka-5, Bethanchwok Rural Municipality, Kavrepalanchwok
3.	Next Generation Low Carbon, Climate-resilient Eco-Village Development in South Asia	Bhalumara-3, Marin Rural Municipality, Sindhuli
4.	Self-help Eco-Village Development Project	Barabise-3, Dharpa, Sindhupalchowk
5.	Solidarity Fund	Dolakha, Ramechhap, Sindhupalchowk, Kavre, Lalitpur, Dhading, Chitwan and Sindhuli
6.	Solar Electrification of a Remote Village and Promoting Energy Planning Based on Reliable Data Collection in Nepal	Khanikhola Rural Municipality, Kavrepalanchowk
7.	Strengthening the Capacity of Nepal’s Energy Sector to Deliver Gender Equality and Social Inclusion (GESI) Results	Dolakha, Ramechhap, Sindhupalchowk, Kavre, Lalitpur, Dhading, Chitwan and Sindhuli
8.	Strengthening the Eco-Village Development concept: Affordable local climate actions for sustainable development in South Asia	Marine Rural municipality, Sindhuli
9.	The Green and Inclusive Energy (GIE) Programme in Nepal	Sindhuli, Lalitpur, Palpa, Gulmi, Nawalpur, Kavre

Abbreviations

ACCESS Coalition Organizations for Clean Energy Access	Alliance of Civil Society Energy Access	ICS	Improved Cook Stove
ADB	Asian Development Bank	INforSE	International Network for Sustainable Energy
ADBL Ltd	Agriculture Development Bank	ISO	International Standard Organization
AEPC Center	Alternative Energy Promotion	IUCN	International Union for Conservation of Nature
CANSA Asia	Climate Action Network South	IWA Agreement	International Workshop
CBOs	Community Based Organizations	IWM	Improved Water Mill
CBS	Central Bureau of Statistics	IWME	Improved Water Mill Electrification
CISU	Civil Society in Development	JFPR	Japan Fund for Poverty Reduction
CRI	Climate Risk Index	LDCs	Least Developed Countries
CRT/N Nepal	Centre for Rural Technology,	MEP	Municipal Energy Planning
CSD Development	Centre For Self-help	MIS	Micro Irrigation System
CSOs	Civil Society Organizations	MTF	Multi-Tier Framework
CSR	Corporate Social Responsibility	NACEUN	National Association of Community Electricity Users- Nepal
EDCs Coordinators	Enterprise Development	NEA	Nepal Electricity Authority
EnDev	Energising Development Partnership	NEFEJ	Nepal Forum of Environmental Journalists
ENERGIA	International Network on Gender and Sustainable Energy	PAC	Practical Action Consulting Partnership for Clean Indoor
EUCs	Electricity User Cooperatives	PCIA Air	
EVD	Eco-Village Development	RECON	Renewable Energy Confederation of Nepal
FY	Fiscal Year	RERA	Renewable Energy for Rural
GEF/SGP	Global Environment Facility Small Grants Programme	Areas	
GESI Inclusion	Gender Equality and Social	RETs	Renewable Energy Technologies
GEWNet Network	Gender, Energy and Water	SDGs	Sustainable Development Goals
GGCAN Alliance Nepal	Global Gender and Climate	SE4ALL	Sustainable Energy for All
GHGs	Green House Gases	Sida	Swedish International Development Agency
GIS	Geographic Information System	UNDP	United Nations Development Programme
GiZ	German Agency for International Cooperation	UNF	United Nations Foundation
Rship		WCRE	World Council of Renewable Energy
GWA	Gender and Water Alliance	WEs	Women Entrepreneurs
IAPHF Forum	Indoor Air Pollution Health		



Ms. Shrijana Silwal from Ichhakamana-5, Muglin, Chitwan is one of the Women Entrepreneur supported by ADB TA 9334-NEP Project, using the Deep Fridge purchased with the support from Solidarity Fund. She currently runs groceries store along with Guest House.

Awards and Recognitions

CRT/N's efforts have been recognized in international area through following rewards:

- CRT/N has been awarded with "The Adaptation at Scale Prize" on 23rd May 2019 in recognition for the promotion of innovative and unique Hydraulic Ram Pump technology.
- Hydraulic Ram Pump Project was awarded with "Protsahan (Encouragement) Prize by UKaid DFID supported Adaption at Scale Prize, Ideas to Impact-Rewarding Innovative Climate Change Adaption in Nepal, 2016
- IWM Programme was selected as final nominee for Energy Globe Award 2010
- The Ashden Awards for Sustainable Energy 2007 to IWM Programme (Ashden Trust for Sustainable Energy, UK)
- Recognition for Best Practice from Wuppertal Institute for Climate, Environment and Energy (WISION) in 2004, Germany on "Women in Energy and Water Management Project" supported by UNEP/ICIMOD.
- Consolation prize on the Ashden Awards for Sustainable Energy 2002 to IWM Project (Ashden Trust for Sustainable Energy, UK)
- Green Energy Letter of National Felicitation 2001 to IWM Project (Green Energy Mission, Nepal)
- IWM Project registered as Projects around the World at Expo 2000 Hanover, Germany.



Centre for Rural Technology, Nepal (CRT/N)

Bhanimandal, Lalitpur, GPO Box: 3628, Kathmandu

Phone: 5547627/ 5530071 | Email: info@crtnepal.org | Website: www.crtnepal.org

Blog: <http://advocacy-wee-nepal.blogspot.com/> Facebook: www.facebook.com/crtnepalorg