# Annual Progress Report 2021-2022 (2078/079)





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### ACRONYMS

AFRC AGGS ASRH BCTN CAFI CBOS CCMA CFUGS CLTS CMC COVID CUG DACS DAFRC DCFLCEN DNPWC DWS	Agro Forest Resource Centre Adolescent Girls Groups Adolescent Sexual and Reproductive Health Brahmin, Chhetri, Thakuri and Newar Community led Agro Forestry Initiatives Community-Based Organizations Climate Change Mitigation and Adaptation Community Forest Users Groups Community Led Total Sanitation Centre for Mental Health and Counselling Corona Virus Disease Closed User Group Differently Abled Children Deusa Agro Forest Resource Centre District Chapter Federation of Large Cardamom Entrepreneurs Nepal Department of National Park and Wildlife Conservation Drinking Water Supply
ECAs	Extra Curricular Activities
ERRP	Earthquake Relief, Rehabilitation Program
FFS FTG	Farmers Field School Fair Trade Group
GCR	Girls Comfort Room
GG	Global Grants
GWMS	Grey Water Management System
HHs	Households
IAP	Indoor Air pollution
ICSs	Improved Cooking Stoves
ICT4D	Information and Communications Technologies for Development
IRD	Integrated Rural Development
JTA	Junior Technical Assistant
MBNP	Makalu Barun National Park
MD-AFRC	Mandan Deupur Agro-Forest Resource Center
MDM	Mandandeupur Municipality
MDRM	Mapya Dudhkoshi Rural Municipality
NHB	Nepalhilfe Bonn
NRM	Natural Resource Management
PHCC	Primary Health Care Centre
PPMs	Preventive and Protective Measures
PTA	Parent's Teacher Association
RCC	Reinforced Cement Concrete
RCC RHSP	Rotary Community Corps
RM	Rural Health Support Project
RVTs	Rural Municipality Reservoirs Tanks
S4H	Spices for Health
SAAF-MAN	Sustainable Agro Forest Resource Centers in Mountain Areas of Nepal
SDG	Sustainable Development Goals
SEE	Secondary Education Examination
SGS	Self-Generated Scholarship
SMC	School Management Committee
SRE	Sex and Relationship Education
SRH	Sexual and Reproductive Health

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#### Message from the Chairperson



It gives me immense pleasure to share with you the Annual Report of EcoHimal Nepal for the Fiscal Year 2078/79 (2021/22). EcoHimal Nepal's primary goal is to help rural communities through utilization of local resources that is environmentally sustainable, and we remain committed in enhancing the sustainability of natural resources and empower the local communities to improve their livelihood. I am pleased to inform you that our vision and legacy of "Sustainable Development through Community Empowerment" continues in successfully implementing numerous initiatives. We remain vigilant on our organizational vision and approach. Furthermore, we will continue to assess opportunities to acquire projects that can promote sustainable community

development practices, which significantly contributes toward improving livelihood of the disadvantaged people Nepal. These people shall benefit and live a dignified life through the implementation of capacity building and income generating initiatives.

Finally, on behalf of EcoHimal Nepal, I would like to take this opportunity to thank all our donors, well-wishers and the local communities for their valuable support and cooperation. I also express sincere thanks to the fellow Board Members for their encouragement, and suggestions in making us better throughout the process. A special thanks to our staff members as well for their diligence, dedication, and commitment toward their responsibilities. We could not have done it without you all.

I look forward to the years ahead with certainty and confidence!

Thank you!

Ang Phinjo Sherpa The Chairperson EcoHimal Nepal

#### Message from the Executive Director



It is a great privilege to present the annual report of EcoHimal Nepal to you all. Despite COVID -19 pandemic, we remained committed to serve the rural communities in hilly and mountain districts of Nepal. We are delighted to share our comprehensive achievements, key activities, accomplishments of targeted plans and their impact on the local communities. This Annual Report gives a glimpse of what EcoHimal Nepal accomplished in terms of meeting the goals, improvements brought about in the community, and how programs from grassroots level to national level operate.

The EcoHimal Nepal family remains active in field and at central level making the projects accessible and alive. At

field level, staff members mobilized themselves to implement the project activities with grassroots attachment. We are an accountable, transparent and goal-oriented organization, wholeheartedly working on community-based project intervention with low overhead and administrative cost in central as well as field offices. Our practice is an exemplary one as the organization mobilizes available fund directly to the target population. It has been implementing the programs/projects with the purpose of improving the living standard of rural people without disturbing the ecology, environment, social and cultural structures. The impacts of all programs highlighted in this report are the result of our joint efforts.

I would like to express gratitude to our Board of Directors, Advisory Committee Members and General Members for their commitment, continued support and guidance throughout the execution of our programs/projects and for keeping the organization vibrant. On behalf of EcoHimal Nepal, my sincere thanks go to the Government of Nepal, local governments, Social Welfare Council and our generous donors for their huge financial support and trust towards the organization. I also thank our diligent staffs for their dedicated services, and our grassroots partners for working in the most remote regions with excellence.

We commit to continue this fruitful partnership and reach the unreached addressing furthermore significant emerging issues in the future.

Thank you all.

Narayan Dhakal Executive Director EcoHimal Nepal

#### **Organizational Background**

EcoHimal Nepal is a national non-government organization founded in 2009, registered in the District Administration Office, Kathmandu, with the aim of achieving sustainable development through community empowerment in rural areas. It has intensive experience in livelihood enhancement of unreached and marginalized communities through sustainable development and community capacity-building.

The organization is committed to improving the living standard of people living in rural areas of Nepal without disturbing its ecology, environment, social and cultural structure by working with grassroots initiatives and in-depth involvement with community groups. EcoHimal Nepal has and is implementing a number of projects in remote regions with the focus on agriculture and livestock development, natural resources management, bio-diversity conservation, climate change, eco-tourism development, infrastructure development, health, hygiene, sanitation, gender sensitivity, poverty reduction, education and institutional strengthening. "Participation - Ownership - Sustainability" is the drive of the organization. Working with local grass root community-based organizations (CBOs) and decent knowledge of rural communities is the strength in project implementation.

Vision	EcoHimal Nepal envisions a prosperous, peaceful, empowered, and self-sustaining Nepalese society free of poverty, injustice, or social discrimination.
Mission	Achieve sustainable development through community empowerment without disturbing cultural and social harmony in mountain and hilly areas by improving local livelihood, ensuring management and access to natural resources, and reducing vulnerabilities of mountain communities to environmental disasters.
Goal	To improve the living standard of rural people with special emphasis on women, children, and socially marginalized communities through integrated sustainable development initiatives.

#### The specific objectives:

- Conduct activities for natural resource management, biodiversity conservation, climate change adaptation, ecotourism, forestry, watershed management and alternative energy promotion
- Support to create a culture and society where children attain the rights to protection, participation, and development
- Support income-generating, skill development, enterprise, and marketing
- Conduct community capacity development, institutional strengthening, and basic physical infrastructure development
- Create positive intervention on agriculture, livestock, livelihood, and food security
- Increase awareness on health, hygiene, and sanitation
- Minimize gender inequalities through women's empowerment and children welfare program
- Assist in mitigating social and political conflict to promote social inclusion
- Advocate for policy level intervention.

#### Thematic areas of intervention:

- Climate Change, Biodiversity Conservation and Natural Resource Management
- Livelihood, Green Production, Food Security, Institutional Development, Capacity Building, Women Empowerment
- Health, Water, Sanitation and Hygiene (WASH) and Nutrition
- Education and Awareness

#### Projects implemented in 2021-022:

District	Municipalities/Rural Municipalities (RM)	Projects	Donor organizations	
Sindhupalchowk	Bhotekoshi RM	Water, Sanitation and Hygiene (WASH)	EcoHimal Austria	
		Community led Agro Forestry Initiatives (CAFI)	Hamashield Foundation via EcoHimal Austria,	
		Dugunagadi Community Sanitary Project	Rotary International Global grant via RC Durbarmarg	
Sankhuwasava	Bhotkhola RM	Bhotkhola Drinking Water Project- Phase II	EcoHimal Südtirol-AltoAdige, Italy	
Solukhumbu	Thulung Dudhkoshi and Mapya Dudhakoshi RM	Climate Change Adaptation Programme (Integrated AFRC and STC Project)	The Glacier Trust, UK	
	Mahakulung RM	Integrated Rural Development (IRD) Project & Drinking Water Construction Project	Nepal Hilfe Bonn, Germany	
	Mahakulung RM	Rural Health Support Project (RHSP)	Pharmacists without Boarders	
	Mandandeupur Municipality	Rural Education Support Project-PHASE II	Kindermissionswerk, Germany	
	(MDM)	Reconstruction of School Buildings	Kindermissionswerk, Germany	
Kavrepalanchowk	MDM	Mandandeupur Agroforestry Resource Centre- Phase I and Phase II	The Glacier Trust (TGT)	
	Bhumlu RM	School Building Reconstruction in Janajagaran Basic School	EcoHimal Austria and ERRP, RI District 3292	
Khotang	Aaiselukharka and Rawabesi RMs	Sustainable Agro Forest Resource Centers in Mountain Areas of Nepal (SAAF-MAN)	EcoHimal Austria	
Lamjung	Marsyangdi RM			
Myagdi	Beni Municipality	Spice 4 Health-Phase I	Lufthansa Help Alliance via EcoHimal Austria	
Solukhumbu	Thulung Dudhkoshi RM			
Kalikot	Khandachakra Municipality and Mahawai RM	Spices 4 Health – Phase II	Lufthansa Help Alliance via EcoHimal Austria	
Lamjung	Marsyangdi RM			
Kathmandu	Kathmandu	EcoHimal Academy	EcoHimal Austria	
Dolpa	Thulibheri Municipality	Construction of School and Hostel Buildings of Disabled Resources Class School	EcoHimal Austria & Forum for the Welfare of Himalayan Children Nepal	
Achham	Turmakhand and Dhakari RMs	Access of School Going Adolescent Girls on SRH Education	EcoHimal Austria	
Solukhumbhu	Solu Dudhkunda Municipality and Sotang RM	Health Equipment Support Project in Solukhumbu District Hospital and Sotang Primary Health Care Centre	Siemens Caring Hands e.V. via Nepalhilfe Bonn e.V.	
Khotang	Aaiselukharka and Rawabesi RMs	Relief to Rural Children in COVID-19 Pandemic in Khotang District of Nepal	Kindermissionswerk, Germany	

#### A. Development Projects

#### 1. Duguna WASH Project

The Duguna water and sanitation project in Duguna village, ward no 3 of Bhotekoshi Rural Municipality, Sindhupalchowk completed successfully achieving the planned target and results. It was implemented in the financial support of Swiss Foundation via Eco Himal Austria in close coordination with the local government. The project has ensured an easy access to safe drinking water and basic WASH facilities. After completion, the project has been handed over on 3<sup>rd</sup> July 2022 to the local government and its user committees for further management and distribution of water.

The project ensured regular availability and sustainable management of water and sanitation for all population of Duguna Gadi (Sustainable Development Goals –SDG (2016-2030)-6). Access to adequate and equitable sanitation and hygiene for targeted population has been safeguarded paying special attention to the needs of women and girls in such rural areas applying gender sensitive sanitation approach. Integrated actions such as construction of drinking water systems integrating improved sanitation facilities (toilets with bathroom, hand washing with soap nearby toilets and in kitchen, grey water management and solid waste pits), along with sanitation and hygiene education and nutrition guaranteed the basic needs and rights of the earthquake affected 233 households for transformation of rural livelihood. As a result, all households are happy and practicing good hygiene behaviors for healthier families.

100% households of project area have access to sustainable safe drinking water supply nearby their households' constructing structures and taps. With "One House, One Tap" policy, the project installed 239 individual and 12 public water taps at community level. Local communities are very happy with improved and equitable access to sufficient, physically accessible, and affordable water for personal and domestic uses. It contributes to the productive rural livelihood in Duguna village. Availability of water in the village facilitated private houses reconstruction and bio-gas plants installation. Consequently, Dwarikas Foundation accomplished its project of private houses reconstruction in time. In addition, accessibility of adequate water supported in agriculture (vegetables) production, contributing nutrition and human health. Even, income generating opportunities and local gainful employment created promoting vegetables and cash crops cultivation and surplus sale. Likewise, interests of local people amplified for livestock production and number of animals has been increased. Engagement of local people in productive rural livelihood initiatives has been improved.

Installation of Grey Water Management System (GWMS) in 212 private households and 12 public taps which is totally new concept in rural Nepal, empowered the local households for maximum use of water reducing need of fresh water as sustainable earth ideology. The limited amount of water available for agriculture necessitates has been complemented by grey water as an alternate option. It resulted better and managed pathways at local level. All the households are skilled to recycle grey water and use it for irrigation in the kitchen garden.

The local people have been aware on importance of systemic supply and consumption of drinking water. The first time ever water use reading meter installation and grey water treatment system at each household has enhanced the dignified lives and misuse of water keeping open/running tape is controlled. Institutional capacity and users groups are at place for drinking water supply system operation and maintenance in future.

Construction and use of 220 private latrines and 10 public toilets with 100% hand washing with soap nearby latrines and in kitchen has improved behavioural practices of local people. Community Led Total Sanitation (CLTS) approach became beneficial for holistic change in sanitation and hygiene behaviours. The local households are motivated to make their village model clean and organized village and their perception towards use of improved sanitation facilities is changed. In addition, segregation of bio-degradable and non-bio-degradable waste produced from kitchens have been initiated at 182 households installing waste management

pits and rest households are constructing pits to utilize their acquired knowledge on waste management in leadership of local women groups.

Rainwater flow during summer from houses roof and absence of drainage system in the dense village Chyumi was endangering the village itself and downward villages. The project constructed a systematic rainwater management structure installing a drainage system and ensured the protection of 38 residing households from landslides. At present, the hamlet is clean, and the pathways are free of sludge. Consequently, 198 people in the hamlet are sleeping without any fear of landslide.

The project supplemented RI Project – GG1758528, installed 10 improved iron-fabricated cattle sheds to 10 poor families from occupational castes in BK tole. They were not in condition to construct cattle sheds to rear the improved breeds of 10 calf buffalo supported by RI project and were keeping them under open sky. In addition, 29 animal rearing households have been capable to manage their cattle sheds improvements considering animals' good health, comfort and protection from the extreme weather.

The project integrated wash in school (WinS) as project component to build on children's awareness of better sanitation and hygiene practices in Shree Gupteshwory Basic School. In line with WinS principles, the project promoted better practices among 43 school children. Ownership of school in hygiene and sanitation promotion increased by installing safe drinking water and sanitation facilities.

Local people especially women attended the trainings sessions on sanitation and hygiene education. 907 local people empowered and skilled for improved sanitation and hygiene practices through 70 different trainings. Improving behavior change education led to increased demand for improved WASH facilities and practices. Consequently, surroundings of their houses, inside kitchens are clean.

The project formed and legalized 6 women groups at local government and institutionalized them as WASH promoters. All the members of 6 women groups trained as local resource persons in sanitation and hygiene and are educating the local people in improved sanitation and hygiene practices. Their involvement, leadership and decision making is enabling improvements in local development. For their further intervention, revolving fund in all women groups established.

With the intervention of EcoHimal's WASH project, DugunaGadi village is transformed as DREAM village. The local communities are satisfied and pleased with the project deliveries. Thus, the project succeeded to fulfil their dreams through inclusive and holistic development.

#### 2. Community led Agro Forestry Initiatives (CAFI) for Mountain Resilience and Sustainable Livelihood in Duguna Gadi Village, Bhotekoshi Rural Municipality, Sindhupalchowk District

The project is working to improve rural resilience of mountain families through community led agroforestry initiatives in Duguna village, ward no 3 of Bhotekoshi Rural Municipality, Sindhupalchowk. All 232 farming families have started to adopt crop-diverse multi-layer farming systems to improve their livelihood, they will be food self-sufficient. Mostly local women and youths are in the steps of self-employed in sustainable agro-product related activities. Local 6 women groups have been institutionalized to serve local people, improving access to credit, investment, and markets for agricultural produce. Establishment of seedlings nurseries are in process, will deliver agricultural services and products to the farmers, including inputs and seedlings. 1,305 high value tree crops seedlings planted by the local farmers and 7,105 fodders and forages seedlings cultivated.

The adoption of crop-diverse multi-layer farming systems is motivating local farmers towards crop diversification that will improve food security and nutrition and support to afforestation

and environmental care. The local farmers are optimistic to the increase in incomes because number of new tree crops are introduced in the multi-layer system by the project after fruit and nut tree maturation.

Women groups institutionalized and have been trained. Their involvement, leadership and decision making is enabling improvements in local development. For their further intervention, revolving fund in all women groups established. One day pickle production training organized and enabled 60 local women and youths (51 female and 9 male) to kick off entrepreneurship culture. They have obtained skills to be local entrepreneurs. A linkage for marketing the consumer products in Kathmandu has been established.

Bio-intensive plantation techniques introduced to encourage layer cropping, till the date 157 farmers from different cluster have been skilled on bio-intensive pits preparation and plantation techniques applying farmers field practical demonstration approach. 6 livestock farmer groups are at place to promote livestock farming and to implement the project activities in line with the project objectives.

The focus of the project - transformation of subsistence farming into improved and commercialized multi-layer farming and on women's empowerment in agriculture- is on the way to be achieved. Lead farmers have been resourced and skilled to continue commercial layer cropping.

The veterinary and agriculture technicians are equipped with necessary tools and medicines to provide services in the local community. 21 households have received the treatment services already, 32 animals treated and are satisfied with the door-to-door services provisions from the project. To date livestock technician provided treatments to 20 local animals of 13 farmers. Similarly, agriculture technician is promoting integrated pest management and organic pest preparation and treatment of crops naturally visiting all households. The success in the treatment of many animals and saving lives and increasing the community's courage on cattle management, layer farming, influence for cattle insurance and farmers' awareness on improved farming and land use is remarkable.

#### 3. Duguna Gadi Community Sanitary Project- GG1758528

EcoHimal Nepal, as the cooperating partner of Rotary Club of Durbarmarg, is implementing Duguna Gadi Community Sanitary Project. In close coordination with local government, the project is promoting 60 biogas digester as eco-friendly alternative energy integrating agriculture, sanitation & hygiene and livestock improvement complementing an ecological cycle.

Access of all local population to improved sanitation facilities increased for holistic change in sanitation and hygiene behaviours. Adaptation of improved sanitation practices is observed at community level. The local households initiated to use latrines as well as bring positive changes in their hygiene and sanitation behaviour. Their perception towards building and using improved sanitation facilities has been changed. In addition, all households installed hand wash facilities and are adopting hand washing with soap. Trained and educated 113 local households are practicing improved sanitation and hygiene behaviours. Surroundings of their houses, inside kitchens are clean. Segregation of bio-degradable and non-bio-degradable waste produced from kitchens have been initiated at 161 households installing waste management pits and rest households are constructing pits to utilize their acquired knowledge on waste management.

The installed 9 biogas plants in 1st phase produced gas and are in operation. 12 out of 20 biogas plants constructed in 2nd phase also are in operation. Rest 8 households are feeding dung in the digesters regularly. In addition, construction of 4 domes completed. The users are very satisfied and very optimistic towards sustainable operation. The biogas plants are providing direct benefits especially to the local women. It has decreased in the workload of rural women, reducing time and labour required for the gathering of fuel for cooking and cooking itself. The use of biogas has helped significantly improve the indoor air quality of homes employing biogas stoves. In addition, installation of biogas plants has resulted in better management and disposal of animal dung and human excrement. Employing biogas plants has helped improve the sanitary conditions in the rural homes.

In addition, the local community people have accepted the biogas as alternative energy and its associated innovative initiatives i.e. 29 greenhouses, bio-intensive cultivation, kitchen garden, use of manure etc. The biogas beneficiary's households are very pleased with the technology and its integration with land use, manure use, agriculture production and income generation. The technology is ever first in this locality and local community tested, demonstrated and its feasibility is ascertained. Their happiness and contentment sharing in the community is empowering to other members and also it indicates the acceptance of the holistic technology by the local community.

The households established kitchen gardens and are capable enough in its management and better production. Green vegetable production and consumption is continued by 158 households that is helpful to fulfil nutrition and income for the surplus sale. Till date, 10.12 tons of vegetables were produced, 6.65 tons self-consumed, and 3.48 tons sold. In total NPR 187,290 income generated by the local farmers.

The local community are adopting bio-intensive cultivation techniques. The perception and behavioural practices of cultivation and consumption have been changed. They have green production and consuming fresh vegetables. Now community focus has been diverted towards long-term income generating opportunities. Plantation of different fruits, nuts, fodder, forage and forest trees are well in progress. Till date, 38,498 seedlings (tree crops, fodders and forages) are growing well. Promotion of plantation for land rehabilitation and stabilization and adaptation of tree cropping is supporting to mitigate vulnerability in regards of climate change. It supported to destabilize the land structure that will prevent landslides and rehabilitate landslides-affected area and finally DugunaGadi village will be a more safe and greener.

192 local households from 5 hamlets have been educated on improved sanitation hygiene and household waste management. They have been aware on hand washing, personal hygiene, kitchen hygiene, environmental sanitation and household waste segregation and management. All the trainees have been skilled on hand 6 steps of hand wash techniques. Likewise, they were also made aware on environmental sanitation (waste management methods – segregation of bio-degradable and non-bio-degradable waste, 3 R's (Reduce, Reuse and Recycle). 192 households skilled on proper management of household waste. Households were skilled during the trainings and also oriented via home visits. Out of 238 households, 161 households completed construction of household waste management pits and are using with segregation of wastes as per its nature.

In addition, 38 HHs trained on compost manure preparation and 41 HHs capacitated on liquid manure preparation. A WASH committee formed in a local school – Shree Gupteshwari Basic School, formed WASH committee members and teachers have been trained on Wash in School (WinS). Likewise, Rotary Community Corps (RCC) has been formed as local partner of the project to mobilize the local community in development initiatives.

The poor families of occupational castes have been capacitated on livestock management and supported with 10 buffalo calves and 5 he-goats in 5 hamlets. Integration of eco-friendly alternative energy, sanitation/hygiene, agriculture and livestock and sustainable livelihood through farm activities is building the village as a model. The dream of the project - sustainable ecology with livelihood options in Duguna village is proceeding towards its achievements. It will support on transforming the village as self-sufficient and self-reliant.

#### 4. Bhotkhola Drinking Water Project- Phase II

After successful completion of 1<sup>st</sup> phase of drinking water project in Bhotkhola Rural Municipality of Sankhuwasava district by providing safe drinking water to 116 local indigenous families, 2<sup>nd</sup> phase has been started to benefit more 225 indigenous families. These families will have water taps nearby their houses focusing "one tap one house".

The project aims to improve health situation of local population of rural mountain areas of Nepal by enhancing access of safe drinking water. The project has envisaged attaining easy safe drinking water availability and accessibility. The purpose to fulfil the basic needs and ensure rights of access of the poorest and excluded households to safe drinking water for improved sanitation, hygiene and nutrition will be attained, finally support in transformation of rural livelihood. It unlocks potential by helping children stay healthy.

The strategy to achieve the project objective is to scale up the demand driven and participatory approach to rural water supply and sanitation schemes. This approach involves local CBOs and local communities to plan, design, implement, operate and maintain their own schemes.

The project is being implemented in close cooperation with local government and Makalu Barun National Park (MBNP). The project has been incorporated in local government plan and budgetary provisions. The local government has committed 50% of the fund and has allocated budget in their annual programmes and plan 2079/080. Agreement with Bhotkhola Rural Municipality was carried out as mandatory regulation of Social Welfare Council (SWC). The necessary documentation done, and the project has been approved from SWC.

## 5. Climate Change Adaptation Programme (Integrated Deusa Agro-Forest Resource Centre and STC Programme)

EcoHimal Nepal is pioneer in this concept and its implementation in its form. The project is in the 3<sup>rd</sup> phase of implementation starting from the 2014. The initial support of the project was for the establishment, introduction of concept and demonstration. 2<sup>nd</sup> phase focused more on sustainable tree cropping, organic certification and income focused activities following great adaptation procedure. The 3<sup>rd</sup> phase is more in institutionalization, market linkage and justifiable handing over. The project is supported by The Glacier Trust UK right from its inception. Additional support from the local government is continued from its establishment till today, which is vital for the further sustaining.

Crops diversification and transformation of local community towards tree cropping to increase productivity is realized and visible. The subsistence farming is in the direction of alternation and diversified towards high value low labour-intensive crops. The success and results of tree crops with starting of production in less than 5 years of cultivation has motivated farmers for tree crops promotion in their farmlands. The famers have considered it as best option to create self-employment and income generating opportunities. Increase in yields with tree crops and in interest of local people towards adaptation of tree cropping of local farmers has marked a green indication towards shaping of sustainable local livelihoods.

In addition, organized marketing of the produces (especially coffee) continued in coordination with potential agro-entrepreneurs in Kathmandu. Cooperative institutionalization at local level for organized marketing of the agro-forest products has set up organized value chain based marketing. Furthermore, incorporation of the project modality and approach by the local government for agriculture development of the area safeguards sustainable local livelihoods through the promotion of tree cropping.

Summer and winter plantation, technical know-how transfer focusing bio-intensive plantation technologies and seedlings production and distribution encouraged the farmers towards crop diversification and multi-layer farming. The programme has covered all 9 wards of Thulung Dudhkoshi Rural Municipality (TDRM) and 2 wards (ward no 6 & 8) of Mapya Dudhkoshi Rural Municipality (MDRM). Education, planting materials and resources support has motivated and empowered the local farmers towards climate smart agriculture promotion.

Production and distribution of seedlings from DAFRC continued and access of local farmers on healthy tree crops and vegetables seedlings increased. In 2021/022, 26,055 tree crops seedlings produced at nurseries in DAFRC and distributed to the local farmers. In addition, seedlings and vegetables production and distribution in satellite nurseries continued. DAFRC generated income of 1,421,480. In summer plantation, 9,965 seedlings (3,767 high value grafted tree crops seedlings and 6,200 forages) distributed to the farmers. Provisions in free of cost to 255 local farming families has been done in coordination with DAFRC. Furthermore, 37 kg vegetable seeds distributed to seven satellite nurseries, seedlings production already started establishing bio-intensive beds in the nurseries.

In addition, total 3,360 seedlings planted in cooperation with local government. Likewise, local government- TDRM has subsidized 2 million Nepalese rupees to establish cold store in ownership of DAFRC. As well, 0.1 million Nepalese rupees has been subsidized to DAFRC by Ward office, ward no 8 of TDRM for forest seedlings production. Five nurseries are producing seedlings and vegetables and generating income from the sale. Rest three nurseries have been revitalized and supported with seeds, seedlings and agri-materials to make them functional and provide regular services to the farmers. Weeding and manuring of Hazelnut orchard have been done and intercropping is promoted to utilise the land. In total 160 plants are active with average height of 8.01 feet.

In total 17 trainings on various aspects of tree cropping conducted and trained 307 local farmers that comprises 41.78% female. Out of 17, four training were conducted by external specialists on fruits training, grafting and pruning, cardamom farming technologies, coffee

production, processing and marketing and environment conservation and climate change adaptation.

Increased trends of tree cropping by local farmers in their land and increased coverage of tree crops in the bare land has assured the income generating and local employment opportunities at local level. Local small holders have adopted crop diversification (layer cropping, intercropping etc.) and environment friendly farming practices. As a result, the local farmers have been generating production and income form multi-cropping in the same land. In addition, farming system is improved and focused on high value and long-term benefiting crops. Increased interest of the local community towards shifting from subsistence to tree crops farming has directed to raise the families out of poverty. Majority of farmers have been capable to adopt high value tree and layer crop production with regular short, medium and long term income. Tree crop coverage has been increased and secures improved livelihood of local farmers.

#### 6. Integrated Rural Development (IRD) Project & Drinking Water Construction Project

The project since June 2017 to June 2021 in financial support of Nepalhilfe Bonn, Germany has succeeded to change the perception and behaviour of local population in Khiraule village. Integrated Rural Development was the soul of the project design and included as much as possible components such as alternative energy, improved cook stove, safe drinking water, green consumption, tree crop, education, breed improvement, women group support etc. and implemented keeping the environment and climate change in a central focus. The project has since then created structures, skills, resources and technologies to improve the livelihood of local households in sustainable way. Fiscal Year 2021/022 focused on drinking water supply and internet facilities installation in Khiraule village.

#### DWS

The project provided safe drinking water to 86 local households covering 451 population-65.21% Sherpa and 34.79% Rai in financial support of Federal Ministry for Economic Cooperation and Development, The Schmitz Foundation and Nepalhilfe Bonn e.V. Germany. 6 settlements of indigenous people benefited with easy access of safe drinking water. Local communities have improved access to sustainable water supply and institutional capacity is at place for drinking water supply system operation and maintenance in future. In line with the local government's policy the project installed 85 individual and 4 public water taps at community level.

Management of drinking water in the village was miserable, there was no single water tap except public taps in basic school. 100% households were consuming water from open sources (spring, stream, cannel and natural head well) that were contaminated and not really safe for drinking. At present, all 86 households are consuming filtered and safe drinking water from the taps nearby their houses. Availability and accessibility of drinking water at their door steps has improved sanitation and hygiene situation in each household. Local people are in better position to improve their life style and engage in other live hood activities. Basic need of drinking water fulfilled, rights of people from Remote Mountain areas to safe drinking water ensured, thus, rural livelihood transformed towards prosperous. Surplus clean water and managed grey water is used in kitchen gardening, supporting in better livelihood.

The significant changes are visible in the kitchens, houses and the pathways. Kitchen are clean, even the local people have improved their sanitation and hygiene practices. The pathways in the villages are free of sludge caused by muddled water by the villagers. GWMS has empowered the local households for maximum use of water reducing need of fresh water as sustainable earth technology. It resulted better and managed pathways. Likewise, as per the responses of local people during focused group discussion, the prevalence of diseases especially common cold reduced. The requirement of boiling water for safe drinking has been solved, people can drink water from tap without any hesitations and psychological apprehension.

Access on safe drinking water supply facilities at household level is effective. 100% population has easy access on safe drinking water throughout the year (less than 5 minutes walking distance). In addition, sustainable operation and maintenance system of drinking water facilities developed with formulation and endorsement of maintenance plan, availability of local youths trained on drinking water maintenance and maintenance fund establishment. The users committee is institutionally and financially sustained for sustainable operation and maintenance.

#### Internet facilities/Services installation and Operation

Reliable internet facilities installed in remote Khiraule village. Tower installed and power back up system manged. Internet services has been operational in Khiraule basic school, heath clinic and 6 local lodges. Installation of internet facilities in 12 local houses is on-going. Installation of internet has brought powerful benefits to rural mountain communities, allowed them to communicate easily and cheaply with other people in the world and to access all kinds of information, products and services on the internet. The services narrowed down the digital gap especially in 3 sectors: communication, health and education. The basic school has already started teaching and learning activities with the help of internet using the laptops provided by NHB- by creating tele-teaching and learning opportunities. The initiative increased communication facilities in rural areas by making broadband Internet available for voice and text communication. In addition, it has connected rural health clinic to the digital medical information sources in order to provide medical assistance. It is serving as a means for the emergency cases and also established connection between the family members in the village and outside of the village.

#### 7. Rural Health Support Project (RHSP)

The objective of the project is to provide increased and more equitable access to quality health services, and better management of public health situation in Mahakulung rural municipality of Solukhumbu district. Providing required essential medicines in the local health facilities in cooperation with local government is assisting the local health instituitons in health services provisons.

Project approval obtained from SWC and started to implement the project in cooperation with local government, especially the health section. A detailed need assessment was done and findings from the assessment have been archived as the roadmap of the project towards delivering maximum benefits to the local population. 6 local health institutions have been supported with necessary medicines – in 1<sup>st</sup> lot, 18 types of medicines in Cheskam Health Post, 9 types of medicines in Tumau Basic Health Centre, 10 types of medicines in 10 Pelmang Basic Health Centre, 8 types of medicines in Khiraule Community Health Centre, 19 types of medicines in Gudel Health Post and 8 types of medicines in Mahakulung Primary Hospital. Supply and distribution of the medicines in line with the request from the local government was carried out.

In addition, basic health equipment supported to the local health institutions via local government. Local government recommended the health equipment need and the project supplied through the local government to the specific health institutions. The project management is conducting regular follow up and monitoring of the services delivered by the local health facilities.

Capacity building of local health personnel is prioritized to increase quality in health services delivery. As per the findings and request from local government, to capacitate the local services providers in quality health services delivery, 7 days training on basic computer skills conducted to the 7 responsible personnel from 6 local health institutions. Computer skills were defined as the use of Microsoft Word, Microsoft Excel, Microsoft PowerPoint, and statistical software in their work activities. Enhanced computer skills of health workers in project area facilitated them with increased use of information technology in service delivery. Their capacities were assessed on basic computer skills and identified specific deficiencies that prioritized to provide training to help them function effectively. At present, they are competent on basic computer skills and information technology and their skills is supporting for efficient health delivery.

To empower community participation, capacity building of local health facilities operation and management committees is planned from 31<sup>st</sup> August to 2<sup>nd</sup> September, 2022. The training will be facilitated by the specialist from National Health Training Centre, Teku, Kathmandu.

#### 8. Post-Earthquake Rural Education Support Project

The project aims to establish qualitative, child friendly and gender sensitive learning environment at schools. The project intend to reduce the school irregularities of girls and dropouts of students providing means and technical support. Adolescent Sexual and Reproductive Health (ASRH), scholarship, capacity building in different aspect of teachers, students, School Management Committee (SMC), Parents Teachers Association (PTA), Sex and Relationship Education (SRE), girl's safety and radio learning are the major activities in implementation.

To increase enrolment rates of the children from poor family background and to reduce dropout, 258 children (156 girls and 102 boys) supported with Self-Generated Scholarship (SGS). Out of them, 56.4% are BCTN<sup>1</sup>, 32.9% are Janajatis and 10.7% are from occupational castes. 50 children (35 female and 15 male) have paid back their SGS seed money to schools. 65 SGS benefited children (27.19%) have generated capital income. Out of them, 35 have generated cash income from sale of products. 100% of cash income generated SGS benefited children their academic requirements. Children started utilizing income from scholarship in their education resulting reducing school dropout and increasing trend of enrolment.

1, 742 (72.10%) adolescent have been capacitated to explain ASRH issues. The average ASRH knowledge of adolescents is 87.01. In addition, 134 adolescents from Phase I project area have been refreshed with ASRH counselling. Leadership capacities of adolescent children is being enhanced working directly with the girls improving their decision-making ability. Adolescent Girls Groups (AGGs) have been reformed and strengthened in all targeted schools. Adolescent children are provided with up to date knowledge, trainings and orientations regarding the current issues of SRH.

Phase wise, AGG MEETs organized to enable the adolescents in discussion, sharing and dissemination of their knowledge among each other. In 1<sup>st</sup> phase, 11 MEETs organized to educate 340 adolescents, where 299 adolescents aware on ASRH measures in 2<sup>nd</sup> phase organizing more 11 MEETs.

Menstruation taboos often disturbs girls schooling at least for 4 to 5 days. As girls security space, resting room (Girls Comfort Room) concept developed and established in 11 basic and secondary schools. The rooms are promoted as secure space for girls during their menstruation period having facilities of hygiene and sanitation, changing, resting, learning etc. These rooms are under the jurisdictions of Adolescent Girls Group where they act as an ambassador to support their pears and spread awareness in menstrual hygiene practice among women and girls of their community.

"Children inspire mother" Adolescence girls are empowered to involve mothers in the sexual and reproductive health awareness issues together with project staff. Total 720 young women have been aware on SRH. They are literate on consequences of child marriage, early pregnancy, menstrual hygiene, on SRH rights and safe motherhood.

440 (100% of identified psychosocially affected) children received psychosocial counselling. In addition, 262 stakeholders (18 head teachers, 155 focal teachers, 37 PTA members and 52 SMC members) trained as resource persons to counsel their school children. Additionally, 37 identified psychosocially affected female students of Brahmayani SS counselled psychosocially in collaboration of CMC Nepal. Furthermore, a psychosocial club named as "Bidhyarthi Sanga Mann Ka Kura<sup>2</sup>" is formed comprising 9 students in Brahmayani SS and is actively involved in organizing ECAs related to psychosocial health and activities related to

<sup>&</sup>lt;sup>1</sup> Brahmin, Chhetri, Thakuri and Newar

<sup>&</sup>lt;sup>2</sup> Soul sharing among students

mental health. Moreover, more affected 115 students from 5 schools oriented on stress management, coping mechanism and psychosocial health issues.

2 focal teachers of each school for ASRH education have been mobilized as resource persons for ownership and sustainability of ASRH focused activities and achievements in targeted school. 201 (18 head teachers, 94 focal teachers, 37 PTA members and 52 SMC members) trained as resource persons for psychosocial counselling. The trained resource persons have identified the children suffering from stress and trauma and are helping them to revive the enthusiasm and energy for self-mobilization.

#### 9. School Buildings Reconstruction in Kavrepalanchok District

To obtain quality education in a child friendly and safe school environment is the basic right of a child. Construction of 3 seismic resilient school buildings (2 story 4 roomed RCC building) in Dedithumka Secondary School, Mahadevsthan, Tapeshwar Secondary School and Dwarpaleshwar Secondary School accomplished. Unlike previous unsafe situation, School children are studying in the safe learning environment without any complications.

The school children are happy and positive as they are studying in safe classrooms. The school management and local community are thankful to EcoHimal and its donor for constructed buildings. Two school buildings (Dedithumka and Dwarpaleshwor Secondary Schools) have been formally handed over to the respective school management committees in coordination with local government and in presence of the honorable Agriculture and Livestock Development Minister Mr. Basundhara Humagain of Bagmati Province as chief guest in both ceremonies. Public hearing of the construction works, and its expenses was carried out during the handing over ceremonies in both schools. Tapeshwor Secondary School Building handing over is postponed due to various circumstances. The school is already in operation and rooms are used for teaching and learning.

Damaged school infrastructure was a major problem and need to have safe restoration of those was obligatory. The psychological fear of the children was at risk because of the lack of safe infrastructures. Classrooms were in no- use and school children were not comfortable to spend whole day in the classrooms. Now, the situation is reverse and safe teaching and learning environment is created in three schools.

The parents are encouraged to send their children to the school. Safe and appropriate classrooms has promoted quality teaching and learning among teachers and students. The probability of drop out children due to unsafe and congested school environment will be minimized. The school children are happy and feeling safe in the seismic resilient classrooms. The school management and local community are thankful for 4 roomed seismic resilient school building for their children's safe study.

### Additional construction: Retrofitting in Indrawati Secondary School, Mandan Deupur Municipality (MDM)-12:

Retrofitting of Block I (10 roomed) completed via D.K.P.S Construction Company Pvt. Ltd. Retrofitting work of block two (6 rooms) completed 79% and planned to complete by mid-September 2022. Two separate agreements have been done for two blocks for the better control of the construction works.

The project enhanced school building resilience from adverse hazard consequences, greater occupant survivability and safety, more reliable service continuity during /after hazard impact, leading to an overall improvement in community security and well-being. Along with the physical infrastructures, the project has improved local knowledge about constructing resilient structures creating safeguarding measures for sustainability in future.

Renovation of gender sensitive toilet with urinal facilities in Dwarpaleshower Secondary School completed and handed over to the school management. The children are using improved sanitation and hygiene facilities.

#### 10. Mandan Deupur Agro Forest Resource Centre- Phase I

The Galcier Trust and EcoHimal Nepal in financial support of Marr-Munning Trust implemented Mandan Deupur Agro-Forest Resource Centre (MD-AFRC) program for 3 years since December 2019 in Mandan Deupur Municipality (MDM) of Kavreplanchowk District. The project was designed foreseeing impacts of earthquake of 2015 and the growing impacts of climate in the lives of subsistence farmers.

The program promoted alternative agroforestry systems with enhanced opportunities of local employment with aim to improve the lives of rural families establishing an AFRC, providing trainings and education to enable them to adapt climate change and build resilience. The program introduced tree cropping technologies to support the local livelihoods. It developed agro-forestry as alternative solution for subsistence farmers with small plots and increased awareness on biological solutions reducing injudicious pesticides and chemical fertilizers.

The original project plan was to implement the project in 3 wards of MDM but it was extended in all 12 wards in request of local government. The local government witnessed the success of MD-AFRC modalities and approach and has adopted agro-forestry (tree cropping) as best alternative solution for sustainable rural livelihoods through the promotion of the tree cropping and the organized marketing of the produce. The local government committed matching fund on 50:50 ratio for the extension and replication of AFRC initiatives in all wards. During this project's period, in ward no 12 and 3, local government provided 50% subsidy to construct infrastructures required for seedlings production and agriculture commercialization. Likewise, the local government included agro-forestry options as the source of crops diversification, agriculture modernization and commercialization in its Policy and Programme 2078/079 (2021/2022). Consequently, local government provided 50% matching fund to develop structures (nurseries, green houses, office etc.) under ownership of 2 agriculture groups. Most importantly, local government is considering MD-AFRC as local partner for agro-forestry promotion. It has subsidized the budget to promote MD-AFRC as tree crops seedlings production and outlet Centre.

In total, 998 local trained farmers supported with 41,889 tree crops seedlings in cooperation with local government. All the planted seedlings are growing well. The farmers have adopted multilayer cropping; most of the tree cropping famers are generating income from sale of produces. An end line assessment of annual income concluded that average annual mean income tree cropping families is NPR 5,553.57.

MD-AFRC is well equipped with necessary capitals (land), infrastructures, furniture and other materials for accommodation, kitchen, training logistics and tools. All necessary structures are at place to run an institution smoothly with sound essential administration and manpower. The establishment and operation of MD-AFRC has motivated local farmers and inspired with technical knowledge in tree-cropping and introduction of environment resilient new farming technologies. Local farmers have been observing improved practices and technologies in the center and replicating in their farmlands. More importantly, community people are accepting MDAFRC as their own property and institution.

5 organic villages and 3 satellite nurseries are producing and supplying seedlings and products. 3 organic villages and 3 satellite nurseries are registered in local government. The farmers are adopting organic production and started to sell their produces with fair price. Production of organic vegetables and healthy diseases free seedlings is already initiated. In total, 17.44 tons organic vegetables produced in the 4 organic villages. They generated income of NPR 171,075.00 organic vegetables consuming 47% produces themselves. This will help to uplift the living standard of people of 4 villages. Ultimately these 4 villages will turn into an organic enterprise. The outlet centers in the villages will be institutionalized as sustainable agro-enterprise. The production of organic vegetables will be outlet through an outlet in respective villages. This is the real success of the program in the pesticides prone area.

3 satellite nurseries are in full operation. Seedlings and vegetables produced, and income has been generated from sale. All satellite nurseries are well equipped with necessary land and basic structures. All nurseries are generating minimal nursery operating cost from the generated income. 3 satellite nurseries generated total income of NPR 206,500.00 from the sale of produced 19,218 seedlings and 1.74 tons vegetables. All are well in a way for sustainable operation.

1,836 local farmers (55.88% female) are capable on agro-forestry and climate smart agriculture practices with knowledge on on-farm tree diversification. Likewise, 269 local farmers educated on improved farming techniques along with day-to-day practical knowledge about different topics of farming and climate change at center. Similarly, 524 school children (66.03 % female) from 7 secondary schools educated on climate change, its effects and adaptation measures in line with improved agricultural practices. Model school agro-forestry gardens established and are well managed in 5 secondary schools. In addition, 17 local farmers are in the process of organic certification. Adoption of agro-forestry and organic agriculture already started; out of trained 929 local farmers, 790 are applying acquired technical knowledge and 323 are cultivating tree crops in their farmland. The local communities in MDM are well aware on mindful climate smart agriculture practices. 168 radio episodes broadcasted in cooperation with 3 local radios to raise awareness on climate change risks and mitigation measures.

Thus, the project implemented in 3 years' duration with limited budget and resources achieved as expected as model project. It would benefit more if the COVID-19 pandemic had not hampered in 2020 and 2021. Despite of pandemic, the project advanced the local farming communities with innovative farming technologies, provided a sustainable solution for income generation to support their livelihood and strengthened the local resilience.

#### 11. Mandan Deupur Agro Forest Resource Centre- Phase II

**The Glacier Trust** and **EcoHimal Nepal** have worked in partnership in Mandan Deupur Municipality in Kavrepalanchok, Nepal since December 2018. During these three years, a community led Agro Forestry Resource Centre successfully established in Mandan Deupur. MD AFRC was designed as a transformative climate change adaptation project and has secured three years of funding from the Margaret Hayman Charitable Trust to continue to support the development and expansion of MD AFRC. The project aims at enhancing the resilience of vulnerable communities to climate change risks through promotion of more sustainable and profitable livelihoods.

The program involves the local government and target communities in a collaborative effort to:

- i) improve agricultural productivity, reduce land degradation, and adapt to the impacts of climate change (e.g., variability, scarce water resources)
- ii) improve incomes through sustainable production and marketing of higher value crops, and provide younger generations with enhanced knowledge of the issues affecting their community
- iii) increase opportunities for gainful employment
- iv) ensure MD AFRC achieves full financial self-sufficiency by December 2024
- v) develop Climate Change understanding and awareness across the population of Mandan Deupur adaptation and mitigation
- vi) embed 'hub' and 'spoke' AFRC model through the development of at least 6 satellite AFRCs and 3 model organic villages
- vii) upgrade and expand physical infrastructure at MD AFRC and Satellite Nurseries
- viii) establish two new outlet centers selling locally grown organic produce, seeds, and saplings.

Right after January 2022, Phase II for 3 years approved from SWC and continued its activities. Weeding of all seedlings of 14 demonstration sites in MD-AFRC premises completed. Regular spraying of bio-pesticides in vegetables and tree crops seedlings is carried out to minimize pest's attacks. Information and data collection of the benefited farmers is on-going for digital profiling.

In last summer, 6,455 seedlings, where 6,350 seedlings are high value tree crops (litchi, mango, avocado, lemon, banana, orange, macadamia nuts etc.), procured and distributed for plantation in MDM. Out of them, 4,442 seedlings provided to 143 local farmers for plantation. They were oriented on bio-intensive plantation techniques before providing seedlings. Rest 2,013 tree crops seedlings planted institutionally-

- i) in coordination with Rotaract Club of Durbarmarg, 1,013 seedlings planted in Jyamdi Chandeni Satellite Nursery
- ii) 250 seedlings planted in Thami Danda View Tower premises in presence of the Mayor and the Deputy Mayor of MDM
- iii) 250 litchis cultivated in marginal land of MDM to establish collective litchi orchard and
- iv) 500 lemon seedlings planted in Jogitar Park, MDM 10 in coordination with local government.
- v) In addition, 6,000 Super Napier supplied to Sindhuplachowk by MD-AFRC.

The program conducted 8 community level trainings (6 on bio-intensive plantation techniques and 2 on climate change adaptation measures) educated 132 local farmers (26 male and 106 female). Likewise, 5 school level orientation programs (2 bio-intensive and 3 climate change adaptation measures) and aware 402 school children (121 male and 281 female) of 5 secondary schools. One day pickle production training organized to enable 33 local women to run pickle enterprise. The local women obtained skills to be local entrepreneurs – housewives transforming for business activities. A linkage for marketing the pickles in Kathmandu has been established in cooperation with the training facilitator. With a belief that

a skillful hand is earning hand with best options with possibility of optimum use for a better life, the training was organized with practical demonstration preparing 100 pickle jars (8 of ginger and garlic and 92 of lemon).

A school agro-forestry garden established in Saraswati Basic School, MDM-12. 4 nurseries of forages (Stylo, Joint Veg, Molases and Epil Epil) established for seedlings productioncultivated 6 kg seeds in MD-AFRC. Likewise, two nurseries for seedling productions (Super Napier and rose plants) established. Furthermore, a nursery for lemon seedlings production established cultivating 0.5 kg lemon seeds. A new nursery caretaker has been appointed in MD-AFRC completing recruitment procedures including advertisement, oral interview, and physical observation. A water-well for underground water constructed and supplied water for drinking and irrigation purpose. At present, the water is enough in MD-AFRC.

#### 12. Rural School Reconstruction Project \_ Janajagaran Basic School

**EcoHimal Nepal** in cooperation with **Rotary Club of Durbarmarg** is implementing school reconstruction project in Janajagaran Basic School, Bhumlu Rural Municipality, Kavreplanchowk in financial support of **Nepal Hilfearuntal** through **EcoHimal Austria** and **Earthquake Relief, Rehabilitation Program**, RI District 3292. Construction of the school is around 97% completed in accordance with the design, standards and specifications approved from local government. Final finishing is going-on to complete with in mid of September 2022. In every event, the Chairperson, the ward chairperson, and representatives are actively participating and supporting all aspects of the project. Similarly, all SMC member, head teacher and other concerned stakeholders are seriously involved for construction process. Parents, teachers, and local community people are providing their views and support continuously. After completion of school building, school children will have a safer learning environment. School children are happy and optimistic as they will be able to get back to safe classroom.

Construction of gender sensitive toilet in the school has also been completed. EcoHimal managed extra financial resources to construct the toilet with handwashing facilities for the school children. Handing over ceremony of the constructed infrastructures is under plan and will be organized in coordination with **RC Durbarmarg**.

#### 13. Sustainable Agro Forest Resource Centres in Mountain Areas of Nepal (SAAF-MAN)

### Sustainable Agrology through Agro Forest in Mountain Areas of Nepal for climate change mitigation, sustainable livelihood and environment protection

The project is under intervention from 2020 December for 3 years to improve the livelihoods of rural farmers through the capacity building and awareness on plantation, ecological farming and natural resource management practices and techniques. This is the replication of the success of the Deusa Agro Forest Resource Centre, Solukhumbu. The project aims to involve a wide range of trees that are protected, regenerated, planted, or managed in agricultural, marginal and forest landscapes as they interact with annual crops, livestock, wildlife, and humans providing food supplement and fresh air.

To Increase access of local farmers of Aiselukharka and Rawabeshi rural municipalities on improved farming technologies and skills, establishment of AFRCs in 4 villages- Aiselukharka, Dubekol, Lamidanda and Makpa is ongoing. The establishment, operation, and management of AFRCs in these villages will contribute to raise rural families out of poverty through the promotion of tree crops production and sale. To establish AFRC centers and expand its services land acquisition, the project has done management committee formation and validation.

Focus of the project is tree crop cropping – fruit and vegetable crops suitable to specific agroclimatic conditions. The shifting of agriculture from traditional cereal crops farming to high value cash crops is prioritized with plantation of wide range of multipurpose tree.

Climate change and its effect in the local community and adaptation measures are communicated to local community through agroforestry initiatives. This project enables local farmers on environment preservation, organic and nature-based farming and lessen greenhouse gas emission. 4 Agro Forest Resource Centers (AFRCs) will become a hub for education, resources and training, enabling sustainable rural livelihoods through the promotion of tree cropping and organized marketing of the produce.

Feasibility study of 4 AFRC locations conducted and studied soil condition, geo-structural facing and vegetation resilience. Climatic condition, agriculture production trends especially cereal crops, cash crops and vegetables and animal husbandry probabilities were analyzed. In line with the findings, the project management will promote tree cropping in the project area. 4 corrugated galvanized iron semi-temporary houses constructed in all 4 locations. Also constructed 2 thatched houses having a kitchen and a store in Aiselukharka and Dubekol AFRC. In addition, completed the construction of 5 High Tech tunnels in 4 AFRCs. All are used for fruits and fodder saplings production.

Total 62 trainings (34 in Aiselukharka and 27 Rawabesi RM) on different aspect of tree cropping was conducted; 1,378 local farmers have been capacitated. All trainings were carried out with practical demonstration. All the trainees explored the new technologies through field-based practices.

Climate change is an issue that affects all of us but particularly our children and young people who will inherit its future impacts. Recognizing this fact, the project identified the need to integrate climate change into school education. The project continued eco-clubs' formation (already formed in 5 schools) as institutional platform to provide training, educational materials and equipment support required for conducting environmental activities. Campaigns, awareness, and education programs will be intervened through mobilization of the clubs in leadership of focal teachers in all secondary schools. Hands-on activities through training programs will be knowledgeable about their local environment. Working in team during field-based agriculture activities will help them to develop a team spirit. The aim is to ensure students were equipped with the information they need to tackle the issue from an early age.

104 school going children have been trained on environment conservation and climate change adaptation.

Food security depends on the production of staple cereals but the local farmers cultivating rice, adopting traditional technologies and practices which is less productive. Trichoderma a soil borne fungus is a beneficial one for the farmers and prevents the major fungus infections of the crops, fruits and vegetables and ultimately increases the production. Two demonstrations conducted and trained farmers are involved on studying the effectiveness of trichoderma application on rice field. Two separate plots were made, same inputs were applied except trichoderma on one. The effect of trichoderma will be studied from vegetative growth, number of tillers, panicle size, number grains and grain weight of the rice of both treatments. Likewise, 20 lead farmers received each 1 kg. They have applied the trichoderma on their vegetable to study the effectiveness.

Various nurseries of lime were established in Aiselukharka AFRC and Makpa AFRC. Fodder tree nursery of Ipilipil and Stylo established in all four AFRCs for seedling production.

Participatory and collaborative learning through the farmer field school (FFS) approach is promoted for carrying out agricultural extension. Our technicians are directly reaching to the local farmers and addressing their day-to-day problems. The project staff are demonstrating climate resilient farming practices and climate adaptive technologies towards enhancing the related knowledge, capacity and skills of local farmers in their farmlands. 48 FFS visits conducted to transfer the technologies to the local farmers.

The local farmers are fully engaged in developing integrated options and accelerating scaling up of agroforestry for resilient livelihoods in two rural municipalities. The project is demonstrating the importance of trees in fields and farming landscapes for enhancing sustainable production. The increased demands of tree crops seedlings and their involvement in climate smart agriculture shows their inclination towards greater diversity of trees crops on their farms than had been previously practiced. Plantation of 98,306 tree crops seedlings (fruits, nuts, fodders and forages) is carried out; these seedlings planted by 563 local farmers. Adoption of agro forestry and farmer's positive perception towards agro forestry have significantly constructive effects. Agro forestry technologies have been adopted by local farmers as innovative concept integrating both indigenous and improved knowledge. Thus, adoption of agro forestry by integrating production of crop, livestock and trees in a sustainable basis is in improving trend in the project area.

Sustainable agro-forestry is attainable through forest regeneration. Plantation is conducted for afforestation of bare land, forest area and abandoned agricultural lands. 680 plants (trees and fruits) in Aiselukharka and 280 plants (trees and fruits) in Rawabesi were planted in bare forest area of more than 1.5 hectare in cooperation with Community Forest User Groups.

Application of new technologies and demonstration has been appreciated at local level. Preventive protein bait spray on citrus plants of 3 model farmers found effective; 80% improvements achieved on minimization. Such new tools and techniques are beneficial among the local farmers. As identified via lab test, Citrus greening (HLB) disease has challenged the citrus production in Lamidanda. 5,000 copies of brochures on "Identification and Management of Citrus Silla and Citrus Greening on Citrus Fruits" and are under distribution in project areas. A district level one day workshop and local level workshop was organized to discuss the better management and mitigation of the diseases.

The project is building local physical and technical capabilities to enhance knowledge of the impact of tree cover change on crop productivity, water, nutrients, and livelihoods. The project started to engage the local farmers to uplift their livelihoods through the capacity building and awareness on plantation, ecological farming and natural resource management practices and techniques. The project is focusing to establish satellite nurseries in the promotion of locally adaptable agroforestry options (seedlings and seeds production). 18 lead farmers have established satellite nurseries encouraging ownership of the local farmers on agro-forestry initiatives.

Thus, organizational mechanisms are at place to involve each household in agro forestry, provide training, technical and material support, encourage farmers especially women farmers to practice tree cropping. The local employment generation is focused based on local product and institution. The expansions of activities are started in all wards by distributing tree crops seedlings and through technologies transfers.

#### 14. Spices for Health – Phase I

Nepal is one of the highly vulnerable countries in the world due to its geography and fragile ecosystem. The climate change and its impacts are particularly evident in the mountain areas, even though carbon emissions in Nepal are relatively low. Extreme weather events, droughts, glacial melt, floods, landslides, and crop failures – all are increasing in number and severity. The country is rich in its natural resources, biodiversity, medicinal herbs, and precious spices. The Spice for Health project has been implemented from October 2019 in Lamjung, Magdi, Solukhumbu and with minor activities in other districts of western Nepal with the financial support of Help Alliance. The goal of the S4H project is to raise rural farmers' standard of living, through capacity development and investment in the quality of their spice products. Two spices, Nepali pepper (Timur) and Cardamom (Alaichi), are focused as core produce. Indeed, the project has achieved good results, with long-lasting impacts on livelihood and environment. S4H is a truly holistic approach for enhancing adaptation to climate change, safeguarding the livelihoods of mountain people and increasing their incomes.

S4H has contributed to raising the living standards of more than 3,145 spice-farming households. Over 1,427 local farmers in the four main districts have been trained in quality improvement and production, harvesting and grading skills.

Spices for Health-Phase II contributed to raise rural farmers' standard of living, through capacity development and investment in the quality of their spice products, with long-lasting impacts on livelihood and environment. All trained farmers are capable in seedling production, organic farming, and quality control in post-harvesting stages and bio-diversity conservation.

Three cooperatives, 55 farmer groups and four women's groups established as local implementing partners. In a short time, 127 local jobs have been created, two cardamom nurseries established for seedling production, and two improved drying stoves installed. Further, we have assisted four women groups in Lamjung in establishing revolving funds to strengthen their self-reliance and ensure their access to resources and decision-making as regards spice production and marketing. Likewise, the project established a cardamom and spices hygienic collection and resource center in Solukhumbu, a Cardamom Collection and Resource Centre in Lamjung and a Szechuan pepper collection, processing, and grading center in Myagdi.

A major initiative has involved improving the traditional cardamom-drying system. Extensive education on smokeless products and its benefits prepared the farmers to ensure quality of spices. This has greatly boosted the quality of the dried product. District Chapter Federation of Large Cardamom Entrepreneurs Nepal (DCFLCEN) has been institutionalized and mobilized for assurance of the smoke free cardamom production and marketing. Consequently, Lamjung District has now been declared as a smoke-free cardamom drying zone. Farmers are proficient for grading system in three categories, each with a specific price. The quality control and grading is supporting in improvements, so, they are now receiving better prices for their spices. Women groups are being active and their access to market and cash income is better. Application of compost manure in spices cultivation increase the production and income.

In addition, the project created a base to move forwards towards promotion of eco-tourism in the cardamom cultivating villages. Farmers are motivated and seeking alternative and innovative opportunity such as agro tourism. Starting of the project focus was to produce more cardamom and maintain its quality to get fair price. The project moved a step forward and provided more opportunity to the farmers for sustainable income through promotion of cardamom circuit trek.

The project has also sought to preserve the tradition of hand-picking of wild Szechuan pepper. Farmers' groups have received training on the value of non-timber forest products, the benefits of wild picking, the need to conserve the wild pepper trees, and their role in biodiversity conservation. Altogether 628 trained wild hand-pickers encouraged to maintain product hygiene and quality, for better incomes. The trained farmers have been aware on environment protection, biodiversity conservation and climate change adaptation.

To ensure the rights of these spice producers, communities have been made aware of the market system, the product value chain, market linkages, and fair-trade principles, in collaboration with the FLCEN and Fair-Trade Group (FTG) Nepal. S4H updated and published 1,000 copies of two resource guidebook manuals, one on Timur, one on Cardamom, which are under plan to circulate among local farmers, stakeholders, local government, and media personnel.

A remarkable action other than project plan is the Lufthansa-HelpAlliance team has made several very beneficial visits to Nepal. Two members of the Help Alliance ProTeam visited in December 2018, and undertook a feasibility study on our working areas, and then, based on their recommendations, 10 Lufthansa ProTeam members, and 2 Product Specialists (from Lufthansa and Swiss Airlines) visited Nepal in the autumn of 2019. On their return to Europe, the team continued working on product promotion, harvesting tools collection and many more but then the COVID-19 pandemic struck, and plans and actions have been stalled since then.

In a gist, the Help Alliance support is highly fruitful for setting up a value chain for Nepali pepper and Cardamom, increased income of farmers selling Cardamom and pepper at fair prices. The quality of product improved, changing the traditional system of post harvesting technique such as harvesting, collecting, drying, sorting, packaging, storing, maintaining hygiene and transport. The farmers are equipped with harvesting and post harvesting infrastructure and technologies with the engagement of young population. All established institutions such as farmers groups, training center, collection and resource center are functional. All those efforts and achievements have not been possible without the support of Help Alliance. The project is a suitable model to replicate in other areas.

#### 15. Spices for Health – Phase II

The project promotes sustainable spice production – especially cardamom and Szechuan pepper. By increasing the quality of the product, it is possible to sell it at a fair price, thus improving the income of the local small farmers. The aim of the project is to help small farmers in the region to optimize their spice production and to increase their income by selling them at a fair price. A sustainable infrastructure is needed to improve production according to international standards.

To this end, local farmers of Kalikot will have the capacities and resources to apply climatesmart spices farming techniques, they will be engaged in spices cultivation and other incomegenerating sectors considering production and sales status. Also, local students from the poor, occupational caste benefit from nutrition gardens in their private farmlands. To promote local spices production, collection and display centers will be established and start serving the local community, focusing on providing harvesting tools, materials, and the production of consumer products and sales. Promotion of cardamom cycle will intensify the income generation opportunity of local cardamom farmers of Lamjung district of 4 villages in innovating the cardamom circuit agro tourism concept.

The project has been approved from SWC and incorporated in RM council of 3 rural/municipalities- Khandachakra Municipality and Mahawai RM of Kalikot and Myarsandi RM of Lamjung. The project mainly focuses the development of pro-poor value chains with the other project initiatives: development and strengthening value chain producers (spices farming farmers), initiatives to promote gender and social inclusion, support for high value commodity production and post-harvest activities, establishment of revolving fund. It will drive the value chain process from the spices (cardamom and Szechuan pepper) production and by so doing establish the value chains and the participating producers on the basis of a demonstrated, concrete market for the high value commodities. That ensures the producers become the implementing partners in the value chain with the fair trade by developing them into cost effective producers that can deliver the qualities and quantities required to make the value chain profitable, thereby strengthening their position and improving their bargaining power

Create an environment and build in robust processes and structures (groups) that enable women, poor and vulnerable households, and groups such as the Dalits, and Janajatis to actively participate in the project. Thus, the project contributes to poverty reduction, development of local communities and biodiversity in the region.

#### 16. EcoHimal Academy

This students' academic scholarship program is under implementation since 2009. From its initiation, 35 ultra-poor and disadvantaged orphan children from rural communities have been provided academic scholarship for their quality education.

The project has been implemented with the vision of building helpless children as the capable and self-esteemed citizens providing guardianship. The children are provided safe academic environment, emotional support and medical care for these orphaned and helpless children, it aims to help them to be self-dependent for their future life. It is a unique and distinct scholarship model in Nepal, where Eco Himal plays role as an intermediate between the sponsors and the children. It is a complete scholarship program with holistic care of children having multiple stakeholders such as individual donor, schools and guardians' involvement.

The project is now in its final phase. It was started with 35 children. 33 students completed school level study and majority of them are pursuing their higher education. Out of those passed out children, 6 are employed either in Kathmandu or in their village. Anil Gurung, one of our students, graduated in Junior Technical Assistant (JTA) in Agriculture and working in our AFRC Khotang as On the Job Trainees. At present, 2 students are studying in grade 10 under this program.

#### 17. Construction of School and Hostel Buildings of Disabled Resources Class School

**EcoHimal Nepal** in financial support of **EcoHimal** and **Forum for the Welfare of Himalayan Children Nepal** implementing construction of school and hostel buildings of Disabled Resource Class School project in Dhurba Tara Basic School, Thulibheri Municipality, Dolpa District. The construction is on-going in coordination with construction committee, School Management Committee and Mukuteshwor Sewa Samaj in accordance with the design, standards and specifications approved from local government. Almost construction of two school buildings and gender sensitive toilet completed, only final finishing is yet to be completed before handing over the constructed structures to the school management.

The construction was carried out based on technical findings and physical verification. Legal requirements fulfilled, an inclusive meeting with the chiefs and representatives of district level concerned line agencies and local government prepared the constructive environment to implement the project. The terms and conditions of five party cooperation agreement have been guiding ethics for all parties. Additional bipartite agreement between EcoHimal and School Management Committee on the basis of that cooperation agreement is guiding the SMC for smooth planning and decision making in school construction.

The close coordination with local government is being helpful for the technical assistance. The school management is responsible for overall local management whereas, the construction committee and MSS is supporting in quality assurance of materials and buildings. In addition, construction of a gender sensitive toilet with urinal facility completed. It is completed as per the design, drawing and cost estimation prepared and provided to the school.

The constructed infrastructures will be used for learning and overall development of differently abled children (DACs). A safer and favourable environment will enhance the knowledge, attitude and skills as well as contribute to the development of mental, physical, psychological, intellectual and social aspect of children. They will have safer infrastructures, appropriate classrooms, hygienic and child friendly sanitation facilities, safe drinking water, easy access for services, clean surroundings etc. Safe and conducive environment in education for differently able and underprivileged children created by improving disability-friendly educational infrastructure and facilities to safeguard inclusion and accessibility of DACs.

#### 18. Access of School Going Adolescent Girls on SRH Education

The project successfully implemented **adolescent sexual and reproductive health** education (ASRH) components with focus on gender friendly learning, community awareness and resting cum resource rooms in schools. The project was implemented in 2 rural municipalities – <u>Turmakhand</u> and <u>Dhakari</u> of Achham District, Province no 7, Far Western Region of Nepal in financial support of <u>Province of Salzburg</u> via <u>EcoHimal Austria</u> from April 2021 to December, 2021.

The project was designed in 2 phases. In first phase, the focus was on capacity building of school teachers and school going adolescent students from local schools on adolescent sexual and reproductive health (ASRH) and establishment, management and use of girls comfort rooms (GCRs) to develop ASRH friendly schools in 18 schools. Subsequently, follow up ASRH trainings in all schools and RRCs in 16 schools is planned in next year.

The project implemented in 34 local schools in the project area in cooperation with local governments. Local governments contributed in physical infrastructures development in education whereas EcoHimal educated school going adolescents with focus on menstrual hygiene management.

70 local focal teachers (47 male and 23 female) from 32 schools (*teachers from 2 schools missed the training opportunity*) trained and prepared as resource persons for continuation of ASRH education in rural schools. They have been educated and resourced with knowledge on ASRH through comprehensive trainings.

1078 adolescents (66.14% girls and 33.86% boys) studying in 30 local schools educated on ASRH knowledge and created better school environment to have dignified lives conducting 30 two days trainings. Access on sexual and reproductive health information focusing on menstrual hygiene management increased among the adolescent school going children, consequently school absenteeism and dropouts reduced. As the result, the adolescents improved their behavioural practices on sexual reproductive health issues.

500 copies of training manual on ASRH issues prepared, printed, and provided to all schools as library copies and personally to the trained teachers. 30 adolescence girls' SRH groups formed and mobilized in 30 schools as promoters and facilitators in ASRH education. Likewise, ASRH groups' guidelines prepared in each school, trained focal teachers, and educated students to prepare and intervene action plan in targeted schools. They are preparing action plans and will share with EcoHimal before its implementation. It ensures each school equipped with SRH action plan and guidelines.

4 awareness raising events organized – an event in 2 schools from each RM. 156 school children, teachers, and school management committee (SMC) members participated in dialogue and discussion to promote menstrual hygiene and to abolish *Chhaupadi*.

18 model RRCs in 18 schools established - 10 in Turmakhand and 8 in Dhakari RM. Establishing GCRs has provided school going adolescent girls a safe place to conduct menstrual hygiene. In Nepal, girls are considered impure, powerless and victims during menstruation. Thus, the project considered RRCs as basic physical facilities at school level develop the confidence of adolescent girl students. At present, the girls are happy and becoming confident and encouraged to attend the school during the menstruation.

#### B. COVID-19, Relief and Response Projects

During 2<sup>nd</sup> phase of COVID-19, we continued to serve the local community. The local government were desperate need of both preventive and protective support. We entertained the need and request of the local government and seek the option to support in our capacity. Understanding the urgency of the rural community, EcoHimal Nepal supported immediate preventive and protective health materials and equipment to 8 local governments of for pandemic response in financial support of Kindermissions werk and Nepalhilfe Bonn e.V. The focus was on immediate prevention and protection in the pandemic.

#### 19. Health Equipment Support Project in Solukhumbu District Hospital and Sotang Primary Health Care Centre

While addressing instant preventive and projective requirements, EcoHimal proritized the need of lasting health equipment for quality health services in local health institutions during and after the COVID-19 pandemics and further. Meanwhile, EcoHimal received official requests from Solukhumbu District Hospital and Sotang Primary Health Care Centre (PHCC) for medical equipment support. On the basis of requests, Nepalhilfe Bonn e.V. (NHB) appealed to Siemens Caring Hands e.V. for the purpose.

NHB received assurance for the support from Siemens Caring Hands e.V. and started discussion about the feasibility and cost of medical equipment. A plan and budget prepared and shared to Siemens Caring Hands e.V. Right after, NHB received grant for medical equipment support to the targeted health institutions. Then, medical equipment most needed were finalized, procured, and transported.

S.N.	Descriptions	Unit	Quantity		
Α	Solukhumbu District Hospital				
1	Paediatric to Adult Ventilator	Number	1		
2	Portable Adult Ventilator	Number	1		
3	Blood Gas Analyser	Number	1		
4	Patient Monitor (7 Parameters)	Number	1		
В	Sotang PHCC				
1	Portable Adult Ventilator	Number	1		
2	Portable X ray	Number	1		

#### Table 1: most needed medical equipment

On the top of the mentioned medical equipment in the table above, upon a special request of EcoHimal Nepal the supplier company provided two patient monitor (5 parameters) free of cost as their corporate social responsibility. And the management decided to provide each to both health institutions.

Formal handing over ceremony was organized in Solukhumbu District Hospital on 25<sup>th</sup> February 2022. The program was organized at district level and health equipment of both health institutions handed over. The program was chaired by the chairperson of Hospital Operation and Management Committee, District Hospital, Phaplu, Solukhumbu. The presence of Mr. Buddhi Kumar Rajbhandari, the Honorable Province Parliament Member, Province 1 (Ka) as Chief Guest and Mr. Uttam Kumar Basnet, the Honorable Province Parliament Member, Province 1 (Ka) as Special Guest made the program influential and significant in the district. There was presence of mayors, doctors, media persons and nurses along with local representatives from different line agencies and organizations. In the program, Mr. Narayan Dhakal, Executive Director of EcoHimal conducted public hearing of the project and thanked all the donor, concerned line agencies, and political parties.

Installation and operation of the health equipment has supported to improve the health services in both health institutions. The local population (105,886) from the district will have better services in affordable cost for their health care without visiting hospitals outside of the district. The local demand of live saving medical equipment has been fulfilled in some extent.

The management in both local health institutions are capable to ensure the utmost utilization of the medical equipment and to examine measures to further facilitate services. Increase in number of outpatients and inpatients in the target health institutions can measure direct impact of the project.

In case of emergency the patient now has the opportunity and option to travel with ventilator. The rural areas are prone to frequent accident and need of portable ventilator is high. It was fulfilled covering the two major geographic areas. There was no blood analyzer in the district and doctors are sending samples to Okhaldunga. Such gap is now fulfilled, where the efficiency of the doctors have also increase and speeded up for the diagnosis and treatment.

#### 20. Relief to Rural Children in COVID-19 Pandemic in Khotang District of Nepal

This project was started to combat against 2nd wave of COVID-19 in Rawabesi and Aiselukharka Rural Municipalities (RMs) of Khotang District. The goal of the project was to support Nepal Government to fight against COVID-19 during its 2nd wave. Similarly, the objective of the project was to establish, create and promote the preventive, protective and safeguarding environment for rural children of the two RMs.

Both the local governments succeeded in minimizing the spread of virus infection and better management of health and education of children and public with the assistance from the project. Due to project action, the awareness level among the population was high, preventive, and protective measures were easily available and the pandemic could be better managed. The infrastructures and resources created during project period have been a strong base for the preparedness and response of 3rd wave.

Even though the project's focus was on relief and short period's humanitarian action, it has created a remarkable impact in the community with its sustainable undertakings. The major long-lasting impact of the project are the establishment of isolation to multipurpose centres, development of women groups entrepreneurship, long lasting and compatible health equipment and services, skills and knowledge enhancement of health service providers and teachers, and children's learning material preparation infrastructures at schools.

Nepal government recently decided that all local government will have to manage health service data digitally<sup>3</sup>. The project was able to support and initiate the implementation of the digital health management system in the project area of both RMs.

**Children have access and use hygiene kits:** Increase the children's access on hygiene kits and its use in coordination with both the local governments. In total 1,987 children received hygiene kits (640 kits from project and rest 1,347 kits managed by the local governments).

The printed materials and digital awareness campaigns from social media had a good impact on all children and their parents in both RMs. These easily accessible information significantly helped in reducing the spread of infection. Local population and children were well protected through 42 educative awareness campaigns, 28 radio events and more than 100 social media circulations. Similarly, all health service receivers from local health institutions were made aware on preventive and protective measures – wearing mask, social distancing, hand washing with soap, regular sanitization etc.

**Infected children receive isolation and treatment facilities for their resistance:** Temporary isolation centres were operated in both RMs with the materials provided by the relief project. The permanent isolation (multipurpose) centre buildings in both RMs were constructed from their internal sources and are in operation from August in Aiselukharka, and December 2021 in Rawabesi. The supported materials and equipment (beds, preventive and protective materials, sanitation, and hygiene kits/packages, drinking water facilities etc.) for establishment and operation of the centres are in use and becoming a strong base for preparedness in combating the upcoming pandemic. Local governments have planned to transform isolation centres as children and women rehabilitation centres after the situation normalizes. In addition, an oxygen plant is installed in isolation centre of Aiselukharka in coordination with the National Innovation Centre, Kathmandu and provides oxygen during emergency for the patients.

<sup>&</sup>lt;sup>3</sup> Deploying Open-Source Electronic Medical Record (EMR) Software System in Government Hospital of Nepal, circulated 23<sup>rd</sup> January, 2022 by MoHP to intervene EHR system in Government Hospitals in Nepal.

In total, 1987 children have been able to adequately protect themselves from the infection and prevent its' spread using hygiene kit supplies like face masks, soaps, sanitizers, and hand washing facilities. A COVID Response Team in both RMs have been mobilized and is functional to support health workers for better care and treatment facilities in isolation centres.

## Children under 5 years and their mothers prepare and consume nutritious foods in this hard time:

The nutrition needs of 1,117 children from poor family backgrounds (520 Rawabesi and 597 Aiselukharka RM), 73 lactating mothers and 10 pregnant women have been fulfilled providing 5 kg Nutri-mix flour packages to everyone. In total, 1,200 beneficiaries enhanced and boosted their immunity consuming nutritious food.

The two women groups (Parijat Swasthya Mothers Group and Lamidanda Women's Group) are well trained and producing the Nutri-mix food locally, utilizing local food grains, human resources, and skills. It has created local employment, business, and trust on the quality of product. The tools and machines (flour mill, roasting pan, celling machine, packaging materials etc.) were supported by the project and are now well utilized and producing hygienic Nutri-mix flour. Both women groups are continuing the production of flour and fulfilling the requirement of the local children. The need of importing Nutri-mix flour from outside of the village is minimized by the project action. If the nutritious food packages were externally supplied, less than 50% children would have been benefited due to cost factor.

#### Children benefited with quality care and counselling:

The telemedicine concept has been for the first time introduced in these two RMs. The facilities on quality health service, care and counselling for rural children are improved through telemedicine initiative in Aiselukharka and Rawabesi RMs. A step ahead of telemedicine, a digital health system is introduced to improve electronic healthcare record and allow distant doctors and government for the better diagnosis and treatment. A health application was developed, trained the users accordingly and compatible health equipment were provided to 13 health institutions in cooperation with local government to ease and functionalize the digital health system. With this, the transfer, storage, and processing of digital health records are started in both RMs. The secure data storage is done in the Cloud system which is secure than the server and hard disc storage system. In total 24 local health care services providers from 13 health institutions are skilled on digital health services and providing service to the local population.

Likewise, local children affected by the COVID-19 are supported with the psychosocial counselling through 140 trained teachers as resource persons of 55 local schools. 33 health service providers from 13 local health institutions, 41 RM employees and 1 media person received a psychosocial therapy and capacitated to identify the mentally and psychosocially affected student in the classroom and community. The psychosocial counselling incorporating local resources are created enhancing the capacity of teachers and health service provider not only for the COVID-19 pandemic, but for such service in future. These local resource persons are capable to support the psychosocially affected children to counsel and restore their dignity now and in the future.

In addition, Child Right advocacy through radio programme in cooperation with local governments, Human Right Forum and 3 radio stations educated the local children, their parents, and stakeholders about their roles in safeguarding children rights in difficult situation. Discussion of child rights have started in schools, health institutions and among the local elected representatives.

**Children continue their learning and regularly performed their assignments:** All 55 schools decided to close for 2 months to minimize the virus spread due to the second wave of COVID-19, which greatly hindered the children's learning. The project created alternative teaching and learning environment to all 6,426 school children and regularized the learning opportunity. "Educational" means such as Tole learning, teaching via Paathshala Closed User

Group (CUG) sim, radio school programme was applied, and children were actively engaged breaking the interruption of learning during the two months long lockdown.

To facilitate learning materials preparation all 55 schools were supported by providing 27 printers and 28 laptops. In this infrastructure development, the local government has invested more than 72% budget as local contribution. The provided resources were well utilized by the schools and developed children's learning materials sharing the responsibility in two RMs from grade 1 to 5 by Rawabasi and grade 6 to 10 by Aiselukharka. Even after the project all devices are being used for better teaching learning activities in the local schools.

In cooperation with different likeminded organization and the local government, 436 episodes of Radio School Program Learn was broadcasted supporting the alternative learning of children. About 50% school children engaged in the radio learning programme. Result of all these efforts is that almost 100% children continued their learning during second wave of pandemic and more than 85.10% children completed their assignments further proving the effectiveness of alternative learning techniques.