# EARTHQUAKE AFFECTED COMMUNITIES REALIZE A HOLISTIC RECOVERY



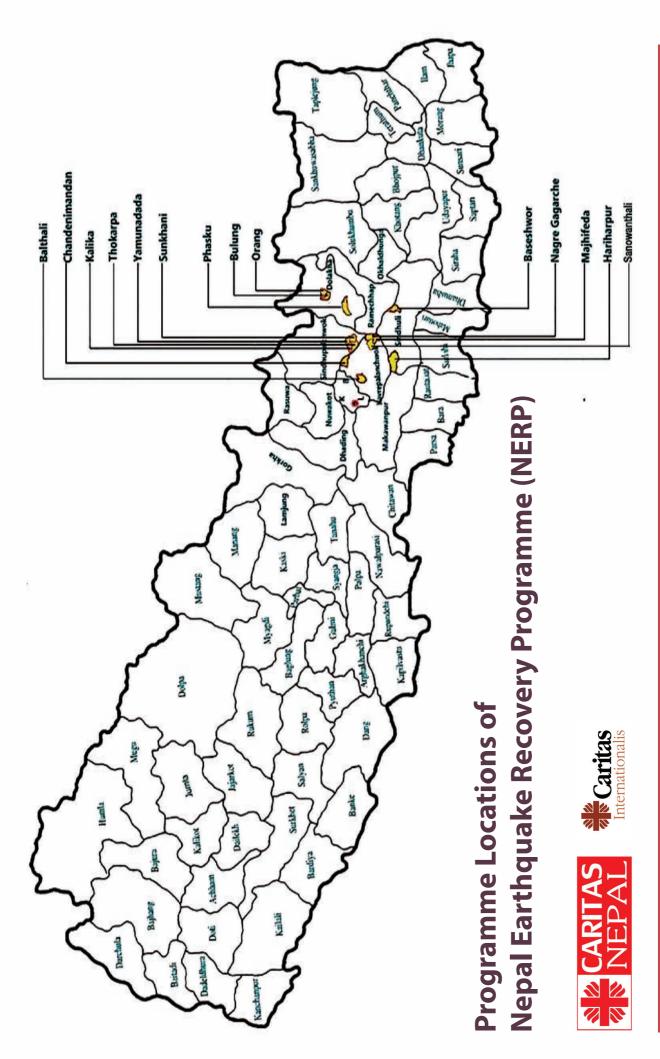




Achievement, Good Practices and Case Studies of Nepal Earthquake Recovery Programme (NERP) 2016–2019







vegetable farmer (Bign, Dolakha), ladies who produce pickles and children drinking water (Golanzor, Sindhuli) Cover Photos: Ms. Kalpana Acharya's earthquake damaged house and her new house (Bigu, Dolakha),

# **Table of Contents**

S.No.	Content	Page No.
I	Message of Fr. Lalit Tudu, Executive Director, Caritas Nepal	3
II	Overview: Earthquake affected people and communities realize a holistic recovery	4
III	Shelter Case Studies	22
	1. Orang – First village to complete shelter reconstruction	
	2. Bulung community realizes a holistic recovery	26
	3. Thokarpa builds back better with CSEB	29
	4. Kalika becomes second village to complete shelter reconstruction	33
	5. Majhi community of Chandenimandan work together for house construction and sanitation	34
	6. Master Sanjay Tamang, a 12 years old child, has a new earthquake resistant house	38
	7. Mr. Chankhey Tamang and his family have a new safe shelter	39
	8. Mrs. Sita Bhandari of Thokarpa is a proud owner of an earthquake resistant house	40
	9. Mrs. Swostika Khatri leads in reconstruction of houses in Orang	41
	10. Mr. Tilak Bahadur Budhathoki of Thokarpa pursues socio-economic recovery	42
	11. Mr. Sarkiman Tamang is a proud owner of a model house in the village	43
	12. Mrs. Maya Kanchi Tamang of Chaap has a new safe shelter	44
	13. Ms. Kanchhi B.K has built a house, has access to drinking water and is raising goats for income generation	45
IV	WASH Case Studies	46
	1. Puranagau Khetpuchhar Water Supply System	47
	2. Mr. Bishnu Pahari of Kalika, Sindhupalchok	52
	3. Ghokshila Drinking Water Supply System	53
	4. Rupse: A sustainable Water Supply System	60
	5. Lekhatole Water Supply System	61
	6. Building back better to provide drinking water - Sauryabhanjyang Khanepani Aayojana	62
	7. People of Pasal Tole do not drink muddy water from Koshi anymore	64
	8. Plumbing training for sustainability of water supply systems	65
V	Livelihood Case Studies	66
	1. Mr. Somlal Tamang, an enterprising farmer	67
	2. Mr Ram Bahadur Pahari and his family are self-sufficient	68
	3. Mrs. Chameli Maya Tamang is able to provide for her family	69
	4. Mrs. Laxmi Budhathoki– agriculture group member of Bulung Village	70
	5. Mr. Kancho Nepali's family improves livelihood security	71
	6. Motorable road with cash for work	72
	7. Kanchi Maya Boju of Hariharpurgadi pursues vegetable farming as an enterprise	73
	8. Mr. Rajendra Shrestha of Basheshwor improves his farming livelihood	74
	9. Women entrepreneurs of Basheswor, Sindhuli	75
VI	Protection and Psychosocial support Achievement, Good practices, and Case Studies	76
VII	Articles on NERP by External Experts	83
	1. Ensuring safe water, decent toilets and better hygiene	83
	2. Livelihood re-established in earthquake affected locations	86
	3. Lessons learned and policy recommendations on shelter reconstruction by Caritas Nepal	90
*/***	4. Summary of End Line Survey of Nepal Earthquake Recovery Programme	93
VIII	Educational infrastructure support to community schools	96
IX	Community buildings built in eleven locations	98

## **Acronyms & Abbreviations**

BPT Break Pressure Tank

CCN Collective Concern Society

CDPS Community Development Program Sindhuli

CGI Corrugated Galvanized Iron

CI Caritas Internationalis

CIMO Caritas Internationalis Member Organization
CLPIU Central Level Project implementation Unit

CN Caritas Nepal

CSEB Compressed Stabilized Earth Brick
DCC District Co-ordination Committee

DLPIU District Level Project implementation Unit

DUDBC Department of Urban Development and Building Construction

ECARDS Environment, Culture, Agriculture, Research and Development Society

ENPHO Environment and Public Health Organization

FCHV Female Community Health Volunteer

FCT Ferro Cement Tank
Gaun Palika Rural Municipality

HRRP Housing Recovery and Reconstruction Platform

kgs Kilograms Itrs Litres m Metres

NERP Nepal Earthquake Recovery Programme
NRA National Reconstruction Authority
SJASK Shanti Jana Adarsha Sewa Kendra

SWC Social Welfare Council

VDC Village Development Committee

VWASHCC Village Water, Sanitation and Hygiene Co-ordination Committee

WASH Water, Sanitation and Hygiene

WSS Water Supply System

WUGC Water User Group Committee

GMALI Grant Management and Local Infrastructure

1 Ropani = 0.05087 Hectare (ha.)

1 Euro = Rs.124 1 USD = Rs.114

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## Message of Fr. Lalit Tudu Executive Director, Caritas Nepal

As we celebrate the 30th anniversary of Caritas Nepal, we are glad to report to you that we have successfully completed Nepal Earthquake Recovery Programme (NERP), the biggest programme managed by Caritas Nepal till date. This programme has reached 9409 households in 15 earthquake affected villages of Dolakha, Sindhupalchok, Sindhuli and Kavrepalanchok and enabled the people and communities to realize a holistic recovery. The families in the earthquake affected communities are now living a 'safer and dignified'. Hence, with utmost joy, we present to you the second edition of Achievements, Good Practices and Case Studies publication of the program.

In this document we present to you the extensive and holistic achievement of NERP noting the good practices which we believe helped us to realize the results in an effective and efficient manner. The results achieved are notable. 4620 households have constructed earthquake resistant houses with full shelter package support of Caritas Nepal. About



4502 households have access to safe and adequate drinking water with the reconstruction of 69 drinking water systems in the villages. More than two thirds of the 9409 households have been able to re-establish and expand livelihoods. Communities have worked together to address disaster risk reduction.

Caritas Nepal salutes the people and communities of the earthquake affected locations whose resilient spirit and willingness to work together helped them to move forward with hope after disaster and realize a comprehensive recovery.

Our heartfelt thanks to Ministry of Women, Children and Senior Citizens (Nepal) of Government of Nepal, National Reconstruction Authority, Social Welfare Council, district line agency offices, local governments for their supervision and guidance provided to Caritas Nepal.

Our heartfelt thanks to Caritas Internationalis, Caritas Australia (lead agency to support us), Caritas Organizations, and Catholic Institutions who have provided support to the programme. Caritas Nepal and communities in Nepal will always remember how the Caritas federation and international communities and institutions joined hands to help Nepal from the time of the earthquake with support to relief and recovery activities.

This publication attempts to present NERP's achievements and good practices, and the benefits realized by the earthquake affected communities. I would like to express my heartfelt thanks to the NERP team for the professionalism, commitment, and perseverance with which they have implemented the NERP programme. I also want to thank the team for organizing the timely publication of the second edition of Achievement, Good Practices, and Case Studies on NERP with the title – Communities Realize a Holistic Recovery.

Junio Junio

Fr. Lalit Tudu
Executive Director
Caritas Nepal
September 25, 2019



# Overview: Earthquake affected people and communities realize a holistic recovery

Manindra Malla, Programme Manager, NERP, Caritas Nepal

## II.a. Introduction

There were two major earthquakes in Nepal on April 25, 2015 and May 12, 2015. Caritas Nepal immediately launched a relief effort reaching 70,036 households of 168 villages (i. e. Village Development Committees). Basic shelter items such as tarpaulin and blankets were provided to these households. 23,534 households of 60 villages were provided food materials



and seeds. 37,690 households of 79 villages were provided WASH materials. 24,584 households of 43 villages were provided corrugated roofing iron sheets to construct temporary shelters. In this way, a massive relief effort of Caritas Nepal helped to save lives and give hope to people.

After relief phase, Caritas Nepal has implemented Nepal Earthquake Recovery Programme (NERP) in 15 villages of Dolakha, Sindhupalchowk, Kavrepalanchowk and Sindhuli. This publication reports on the achievement and good practices of the programme in the view of Caritas Nepal team and external stakeholders. Case studies are presented to inform on the impact achieved at personal, household, user group, and community levels.

In brief, the earthquake recovery effort of Caritas Nepal is found to be successful because it has applied people and community led approaches, provided suitable capacity building inputs and technical guidance, and addressed the needs of the earthquake affected communities in a holistic manner. This report is dedicated to these men and women who have virtually risen up from the rubble of their homes realizing a holistic recovery for their families and comunities.



Table: Targeted Households and Population

	Location	House- holds (HH)	Popu- lation	Intervention sector for the locations
	Orang, Bigu-2*	565	2801	Shelter (full package), WASH, Livelihood, Protection and Psychosocial
Dolakha	Bulung, Bigu-3*	759	3762	Shelter (full package), WASH, Livelihood, Protection & Psychosocial
	Sailung-6^	550	2726	Shelter Technical Support, Livelihood, Protection
	Sailung-7^	580	2875	Shelter Technical Support, Livelihood, Protection
wk	Kalika, Sunkoshi-3*	656	3252	Shelter (full package), WASH, Livelihood, Protection & Psychosocial
Sindhupalchowk	Thokarpa, Sunkoshi-1 and 2*	1178	5839	Shelter (full package), WASH, Livelihood, Protection & Psychosocial
	Sunkhani, Sunkoshi-5^	771	3822	Shelter Technical Support, Livelihood, Protection
	Yamunadanda, Sunkoshi-4^	473	2345	Shelter Technical Support, Livelihood, Protection
	Chandenimandan, Mandan Deupur-10*	1065	5279	Shelter (full package), WASH, Livelihood, Protection & Psychosocial
chowk	Balthali, Panauti-11*	546	2706	Shelter (full package), WASH, Livelihood, Protection & Psychosocial
Kavrepalanchowk	Sanowanthali, Chaurideurali-1^	277	1373	Shelter Technical Support, Livelihood, Protection
Kav	Nagregagarche, Chaurideurali-2^	389	1928	Shelter Technical Support, Livelihood, Protection
	Majhifeda, Chaurideurali-3^	498	2469	Shelter Technical Support, Livelihood, Protection
uli	Baseswar, Golanzer-6	510	2528	WASH, Livelihood, Protection and Psychosocial
Sindhuli	Hariharpur Gadhi, Hariharpur Gadhi-1	592	2935	WASH, Livelihood, Protection and Psychosocial
	Total	9409	46640	

Note: In locations with white background in the above table, the programme was initiated in April, 2016, and in locations with blue background programme was initiated by August, 2017. Though formal beginning of the NERP period is noted as 1st January 2016, work was initiated in the villages 3- 6 months later in the various sectors upon receiving necessary approvals from concerned Nepal Government's Ministries, National Reconstruction Authority, and Social Welfare Council. In regards to shelter intervention, locations marked with\* is supported with full shelter package (housing grant & socio-technical support) and locations marked with ^ are provided partial shelter package support (i. e. only socio-technical support and not grants).

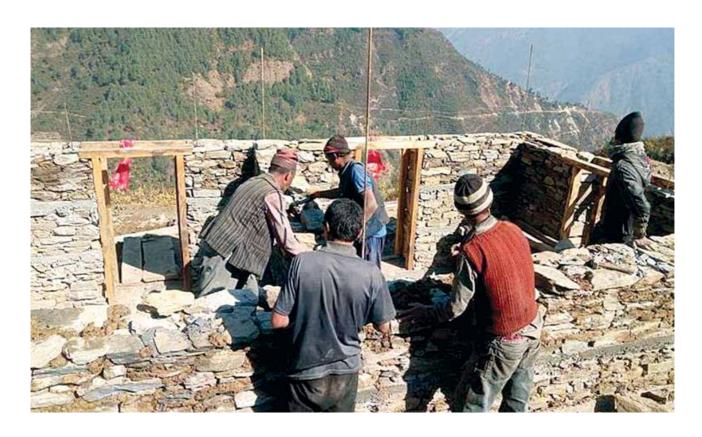
Note: Achievement and Good Practices of Shelter, WASH, Livelihood, and Disaster Risk Reduction are presented in this article (chapter II). The achievement, good practices and case studies of Protection and Psychosocial support is presented later in chapter VI.

#### Goal of NERP

#### Earthquake affected households have safer and dignified lives.

### **Program Period**

The program period is January, 2016 to September, 2019. Caritas Nepal has received approval to implement the programme from concerned Nepal Government Agencies mainly Social Welfare Council, National Reconstruction Authority, and Ministry of Water Supply and Sanitation, District Agriculture and Livestock Offices and local governments etc. The work in various sectors were started in spring and summer of 2016 upon receiving the required approvals.



#### Table: House reconstruction status

S.N	Location	Number of houses constructed	S.N	Location	Number of houses constructed
1	Orang, Bigu-2, Dolakha	565 units	4	Thokarpa, Sunkoshi-1,2 Sindhupalchok	1164 units
2	Bulung, Bigu-3, Dolakha	743 units	5	Chandenimandan, Mandandeupur- 10, Kavrepalanchok	986 units
3	Kalika, Sunkoshi-3, Sindhupalchok	645 units	6	Balthali, Panauti-11, Kavrepalanchok	517 units
	Total	4620			

## Summary of Results Achieved

The following table indicates the summary of results achieved by NERP.

S.N.	Objective	Result
1	Earthquake affected households in the target areas are living in safe and adequate earthquake resistant houses.	4620 HHs or 97% of the targeted 4775 households are living in earthquake resistant newly built houses. As per end line survey: (a) 96% HHs supported are happy with house design; (b) 97% HHs supported think their house is safe to live in due to improved construction practices; (c) 6% HHs have built houses in new locations within their villages. 13 communities have improved capacity in terms of technical knowledge and trained human resources including 758 Masons trained to construct and maintain earthquake resistant houses. 13 Local governments have committed to continue earthquake resistant house construction promotion in their locations in the future. 26 units of model houses constructed and provided to most vulnerable households selected by the communities.
2	Earthquake affected households in the target areas are using safe and appropriate WASH facilities.	4502 earthquake affected households (22955 population) have improved access to safe drinking water from 69 drinking water systems constructed. End-line survey has found: 87% of households in intensively supported locations have access to enough tap water; out of this, 92% could fetch water within 5 minutes, and 90% have enough water available for household use. 99% of the households used their own latrines and 1% used neighbour's latrines; most people pursued hygiene measures such as hand washing after work, going to toilet and before meals. 14 schools have improved latrine facilities.
3	Earthquake affected households in the target areas have increased livelihood security and increased resilience to disaster risks.	8144 households' members received training and grants (Rs. 22000-Rs. 35000/- each) to reestablish their livelihoods. Small Holder Farmers were trained in agriculture, livestock raising and IPM practices. 198 people were trained in non farm enterprises. Irrigation systems constructed and repaired have provided irrigation to 211 ha. of land. 11 marketing centers for milk and vegetables were established.  End line survey notes: 95% households received livelihood sector trainings and inputs; 78% households noted improvement in livelihoods due to training and support received; 79% households were able to sell their farm produce; 96.3% households have access to micro-finance services such as by cooperatives; 81.3% households note they have improved food security since the earthquake; and 39.7 % households and 41.6 % households noted improvement in income due to their agriculture and livestock activities respectively.
4	Earthquake affected communities obtain services in an accessible, safe, dignified manner and improve their physical and mental wellbeing.	Protection mainstreaming was done effectively ensuring recovery service delivery was provided in an accessible, safe and dignified manner to the programme participants. End line survey notes that 12% of the beneficiary households were single women led households, and 9% of the beneficiary households had people with disabilities. 240 people with disability and 229 people with psychosocial challenges received special referral funds to address their concerns. 72 trained volunteers and Village level Protection Committees ensured the programme was implemented without leaving vulnerable households behind. In addition feed backs received to improve programme service delivery in meetings or through 98 feed back boxes and one toll free line and were answered to.
5	Earthquake affected communities have increased resilience to disaster risk.	Disaster mainstreaming was done in all the sectors of intervention. For example, earthquake resistant house construction, laying pipelines of drinking water system two feet deep so it will not be washed away by mudslides, and facilitating farm animal vaccination and insurance. Local Disaster Management Committees formed in 12 locations and supported to prepare plans for disaster risk reduction and adaptation to climate change. Various aspects of the plans supported to be implemented with the support of local governments. Mitigation measures such as plantation in community forest, gabion boxes for land slide protection, and lightning arresters were placed.
6	Educational infrastructure support to community schools	7 School buildings constructed benefiting more than 1200 children. The buildings were constructed as per approved design of Department of Urban development and Building Construction of Government of Nepal.

The earthquake affected households and communities have now realized a holistic or comprehensive recovery. They are now living safer and dignified lives as compared to the time of the earthquake. The people and community led approaches applied by Caritas Nepal in the various sectors are as follows.

- Shelter: Owner and Community Driven approach
- WASH: Drinking Water User Group led approach, WASH Coordination Committee led approach, Local Community Health Volunteer led approach
- Livelihoods: Irrigation User Group, Livelihood Groups, Commodity Marketing Groups, and Local Cooperatives led approach
- Disaster Risk Reduction: Local Disaster Management Committee led approach
- Protection and Psychosocial: Local Committees and Community Health Volunteer led approach

Overall Local Coordination: Village Level Advisory Committee for programme implementation This committee included representative of user groups, cooperatives, committees and local government leaders.

The important inter-linkages generated in the communities by the integrated (or multi-sectoral) approach of NERP made a holistic recovery possible. Early on families immediately accessed Masons trained by the programme to construct earthquake resistant houses using local materials. Neighbours helped each other to build houses by sharing labor and this motivated vulnerable families to build houses. Before or even while constructing their houses, communities worked together to build

#### Summary of good strategies used by Caritas Nepal:

- 1. Holistic approach of the programme that has intervention in multiple sectors (as per need of the earthquake affected communities). The holistic approach resulted in bringing about strong inter-linkages creating synergistic action for social and economic recovery.
- 2. Local people and community led social mobilization approach to promote ownership, local contribution, and for sustainability. For example: 'owner driven approach' in shelter sector; 'Village Water, Sanitation, and Hygiene Coordination Committee' and 'Drinking Water User Group led approach' in WASH sector; Farmer Group and Cooperative led approaches in livelihood. Local Disaster Management Committee led approach for disaster risk reduction. These are also in line with the policies and strategies of Government of Nepal in terms of community participation in these sectors.
- 3. In each sector, a holistic technical package has been applied to address local concerns for building back better, to address capacity building needs, and to ensure sustainability.
- 4. Most vulnerable households were identified by village teams and effort was made to reach these families with multiple sector support in timely manner Protection volunteers and committees helped sectoral teams to realize this objective. Feed back mechanisms in form of feed back boxes and toll free phone lines were placed to receive and address suggestions / grievances.
- 5. People facing psychosocial challenges and with disabilities were identified by trained volunteers and then linked to local health post and specialist organizations. These people were also provided referral support to access medication and disability registration cards from hospitals and local governments respectively. This work was done as pilot activity by Caritas Nepal in NERP.
- 6. Implementation of the programme by forming Village Advisory Committees to address integrated recovery needs of the village and with good coordination with local government, line agencies and overseeing authorities.

Caritas Nepal implemented the programme effectively and in a cost efficient manner. Emphasis was given to train and mobilize local human resources. 15 village offices, 4 district offices, and one central level Programme Management Unit was set up to implement the programme. The administration cost of the programme was less than 17% for both the relief and recovery effort of Caritas Nepal. This shows the efficiency in service delivery by Caritas Nepal even in challenging scenario.



#### **Achievement and Good Practices**

#### Objective one (Shelter sector): People live in safe and adequate shelter

The shelter support activities of Caritas Nepal have enabled the earthquake affected families to pursue house construction in an 'owner driven approach'. The campaign slogan of Caritas Nepal and the communities is 'Surkashit Awas Afain Banau'. This translated in English is 'let us construct safe houses ourselves'.

Orang (Bigu -2) of Dolakha, was the first village to complete shelter construction in April of 2018 (as per then existing NRA list) out of more than 600 villages damaged by earthquake. Similarly, Kalika (Sunkoshi - 3) of Sindhupalchowk was the second village to complete house construction. In this way, by providing timely socio-technical support, housing grant support, Caritas Nepal enabled local communities to build earthquake resistant houses on timely manner. The houses built by the families ensured better health, safety and security of their family members and this enabled them to improve their livelihoods and contribute towards village development.

Cartias Nepal had proposed to support 4825 households in the six full shelter package supported locations (Orang, Bulung, Thokarpa, Kalika, Balthali and Chandenimandan). However, only 4775 households with their names in the NRA list enrolled to receive the housing grants. Hence, the revised target for full shelter package support is 4775 households.

### Result one: People are living in safe shelter and adequate shelter

The households selected earthquake resistant house designs and managed house construction. 4620 households of 6 village locations (Orang, Bulung, Thokarpa, Kalika, Balthali and Chandenimandan) have already constructed earthquake resistant houses using local materials. That is 97% of the targeted 4775 households are living in earthquake resistant houses. Additional, 155 households are pursing house construction. The houses constructed by the villagers are mainly of stone mud masonry (45%), brick cement masonry (39%) and reinforced concrete technology (11%), Compressed Stabilized Earth Brick (3%) and others (2%). The houses built have used earthquake resistant technology and rural house design (as per DUDBC catalogue 1).

#### Result two: Households have received technical guidance

8787 households have received individual level technical guidance. This includes socio-technical support provided to 4088 households in 7 new locations (Sailung 6 and 7, Sunkoshi 4 & 5, and Chaurideurali 1, 2, & 3). This effort to provide additional technical support in new locations was started in August of 2017 as per advisory of NRA to reach more households with socio-technical guidance.

As per end line survey 97% of the households have noted they feel safe in their newly built earthquake resistant houses. About three fourths of the households were able to re-construct their houses within a three month period. 96% of the households have built their houses in their original place of residence.

Result three: Earthquake affected communities have acquired knowledge and skills to pursue earthquake resistant house construction

The communities are aware of earthquake resistant construction and have demonstrated capacity to build, and maintain their houses. 7600 households were oriented in pursuing earthquake resistant shelter construction using local materials such as stone, mud, wood, and bricks. These households have now completed house construction. As per end line survey, 43% of households received technical support from Caritas Nepal team with 4-5 visits, and 45% households received technical support from Caritas Nepal with visits of more than 6 times.

758 Masons (28 Female) were trained in earthquake resistant house construction training (7 days long on technical issues, role of Masons, and social mobilization). These skilled workers have successfully led the effort for house construction in the villages. Many of these Masons, working in construction teams have constructed 20 or more houses. The Masons were fully employed and also received higher wages after the training. Lady Masons were glad to earn wages and used this for the welfare of their families. The Masons appreciated the recognition they received from the communities. Masons who migrated from other locations to work in the villages where also provided orientations on earthquake resistant construction. As per end line survey, 90% of the households noted that mason training, orientation and shelter sector neighbourhood meetings enabled them to construct houses.

#### Result four: People have access to financial support

Caritas Nepal has provided initial tranche of housing grant to 4775 earthquake affected households of six locations (Orang, Bulung, Kalika, Thokarpa, Chandenimandan, and Balthali). It is noted that 4620 households have completed house construction (97%) and received full housing grant (Rs. 300,000/-). 60 households are nearing completion of their houses (1.2 %), and remaining 95 households are yet to complete to the wall level (1.8%). The grants were provided through Laxmi Bank, Sindhu Bikash Bank, Nepal Bank, and Prabhu Bank that were recognized by NRA to provide the shelter grant support. People were glad to receive grants from these nearest locations -Singati, Sukute, Panchkhal, Panauti. People with disability and elderly family members were provided additional transport facility to reach the banks to collect the funds. As per end line survey, most households (94%) have noted they received final housing grants on timely manner.

Ms. Mithu Thakuri in front of her new earthquake resistant house in Orang, Bigu, Dolakha.



## Table: Fact Sheet for Shelter Sector (some progress and achievement indicators)

s. no.	Particulars	Indicator (number)	s. no.	Particulars	Indicator (number)
1	Number of houses constructed	4620 houses (96.8%) completed 60 houses (1.3 %) constructed till wall level 95 houses (1.9 %) still to complete wall level	8	Number of households supported by Caritas Nepal to put in grievances and advocate to receive grant support successfully	1040 households in full shelter package locations, and 614 households in new locations with partial shelter package support)
2	Types of houses constructed(with concrete or wood bands and other earthquake resistant features)	45% stone mud masonry, 39% brick cement masonry, 11% with reinforced concrete pillars, CSEB 3%, others 2%.	9	Number of single women and people with disability who have constructed houses	402 single women and 77 households with people with disability. All vulnerable households as per NRA list have construced houses.
3	Number of shelter groups formed and oriented:	284 shelter groups in 13 locations (past VDCs)	10	Number of local masons trained in training (7 days) for earthquake resistant house construction using local materials	27 units of training. Out of the 758 masons trained, 28 are female.
4	Number of households oriented	7600 households.	11	Percentage of Masons trained and working	Initially 86% and later 70% Masons trained are working full time.
5	Number of households provided technical guidance	8787 household (4-8 visits per household)	12	Types of additional resources supported by Caritas Nepal	Water tanks, pipes, water pumping machines, Caritas Nepal's trucks to transport construction materials.
6	Number of model houses constructed and provided to most vulnerable family in the village	26 units of stone mud masonry and brick cement masonry houses	13	Number of households (HH) provided housing grant and transport top up  Note: The original target HH number was 4825 and all enrolled 4775 HH have been given first installment.	Grant tranches situation:  1st (Rs. 50,000): 4775HH  2nd (Rs. 150,000): 4680 HH  3rd (Rs. 100,000): 4620 HH  Additional remote location transport support top up for 0rang and Bulung of Dolakha: 1422 HH

**Table: Good Practices in Shelter Sector** 

s. no.	Intervention strategy	Description of practices
I.	'Owner driven approach' promoted through social mobilization.	<ul> <li>a) Formation, issue orientation, and facilitation of shelter groups. Mobilizing households by organizing them into groups and local committees to work together to access materials, human resources, and to share labour etc.</li> <li>b) Guidelines and training provided to social mobilizers to facilitate households to construct houses as per owner driven approach. 5 local social mobilizers and 9 local volunteers placed and trained to lead shelter campaign in each village.</li> <li>c) Individual level support provided to each household by social mobilizers who know of the context and spoke the local tongue. Special emphasis given to socio-economically vulnerable households to encourage them to construct houses by providing necessary advice, motivation and support by local committees. The local families also shared labor to help each other to construct houses.</li> <li>d) Guidance provided to households for enrollment and for pursuing grievances.</li> </ul>
2.	Holistic technical package with individual level technical guidance.	<ul> <li>a) Guidelines and training provided to technicians to facilitate households to construct earthquake resistant houses as per owner driven approach. 2-4 engineering technicians placed in each village as per need for technical guidance. Individual guidance to households by trained technicians on house designs, costs, lay out, construction supervision, and for filling application forms for shelter grant access etc. Each house was visited 5 to 8 times by local shelter team (social mobilizers and technicians).</li> <li>b) Awareness and orientation on earthquake resistant designs (DUDBC catalogue).</li> <li>c) Awareness created by model houses constructed using local materials (stone, mud, wood, bricks), model houses were constructed for 26 most vulnerable families of the 13 villages.</li> <li>d) Mason training based on seven day long DUDBC curriculum and including practical training opportunities. One day was added to discuss the important role of Masons in reconstruction and for social mobilization.</li> </ul>
3.	Support provided to access housing grants and additional top up provided.	<ul> <li>a) Provision of housing grants through banks that are nearest to the villages. Individual electronic card provided in Orang and Bulung by Laxmi bank.</li> <li>b) Individual level support to ensure households are able to fill forms and access grants on timely manner by social mobilizers and technicians. This is to report to local government, NRA, DLPIU, DCC, GMALI.</li> <li>c) Rs. 50,000/- per household top up provided to remote locations of Orang and Bulung of Dolakha. This was provided as remote location transport support.</li> </ul>
4.	Addressing other limiting factors	<ul> <li>a) Improving village roads through cash for work helped villagers such as of Orang and Bulung to access materials for construction on timely manner and prevent delays.</li> <li>b) Water access improved through drinking water and irrigation system re-construction. People used newly accessed water from the systems to construct houses such as to mix mortar. Some most vulnerable people such as people with disability and elderly were also provided transport facility to go to the banks to receive the housing grants.</li> </ul>
5.	Coordination and advocacy	a) Coordination with NRA, SWC, CLPIU, HRRP at central level and coordination with DDC, DLPIU, GMALI, District DUDBC and NRA offices, village NRA officers, and local governments for shelter construction facilitation.

In this way, earthquake affected households including most vulnerable households have constructed earthquake resistant houses with the support of Caritas Nepal. The changes brought about are further described by the case studies presented later in this publication.



# WASH Sector Achievement and Good Practices

# Objective two (WASH Sector): People have access to safe drinking water and hygiene and sanitation facilities.

Caritas Nepal has WASH committees, user groups, local institutions and volunteers to work together to improve safe drinking water access, personal hygiene, and household and community sanitation. The rural families and communities have improved access to safe drinking water, improved toilet facilities, declared their communities as 'open defecation free locations', and are undertaking campaigns to pursue 'total sanitation'. 'Total Sanitation' concept is part of Nepal Government's policy to facilitate wider improvement in WASH in the villages.

# Result one: Earthquake affected households have increased access to safe drinking water

No. of Systems Constructed	Total households reached	Total population reached	Percentage (and number) of households reached in eight main targeted .locations where programme was launched in 2016
69	4502	22955	(HH 4347) 74% In additional 3 locations (Sailung 6, Chaurideurali 1&2) - 155 HH

4502 earthquake affected households (22955 population) have improved access to safe drinking water from 69 drinking water systems constructed by the programme. As per end line survey, 87% of the households surveyed had access to either individual or public drinking water system tap. Access to individual household level taps has increased from 4% to 39%. 92% of surveyed households could fetch water within 5 minutes, and 90% of the households reported they had adequate availability of water. 77% of the households noted they had access to excess water and could use the same for kitchen gardening as well. 60% of households noted tap water quality was clear throughout the year, while, 33% noted there was some turbidity during monsoon. 77% of the households practice water quality improvement measures such as filtration and boiling.

Caritas Nepal worked with the 69 User Groups for developing the drinking water project plans (feasibility, system design, and cost estimation). The user groups committees managed the construction of the systems with technical guidance of Caritas Nepal. The user groups were able to mobilize beneficiary households to contribute labour for transporting construction materials, for laying drinking water pipes and for construction of reservoirs and tanks. In this way, the local in kind contribution of the projects have been about 30-40% of total cost. The user groups are now managing the systems by preparing water safety and sustainability plans. The user group committees are mobilizing the households to provide labor contribution and/or tariff payments for maintenance of the systems. Caritas Nepal has handed over the drinking water systems to the user groups and local governments, and is confident that the local community will work together to sustain the systems in the longer run.

# Result two: Earthquake affected households have increased access to sanitation facilities

Every household in the communities was visited by the volunteers and encouraged to improve or construct new toilets. More than 4620 households have improved their toilet facilities. 250

vulnerable households constructed toilets with septic tanks with additional financial grant support from Caritas Nepal. One toilet (with girl and boy latrines) each were constructed in 14 schools in Orang, Bulung, Kalika, Thokarpa, Baseswar, Hariharpur Gadhi. In addition, 4 community toilets have been constructed (2 units at Chandenimandan, 1 unit at Kalika, and 1 unit at Thokarpa). The communities have declared their locations as 'open defecation free villages'. As per end line survey, 99% of the households were using their household toilets while 1% were using their neighbour's toilet.

# Result three: Earthquake affected households have knowledge and skills to improve hygiene and sanitation.

74 volunteers, child clubs in 14 schools, and 9 WASH committees are leading the WASH situation improvement campaign in their locations. Children and adults in eight village locations are working together as communities and are encouraging all to pursue safe hygiene and sanitation practices. As per end line survey, 95% respondents were aware of proper hand washing, 91% on importance of keeping house clean, and 70% on personal cleanliness issues. Local communities have realized their aim of declaring their locations 'open defecation free' and are undertaking wider campaign to pursue 'total sanitation'. With greater access to water from the newly built taps, children and adults are taking bath more regularly. People are following proper sanitation practices such as washing hands after going to the toilet or before eating. Village Health Posts have reported reduction of water borne diseases in the communities.

# Result four: Earthquake affected communities have increased capacity to manage water, sanitation and hygiene facilities.

Nine WASH committees (i. e. of Orang, Bulung, Kalika, Thokarpa 1 and Thokarpa 2, Chandenimandan, Balthali, Baseswar and Hariharpur Gadhi) have been strengthened. The trained WASH committees have prepared local WASH plans in a participatory manner. They have submitted the plans to the local governments and wider local stakeholders. They plan to implement the new WASH plans with an aim to move towards 'total sanitation' in the future.

69 user groups are managing drinking water systems. 58 Drinking Water User Groups have each prepared 'water safety and sustainability plan' and other 11 groups have prepared smaller plans for raising funds and general maintenance of the drinking water systems. The groups meet on periodic basis to collect user fees and take participatory action (labor work) to maintain the systems. Local plumbers trained by Caritas Nepal are supporting the groups to maintain the systems. Cleaning of water source areas and water reservoirs are done regularly.



Table: Fact Sheet for WASH Sector (some progress and achievement indicators)

		, 1 8		,		
S. no.	Particulars	Indicators	S. No.	Particulars	Indicators	
1	Number of households with improved drinking water access	4502 households (22955 population)	7	Number of extracurricular activities supported to child clubs on WASH	220 extracurricular events held	
2	Number of households who have improved toilets	4620 households (250 vulnerable HH with special grant support)	8	Number of school toilets constructed with girl and boy latrines and students served	14 latrines in 14 schools, 1496 (750 girls) students	
3	Number of groups trained in drinking water safety and system management	58 user groups prepared water safety & sustainability plans	9	Number of model house toilets constructed	26 units of model toilets constructed	
4	Number of drinking water tests undertaken (at source, reservoir, taps)	1012 samples taken and tested	10	Number of awareness materials (posters and leaflets)	32000 awareness materials	
5	Number of water tank disinfection actions undertaken	122 units of disinfection activity implemented	11	Number of dramas hosted at school and community levels for awareness raising	84 units with moroe than 6000 people reached	
6	Number of schools and child clubs supported for hygiene and sanitation campaign	Child clubs in 14 local government schools				

#### **Table: Good Practices of WASH Sector**

s. no.	Intervention strategy	Description of practices
1	Local user group and community led approach promot- ed through social mobilization.	<ul> <li>a) Strengthening of Village Water and Sanitation Coordination Committee (VWASHCC) for local WASH plan development, to submit plans to local government and wider stakeholders, and to implement the plans to ensure synergy with national government's policy to move toward 'total sanitation concept'.</li> <li>b) Mobilizing 'Drinking Water User Groups' to construct, manage and sustain drinking water systems through regular guidance, orientation, and training.</li> <li>c) Training and guidance to child clubs of schools and local WASH Committees for undertaking hygiene and sanitation improvement campaign.</li> <li>d) Trainer's Training of Community Health Volunteers on effectively undertaking sanitation and health extension in coordination with specialist organizations.</li> </ul>
2	Holistic technical support provided as per Nepal Stan- dards.	<ul> <li>a) Feasibility of drinking water systems prepared with participation of local user group members.</li> <li>b) Technical guidance for drinking water system construction. Drinking water systems based on gravity flow, pumping system (with electricity and solar power) promoted.</li> <li>c) Systems constructed by reducing disaster risks (such as laying pipeline two feet deep, and constructing reservoirs in locations safe from landslides, and applying technologies such as Ferro-cement tanks).</li> <li>d) Training on 'water safety planning and plumbing training' to water user groups.</li> <li>e) Construction supervision and guidance provided as per Nepal Standard for construction of drinking water systems and school toilets.</li> </ul>

The program has enabled local people and communities to improve their WASH facilities. The changes brought about are further described by the case studies presented later in this publication.



# Livelihood Sector Achievement and Good Practices

Objective three: Earthquake affected households have increased livelihood security.

Result One: Vulnerable earthquake affected households earn cash income to meet immediate household needs and have improved access to community infrastructure.

5212 vulnerable households took part in cash for work activities. The cash earned was used by the families to meet their basic needs such as food and clothes. Interestingly, some households have utilized the cash for the reconstruction of their houses as well physical infrastructure such as irrigation canals (15 units), motor-able roads (10 units), community buildings (11 units), bridges, walls of classrooms, resting place near the road have been constructed with cash for work.

15 units of irrigation canals have been repaired or constructed irrigating 211 ha of land. This has helped 1978 farmer households to pursue farming of main crops and vegetable crops in a timely manner. 6 units of milk collection centers and 5 units of vegetable collection centers have been constructed. These infrastructures have benefited more than 2000 farming households to improve agriculture production and market their produce.

Infrastructure improved or constructed through cash for work has contributed to socio-economic recovery of the locations. For example roads improved in Bulung, Orang, Thokarpa, Kalika, Balthali and Chandenimandan helped the local people to access basic materials (i.e. food, agriculture inputs) and re-construction materials (i.e. iron rods, cement, and wood) on a timely manner. Marketing infrastructures constructed are being managed by the community.

As per end line survey, 79% of the surveyed households are selling their farm produce (agriculture or livestock produce). Most of the products are sold to villagers, in nearby markets or retailers.

## Result Three: Earthquake affected households have restored and expanded their livelihood activities.

Seed support was provided in the first year to 5,449 households given many had lost seeds when their houses collapsed due to the earthquake. With access to seeds the small farmer households were able to continue farming main crops such as rice, maize and wheat. There has been yield increases realized by the farmers due to seeds introduced. 8,144 trained small farmers of the target areas are pursuing livelihood recovery effectively by improving agriculture and/or livestock raising activities. 2365 farmers are now pursing sustainable agricultural practices. 2321 people supported are pursing livestock raising for income generation more effectively. These farmers were provided three days training on sustainable agriculture or livestock management concerns and were provided grants or material inputs worth about Rs. 35000. They have been able to improve household food security, nutrition, and incomes by improving and/or expanding farming and livestock raising practices. Additional 3458 farmers have taken livelihood enhancement training, received grants of Rs. 22000/- each, and made effective efforts to re-establish and expand their rural livelihoods.

As per end line survey, 95.2% of the surveyed households have received livelihood sector training and support. 78% of the households reported improvement of their livelihoods. 41.6% of households reported increase in livestock income, 39.7% of the households reported increase in agriculture income. 81.3% of the households noted they have improved food security status now

as compared to immediately after the earthquake. The low income and poverty level households have used their incomes for improving their basic well being, to pay loans, and for savings for the future.

#### Result Four: Earthquake affected households have increased access to community-based financial services

The administration or management capacity of fifteen local cooperatives have been strengthened. The cooperatives are providing micro-finance services to the communities from the resources they have raised themselves. In addition to this, they have been provided grants by Caritas Nepal to provide soft loan (low interest loans) to vulnerable households. More than 1100 households have received soft loan and are improving their rural livelihoods. The cooperatives have also helped in implementing various activities such as cash for work activities. The cooperative leadership have improved good governance in the cooperatives, and the organizations plan to work for economic and social development in the villages in the long run.

As per end line survey, 96.4% surveyed households had access to micro-finance institutions (cooperatives, micro-finance, banks). 89.5% of the households have monthly savings of Rs. 100/- to Rs. 20,000/-

#### Table: Fact Sheet for Livelihood (some progress and achievement indicators)

S.N	Particulars	Indicators	S.N	Particulars	Indicators
1	Cash for work	5212 HHs engaged in cash for work activities for 5-7 days each	6	Non-farming training to vulnerable HHs	10-units completed, 198 particpants took part
2.	Training in agriculture and livestock in eight locations (from 2016 onwards) and fund support	Agriculture training (3-4 days) and technical follow up: 2365 farmers trained and provided Rs. 35000/-grant each.  Livestock training (3-4 days) and technical follow up: 2321 farmers trained and provided Rs. 35000/-grant each.	7	Repair and reconstruction of physical infrastructure such as irrigation canal and marketing infrastructure.	15-units irrigation canals have been repaired/restored with irrigation outreach added to 211 ha of land.  Similarly, 6 units of milk collection center and 5 units of vegetable collection centers have been constructed in the program locations.
3	Livelihood enhancement training (from 2017 onwards) and fund support	3458 Farmers were provided livelihood enhancement training and follow up services. Each farmer provided Rs. 22000/- grant.	8	Micro-credit loan mobilization	More than 1100 HHs received soft loan from 15 partner cooperatives.
4	Integrated pest management	21-unit season long IPM FFS training provided to 585 farmers.  IPM practice has resulted in decrease in chemical pesticides used in the villages.	9	Farmer groups formation and review planning meeting in quarterly basis	In total 274 farmer groups have been formed (124 agriculture groups and 150 livestock groups). These groups have been linked with local government and cooperatives.
5	Kitchen Garden training and input support	80 units trainings held 1890 farmers trained			

### **Table: Good Practices in Livelihood Sector**

S.N	Intervention strategy	Description of practices
1	Cash for work activity facilitated to be implemented by local committee as per local needs for infrastructure development	<ul> <li>a) Cash for work implementation guidelines developed in Nepali language and local people and stakeholders oriented on the same.</li> <li>b) Infrastructure improvement or livelihood sector development need identified through meetings held with local stakeholders. Emphasis given to irrigation and marketing infrastructure development.</li> <li>c) Participatory planning and implementation pursued by formation of local committees to manage the tasks</li> </ul>
2	Livelihood training and extension and grant support package	<ul> <li>a) Short term training in kitchen gardening, vegetable farming, and livestock raising and follow up meetings held given time limitation of families pursuing recovery. Seasonal follow up meetings held. Field level extension undertaken by village based agriculture and livestock technicians. Off farm enterprise trainings also held as suitable by working with local cooperatives.</li> <li>b) Provision of suitable material and/or grant support (amounting to Rs. 22000-35,000/- per household)</li> </ul>
3	Cooperative strengthened to provide micro-finance service delivery	<ul><li>a) Leaders and Members trained to manage cooperatives in an accountable, transparent and financially sound and sustainable manner. The cooperative leadership have been trained to sustain the economic development efforts, and social inclusion efforts in the long run.</li><li>b) Cooperatives involved in suitable recovery work such as to provide soft loans to vulnerable households affected by earthquakes. Cooperatives involved to implement livelihood activities such as cash for work and enterprise trainings etc.</li></ul>

The earthquake affected households including many vulnerable households have been able to pursue livelihood recovery. The changes brought about are further described by the case studies presented later.









# Addressing Disaster Risk Reduction

# Objective five: Earthquake affected communities have increased resilience to disaster risks.

Caritas Nepal has mainstreamed disaster risk management concerns in the program activities for Shelter, WASH, and Livelihood. These include earthquake resistant house construction, construction of drinking water systems in safe locations, putting in mitigation measures where necessary, promoting vaccinations and insurance for livestock etc. In addition to this, efforts have been made to discuss disaster risk reduction at the community level and undertake demonstrative mitigation measures. Capacity of Local Disaster Management Committees to provide emergency response services have been enhanced. Similarly, Local Disaster and Climate Resilience Plans have been facilitated to be prepared.

# Result One. Earthquake affected communities have implemented disaster risk mitigation measures

Communities were organized to undertake eleven types of disaster mitigation works as animal health camp, plantation, landslide protection, fire-line construction, lightening protection system, water source protection, natural pond conservation, plant clinic. These mitigation works were carried out with the leadership and participation of the local people.

# Result Two: Communities have increased knowledge, skills and capacity to manage disaster risks

To institutionalize DRR activities in local levels, 12 Local Disaster Management Committees (LDMC) were formed in the working locations with direct involvement of 440 community members including 125 females. Teachers, political leaders, CBO members, child club members, women, people with disability, Dalits, ex- army and police security personnel were nominated for committee formation, considering the government guidelines. The committees have around 19-25 members. These committees along with other community members were provided with Community Search and Rescue (CSAR) and basic first aid (BFA) training along with orientation on 'emergency response standard operating procedures, emergency fund mobilization guidelines, disaster management act 2018, local level model disaster management act as an example to local governments'.

The LDMCs undertook quarterly meetings and prepared Local Disaster and Climate Resilience Plans (LDCRP) for their respective committees. The plans include the following: list of main hazards, neighbourhood level hazard maps, priorities for preparedness, mitigation, and process of service delivery in time of emergency. 9 of NERP's initial wards have allotted emergency funds ranging from Rs. 50,000 to Rs. 350,000 after the submission of the LDCRPs. The funds have been used in accordance to the need of the locations. The LDMCs also undertook a review of effect of Monsoon on the communities in coordination with the local governments. In this way, communities have increased their knowledge, skills and capacity to manage disaster risks.

# Result 5.3. Caritas Nepal has increased organizational capacity to promote and implement DRR activities

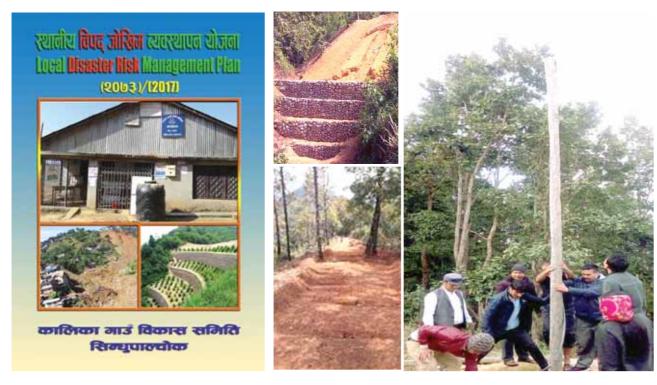
Caritas Nepal has finalized new strategic plan document (2017-2021) with interventions in social, economic and humanitarian domains. DRR mainstreaming and policy formulation

workshop has been undertaken with the participation of 41 Caritas Nepal Staff from central, regional and field offices.

Disaster management capacity assessment was done in a participatory manner by undertaking disaster management capacity survey of Caritas Nepal and partner organizations, and the results of the survey were shared for discussion and planning purposes in the workshop. Discussions were also held to obtain recommendations to prepare DRR strategy and DRR policy in the workshop.

#### Table: Fact Sheet for Disaster Risk Reduction

S.N.	Particulars	Output	S.N	Particulars	Output
1	Number of Local Disaster Management Committees formed	12 LDMCs with around 19-25 members formed	8	Medication support to livestock	Medication support provided to 113 animals of farmers from Orang and Bulung, Dolakha
2	Number of Risk Vulnerability Capacity Assessments undertaken	10 RVCAs undertaken	9	Fire-line construction	A 4500 meters fire line constructed in Thokarpa
3	Number of Local Disaster Climate Resilience Plans formulated	9 LDCRPs formulated	10	Number of Lightening Protection system installed	3 units of lightening protection systems installed in Dolakha and Sindhuli, protecting 8 schools, two community buildings along with individual houses
4	Number of animal health camps undertaken	9 animal health camps conducted benefiting 1731 farmers	11	Number of Community Search and Rescue and Basic First Aid training provided	2 units of CSAR and BFA trainings provided to 75 emergency task force members of the LDMCs
5	Number of plantation activities carried out	6 units of plantation activities were carried out in Kavrepalanchowk and Dolakha	12	Number of orientation on emergency response, disaster management act 2018  Number of people	9 units of orientations undertaken  119 people with 43 females
				oriented	
6	Number of landslide protection	3 units of landslide protection activities undertaken in Kavrepalanchowk, Sindhuli and Sindhupalchowk	13	Guidelines and policy formulation of Caritas Nepal	DRR strategy, Disaster Risk Management Policy 2018, and Emergency Response Guidelines formulated
7	Number of drainage clearance activity	1 unit of drainage clearance undertaken in Balthali, Kavrepalanchowk			



Local Disaster Risk Reduction Plan formulated with the support of Caritas Nepal at Kalika, Sindupalchowk Mitigation measures such as gabion wall for lanslide protection, fire line, and lightening arrester kept in various locations.

### Table: Good practices in DRR

Intervention Strategy	Description of practices		
DRR mainstreaming in all the thematic sectors of NERP	<ul> <li>a. Shelter reconstruction complying with the government guidelines of earthquake resistant designs and technologies.</li> <li>b. Drinking water systems constructed with earthquake resistant technologies. Reservoir tanks constructed at safe locations. Mitigation measures carried out for water source protection.  Water quality tests and hygiene awareness sessions carried out for the prevention of epidemics.</li> <li>c. Community cooperatives supported have allotted 'risk management funds'. Livestock insurance, vaccination, medication camps undertaken.  Rain water harvesting, plastic ponds construction, plastic tunnels, bio manure distribution undertaken.  Promotion of bio pesticides and fertilizers instead of chemical ones.  Alternative irrigation schemes and plastic greenhouse pursued to reduce drought.</li> </ul>		
2. Institutionalization of DRR activities at local level	<ul> <li>a. Local Disaster Management Committees comprising of political leaders, ex- army and police personnel, women, Dalits, teachers, child and youth leaders formed.</li> <li>b. Risk, Vulnerability, Capacity Assessments undertaken at local level with the participation of the local people.</li> <li>c. Local Disaster and Climate Resilience Plans formulated, after which local governments allotted emergency funds.</li> </ul>		

# SHELTER CASE STUDIES



## Table: Masons Trained by Caritas Nepal

	No. of train		
Location	Full shelter package locations	Partial shelter package locations	Total masons trained
Orang	24		
Bulung	24		
Dolakha	48	52	100
Balthali	54		
Chandeni	94		
Kavreplanchowk	148	224	372
Kalika	84		
Thokarpa	131		
Sindhupalchowk	215	71	286
Total	411	318	758



### Table: House reconstruction status

S.N	Location	Number of houses constructed	S.N	Location	Number of houses constructed and percentage
1	Orang, Bigu-2, Dolakha	565 units or 100%	4	Thokarpa, Sunkoshi-1,2 Sindhupalchok	1164 units or 99%
2	Bulung, Bigu-3, Dolakha	743 units or 98%	5	Chandenimandan, Mandandeupur- 10, Kavrepalanchok	986 units or 92%
3	Kalika, Sunkoshi-3, Sindhupalchok	645 units or 99%	6	Balthali, Panauti-11, Kavrepalanchok	517 units or 92%
	Total	4620			

# Orang – First village to complete shelter reconstruction





Newly built house of Mr. Rikshan Tamang

"I used to work in India and Malaysia in the past. After the earthquake I came back to the village and rebuilt our house. Now I will not leave my village, as the combined income from my mason work and agriculture and livestock is better than what I used to earn abroad." –Mr. Rikshan Tamang

Orang villagers completed house reconstruction in April of 2018. It was the first village to complete shelter reconstruction (as per then existing NRA list) out of more more than 600 villages damaged by earthquake in Nepal. This is the story of the villagers who constructed the houses.

Mr. Rikshan Tamang with his family member of seven used to live in a two and half story house (stone in mud mortar with slate roof), which collapsed during earthquake. After staying in a temporary shelter for about a year, they built a new house - two room single story with stone in mud mortar and CGI roofing - with a grant support of Rs. 350,000.00 from Caritas Nepal. According to him, various supports rendered by Caritas Nepal made the construction process easy and timely. He mentioned, "Unlike the old house, this new building does not collapse, as it has incorporated many earthquake resilient detailing and was inspected by qualified engineers." With new skill and knowledge from vegetable gardening training, using better seeds and biofertilizer, they were able to produce a lot of vegetables, even to sell after consumption, which was not the case before earthquake. He happily explained "After taking mason's training, I have already built more than 50 houses so far in ward nos. 1 and 9, besides working in road improvement project." "I had worked in India and Malaysia for many years before returning to the village after the earthquake. Nowadays, I am very busy with construction work and have no plan to go abroad again, as income from mason work, farming and livestock is much more than what I used to get in abroad. Working in own place and staying with family member is something unique experience, which I never felt in the past," he further explained.

"Without Caritas
Nepal's support
and mason
training, I would not
have been able to
remodel my new
house. It is now
earthquake safe;
I received grant
money and have
been engaged
in numerous
construction woks
with better wages"

Mr. Kami Tamang





Note: Case studies 1 to 5 in shelter case studies section (III) is presented by Dr. Bijay Krishna Shrestha who is a shelter specialist.

After collapse of two and half story old house (stone in mud mortar and slate roof) which killed two goats, Mr. Kami Tamang's family (seven members with father) lived in a temporary shelter for many months before building a new house of two room single story with stone in mud masonry walls and CGI roofing. However, this house does not fit the NRA's guidelines and DUDBC's design catalogue.

During the mason's training he learned safer construction practice and received some equipment such as level pipe. With technical support from Caritas Nepal, he remolded his new house by adding rods at different corners and in DPC level and replacing stone gable wall between roof and lintel level by CGI sheets and cement plastering the walls on both sides. Then only was he eligible to receive grant support of Rs.300,000.00 and extra Rs. 50,000.00 for transportation expense. "After mason's training, my wage has doubled and I have been continuously working on school and community building, gable wall construction and road expansion" he shared his experience.

After participating in vegetable gardening training, his family were able to grow a lot of tomatoes in plastic green house and also other vegetables such as radish, cauliflower, turmeric and chilies. "Now we can sell vegetables worth of Rs. 40,000.00-50,000.00 in the shops nearby and in the village," he expressed his satisfaction. In addition to these, their family members have been engaged in livestock and earning about NRs. 20,000.00 to NRs. 30,000.00 on average annually.





"With technical, facilitation and grant support of Caritas Nepal, a single woman like me managed to rebuild safer house without taking any loans"

Ms. Sanu Tamana

After spending painful life in a temporary shed built in the old damaged house for almost two years, Ms. Sanu Tamang, a single woman managed to construct her new house, using local material stone and mud with CGI roofing without taking any loans. In addition to grant support and transportation charge totaling Rs 350,000.00 from Caritas Nepal, she also received an extra amount of Rs 25,000.00. She joined the livestock group and received training and cash support equivalent to Rs. 35,000.00 in three different installment to buy cattle. There was drinking water tap adjacent to the house, construction by Caritas Nepal itself. Before that she used to go to nearby river for drinking water, washing and taking bath, which takes almost one hour one way. "Life in the post-earthquake period has become comfortable due to additional facilities such as drinking water, improved access road, besides new house and better family income from agriculture and livestock" she stated. While working in a group in shelter project, the villagers have developed a habit of self-help. Neighbors help in her farming in lieu of offer cattle (ox and buffalo) for cultivation of their lands.





Mr. Raj Kumar Thakuri's family has been staying in Orang from many generations. After the collapse of the house –two and half story structure with stone in mud mortar and slate roofing – the whole family (wife, two sons and one daughter) lived in a temporary shed a little bit away from the collapsed house. That place was found vulnerable to landslides, so they moved to the site of collapsed house and stayed there for almost two years with bamboo mats and tent.

They built a new house - two room single story structure with stone in mud mortar and CGI roofing. It took about three weeks employing around twenty persons daily. Stones were carried out from neighboring village and CGI sheets were brought from Singati costing Rs. 75,000.00 per bundle. Cooking and eating was done in one room and the next one for sleeping and storing clothes. Extra space was created by covering part of front veranda. The attic space was raised with small windows so that it could also be used for sleeping when necessary especially when relatives visiting the home. They spent around Rs. 550,000.00 for house and toilet. Labor cost was reduced through participation in 'parma' system with neighbours. His family received NRs. 350,000.00 for housing and transportation grant from Caritas Nepal. He also received mason training and his family joined livestock training program, both organized by Caritas Nepal.

According to Mr. Thakuri, their family has been fully recovered from the earthquake and now is living a happy life. "After mason training, I worked in construction of more than five dozens of houses in this community and nearby villages, profiting about Rs.11,000.00 on an average from each house" he happily mentioned. His family has been making good profit from livestock and agriculture. "The products are more than sufficient for household consumption. Sometimes we do sell vegetable in the village," he explained. "There is a new health center and Caritas Nepal is building one school block and another community building, which is very good for this village," he further expressed his happiness.

In this way, many factors contributed to fast reconstruction process in Orang and Orang became the first village to complete shelter reconstruction after earthquake. Majority of newly built houses use locally available materials such as stone in mud mortar for walls and CGI sheets for roofing. They have low height attic spaces without windows. Same design typology has been replicated for many households. All these factors have helped local people to construct houses in cost effective manner. As reconstruction process started early in this village, labor cost and mason's wages were comparatively low. Some of them participated in 'parma' system whereas others engaged in construction activities under 'cash for work' thereby making new house affordable. Single women were further supported with extra amount of Rs 25,000.00 for toilet construction and delivering model houses built by Caritas Nepal itself. As a result, majority of them were able to complete the house within the grant they received from the government of Nepal through Caritas Nepal. Mason training and livelihood improvement activities further supported shelter construction indirectly by strengthening their family income and job opportunity.

"Even now remembering difficulties after the earthquake and landslides and livina in temporary shelter. we reflect how we felt sometimes we might not survive, but with support of Caritas Nepal we are now living in this new house, which is like a dream"

Mr. Raj Kumar Thakuri

# Bulung community realizes a holistic recovery





"Caritas Nepal's working style is unique, as it always puts beneficiaries at the center by providing services at our door steps. It encouraged us to rebuild the house early. Households in neighboring villages are yet to construct houses and receive their grants"

Mr. Gopal Khatri

Mr. Gopal Khatri and his family rushed to the village from Kathmandu after the collapse of their old house (two and half story of stone in mud mortar and slates roofing) in Bulung, where their parent used to live. While staying in a temporary shed of CGI sheets and tent, they lost their father. Need to pay high rent in Kathmandu, difficulties in staying in the temporary shelter and above all Caritas Nepal's active engagement in shelter project in Bulung all have motivated them to rebuild the house at the earliest possible. It cost about Rs. 800,000.00 to construct two room single story housing using stone in mud mortar for walls and CGI for roofing. Both interior and exterior walls were plastered for gaining strength and avoiding mud coating.

"We did not face any problem during construction due to frequent supervision by Caritas Nepal staffs, which also facilitated in getting grants smoothly in different installments" he mentioned. He also took loan amount of Rs 40,000.00 once from Caritas Nepal supported cooperative, which charges only 1.5% of interest rate.

"I will not go back to Kathmandu again to drive taxi, as we found better job and income opportunity here in the village" he explained. He has opened a new retail shop in new house; his wife is busy taking care of poultry and goat rearing whereas his daughter is teaching in a government school. All family members work together in agriculture field. "The combined income from these activities is much more than what I used to earn in Kathmandu," he mentioned. He felt many changes in the villages after the earthquake. Households now have water tap, permanent toilets and safer house, besides better income from agriculture and livestock. Villagers are now getting job due to many ongoing construction works — road extension, irrigation and drinking water project and house construction.

Mr. Ganesh Bahadur Shrestha used to live a happy life in a joint family with his son and grandson (family of six members) in a two and half story house, constructed with stone in mud mortar and CGI roofing. The earthquake destroyed their house and his only son was killed on the way from fallen stone. He was very sad and could not think of moving forward with house reconstruction. The site of the old house was not suitable for habitat due to landslides. This situation has changed after coming in contact with Caritas Nepal. He received social guidance or counseling from



"Untimely demise of my only son pushed us into sadeness. The various suport including social guidance provided by Caritas Nepal helped us to come out of sadness and motivated us to take up our responsibility of building a house. We are pursuing livestock raising for income generation and living a normal life".

#### Mr. Ganesh Bahadur Shrestha

Caritas Nepal. Caritas Nepal took responsibility to build a three roomed single story house for him, assuming that his daughter-in-law and grandson will join them in future. The site was in another land, far away from old house. It was of stone in mud mortar for walls and CGI sheets for roofing. Both interior and exterior walls were cement plastered.

"We were not in a position to rebuild this house even though we received sufficient financial support, but it was Caritas Nepal along with local community who were with us in our hard time" he explained remembering the past. His family also benefited from livestock training and received support of cash and kind equivalent of Rs. 35,000.00. "Life is normal and busy now" he further mentioned. Agriculture product such as maize, wheat and different types of vegetables from farm land is more than enough for two persons. Livestock business has yielded good profit.

Drinking water through pipeline is available in the front yard. His married daughter sometime visit them in the village. He is hoping that one day his grandson and daughter-in-law will join them in future.

Mr. Mekh Man Tamang has a small family of four – one son and one daughter – living in Bulung for many generations. Their two and half story (stone in mud mortar and CGI sheet) collapsed during earthquake and stayed in a temporary shed for almost two years. He built a new house-two room, single story with corridor in the middle using stone in mud mortar and CGI roofing – costing Rs. 700,000.00. All the walls were cement plastered. According to him, large attic space was avoided due to safety reason. Stone was transported from local mines, cement and CGI sheets were brought all the way from Singiti. He received Rs. 350,000.00 from Caritas Nepal and the rest he managed through loans from cooperative and villagers. According to him, expect Rs. 50,000.00 the rest of the loan was being paid back.



"I used to work as laborer before the earthquake making limited income but with support from Caritas Nepal, improved farming and livestock gave us some savings to start a new business of restaurant and retail shop, just next to Caritas Nepal's office here in Bulung"—Mr. Mekh Man Tamang

His family has been living a happy and prosperous life at present. He gave all credit to Caritas Nepal. "This new house is earthquake safe and we can now sleep properly" he mentioned. "There is a permanent toilet and water supply is in the front yard, so life has become easy now" he further explained. He recently opened a new restaurant and retail shop by leasing the land for ten years with monthly rent of Rs. 1,500.00. Various types of vegetable produced from agriculture land and livestock products are being consumed in the restaurant. With these combined income from business and agriculture, he is able to give good education to his children - daughter studying at grade nine and younger son in grade one.

Mrs. Sabitra Mugaratri used to have family of 10 members of three generation living together with different kitchens in a two and half story house made up of stone in mud mortar and slates roofing. She has five daughters and one son (four months). They stayed in a temporary shelter for almost three years. She lost her father in law after the earthquake.

At present, they have two new houses built in close proximity: one for her mother-in-law and other for her family after one year. Both were of two roomed single structure, constructed with stone in mud mortar and cement plastered with CGI roofing. For her family house, they spent around Rs. 700,000.00.

"We received Rs. 350,000.00 from Caritas Nepal and the rest we manage from different sources: own collection, loans from cooperative (Rs 35,000.00 with interest rate of 3%) and villagers (Rs 200,000.00 at interest rate of 25%)," she explained.

Her husband used to work in a retail shop in Darjeeling, India. After the earthquake, he came back and got one week training from Caritas Nepal. Since then, he has been busy in construction

work and already construced 15-16 houses, profiting Rs 20,000.00-22,000.00 from each house. She joined livestock group and got training on keeping animal shed clean and raising goats, buffalo and poultry. "With development of skills and knowledge, we are able to get better income from livestock, around Rs. 15,000.00 per year," she happily expressed. "The new house is much comfortable, as it is plastered and no need to put mud coat, besides safety from snake and other insects," she mentioned. As their combined income nowadays is much better than what they used to earn from working in India, her husband decided to work in the village supporting her wife in livestock.

"The combined income from construction work and livestock is much better nowadays than what my husband used to earn working in India before the earthquake. So, we decided to continue work here in the village"

Mrs. Sabitra Muqaratri



# Thokarpa builds back better with CSEB





Though Mrs. Khanal has a family of 4 persons, her son and her other family members have been staying in Kathmandu for work (at Nepal Electricity Authority) for many years. They used to have two and half story houses built with stone in mud mortar, which was damaged during earthquake. After staying almost three years in the temporary shelter, she alone built a new house using locally produced Compressed Stabilized Earth Block (CSEB) interlocking bricks. It's a two room with corridor at the center and single story structure with sufficient attic space with windows. CGI sheets were used for roofing and covering veranda. Total cost of Rs. 650,000.00 for new house was covered by combination of grant support of NRs. 300,000.00, her saving and loan amount of Rs. 50,000.00 from local Women Finance Group. A separate kitchen was created by extending the wall of the old damaged house and covered by CGI sheets of temporary shelter. A separate toilet on the lower part of the farm land was constructed.

"Building house using CSEB is cost effective, comfortable to live in, looks beautiful and above all they are locally produced and easily available"

Mrs. Chitra Kumari Khanal

She used locally produced CSEB interlocking blocks due to its multiple benefits: locally produced and low transportation cost, comparatively cheaper than bricks, which needs to be brought all the way from Banepa or Bhaktapur, comfortable (cold in summer and warm in winter inside the room) and looks beautiful. After getting vegetable farming training from Caritas Nepal, she gained much improved yield of vegetables such as tomatoes, peas, eggplants, onion, garlic, coriander, etc. compared to pre-earthquake period. "I do not need to buy rice and vegetable these days. For clothes and other expenses, I am regularly getting money from my son," she happily mentioned. She has learned how to keep animal shed clean and hygienic from her neighbours who attended the animal stock training. As a result, she was able to make profit from goat rearing. "Life is more comfortable after the earthquake. New house does not require cow dung and mud coating. There is alternative provision of gas stove. Separate kitchen means no smell and smoke in living and bed rooms. Drinking water is available in the front yard. Rain water collection is sufficient for washing clothes and utensils and flushing toilet. Above all, there is no fear of collapse of house by the earthquake now" she explained.

Mr. Sambhu has a family of four but his family's kitchen is separate from her mother's. Both family used to live in a single story house of stone and mud with thatched roof till destruction in the earthquake. He generally works in a construction site and sometimes does plastering work too, besides relying on agriculture and livestock for family income.

#### CASE STUDY





"We did not have adequate plots to build two houses for two beneficiaries (my own family and for mother). With support of Caritas Nepal and cooperation from local community and ward office, we were allowed to rebuild a single house sharing rooms under financial support of two beneficiaries"—Mr. Sambhu Pahari

"Without extra support from Caritas Nepal, my dream of living in this new house would never come true. Now, I am living in a normal life engaging in goat rearing and hiring some labors to farm my agriculture land, as I alone cannot work all by myself."

Mrs. Bhakti Bhandari Despite listing of two beneficiaries (his family and mother), they were unable to build houses due to lack of sufficient lands. With cooperation from Caritas Nepal, local communities and ward office, they were allowed to construct a single building sharing rooms, using grant support of two beneficiaries. He managed to build the whole building (two roomed single story with CGI roofing) using CSEB interlocking blocks with total cost of Rs. 400,000.00. According to him, most of the money went for purchasing CSEB blocks and paying for trained masons and carpenter: around Rs. 1,000-Rs. 1,200 per day for plastering and around NRs. 1,500.00 per day for carpenter. But the construction cost was reduced due to use of stones from old houses for foundation and participating in 'parma' system. "While staying in temporary shelter of CGI sheets, we used to suffer a lot: hot in summer, cold in winter, disturbance in rainy season, besides insect bites at night; all those problems are gone now after shifting to this new house," he mentioned while appreciating local community and Caritas Nepal. He was also able to increase his income from vegetable farming and livestock business. In future, he plans to increase the habitable space by raising the attic floor by 3 feet so that space can also be used for sleeping.

Mrs. Bhakti Bhandari is living with her elder son. His young son is living in Kathmandu with family. Her source of income is purely from agriculture and livestock. Their small single story (stone in mud mortar with thatched roof) was destroyed in the earthquake. She intended to build a new house of two room single story using 9" thick brick in cement mortar and CGI roofing. However, she was able to complete up to DPC level only due to lack of budget. With this grant of Caritas Nepal she completed the house and has already been staying there from the





last six months. She has been keeping herself engaged in livestock especially in goat rearing and has hired some works to cultivate her land.

Majority of households in Thokarpa built their new houses using locally produced 'Compressed Stabilized Earth Brick' (CSEB). With facilitation from Caritas Nepal, the local community received one machine which would be shared by different groups in different locations. Soil test was also carried out in different locations to find out the best soil. Households were trained for preparing CSEB interlocking bricks on the site. Use of CSEB interlocking bricks for new house construction has been found beneficial in many ways. Its production cost is low due to use of local soils and operated by locally trained people. Its size is bigger than normal brick size and requires less mortar. It can be horizontally and vertically reinforced using iron bars and hence resilient to earthquake. Transportation cost is less. For the same size of house, Mrs. Chitra Kumari Khanal completed her house using CSEB block with only NRs. 650,000. The money used to purchase the blocks by many households has been circulated among beneficiaries only.

Caritas Nepal in coordination with local communities and ward offices supported in different means to ensure completion of house construction by vulnerable people and single women. Mr. Shambu Pahari and his mother could build a single house by sharing resources despite inadequate lands for two beneficiaries. Despite following the same standard house plan, slight variation in attic spaces provided enough flexibility for households to build as per their needs and budget. Those households who have big family and who can afford raised the attic space with provisions of small windows so that it could also be used for sleeping, besides storing agriculture products and junk goods. Mrs. Khanal has a house with higher attic space. However, Mr. Sambhu due to limited budget has house with low height attic space. He plans to increase the height in future for his children.

Mr. Durga B. Pahari's old house of stone in mud mortar also collapsed and forced them to live in a temporary shelter constructed nearby. "Caritas Nepal not only supported us in technical and financial matters, but it also gave us synthetic tank, pipes and other equipment for sharing among households during construction time," he stated. He attended mason training given by Caritas Nepal and nowadays is very much busy in constructing houses in the village and surrounding areas. He was very much encouraged with his new job. His family member also received training on livestock. "With new skill and knowledge, our family is doing much better now than before the earthquake," he further explained.

"Being a trained mason, I do understand the importance of CSEB interlocking blocks and that is why I used them in my new house. It is economical and safer material, besides it provides comfortable environment to live in."

Mr. Durga Bahadur Pahari





# Good quality bricks are being made cheaply with the use of a machine by the people of Dandagaun

There are 20 Dalit households in Dandagaun at Thokarpa, Sindhupalchok. The Dalits are marginalized group of people in Nepal, discriminated largely because of their caste and economic status. The Dalits of Dandagaun lost the little they had in the earthquake. Three of them lost their lives while many of them got injured.

Caritas Nepal intervened to provide safe shelter for these vulnerable people. It provided NRs. 300,000 per household as per the agreement done with NRA. Also, as a means of cost minimization, it provided the community with Interlocking Compressed Stabilized Earth Brick Machine (CSEB) to produce bricks. A 2 days' training was provided to them before handing over the machine.

The Dalit household members have been working to produce these good quality bricks that are cost effective to produce, and that have a more eco-friendly production process. One person from each household work in two to three shifts per day. One CSEB brick is almost three times in size of that of a normal brick. One sack of cement mixed with mud and sand can produce about 65 bricks. These bricks upon taking out of the machine are cured (or kept in shade and watered)





The local people noted that a small house (with two rooms, a kitchen and a small balcony) needs about 1800- 2000 CSEB bricks as against 6000-7000 pieces of regular bricks

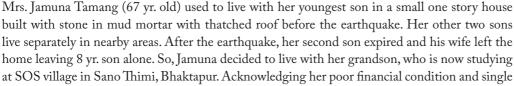
In total 120 households of Thokarpa (Sunkoshi) have constructed CSEB houses. These include the 20 Dalit households noted above. The villagers note that CSEB has provided them a way to build back better. The width of the walls is smaller when they use the bricks as compared to stone. The time take for construction is also less. The finishing is good hence there is no need for plastering. The CSEB brick houses provides good insulation and so is comfort to live in during summer or winter

# Kalika becomes second village to complete shelter reconstruction

Mrs. Gayatri Khadka used to stay with her husband and four kids (one son and three daughters) before the earthquake in a two and half story house (stone in mud mortar with CGI roofing). The earthquake destroyed the houses and some grains were covered by debris. She is 34 yr. old only and has to take care of all her kids: the youngest is 5 yr. old son and the eldest is 16 yr. old daughter, as she also lost her husband after the earthquake. Her source of income is agriculture and livestock only.

She built the new house – two room single story with attic space – using stone in mud mortar and CGI roofing, costing NRs 450,000.00. Both exterior and interior walls were cement plastered. One room is used for keeping clothes, goods and the other room is bed room. There is a kitchen and animal shed outside the building. She received Rs. 300,000.00 as grant support and some extra money for transportation expense. Remaining

fund required to build the house was received from her mother and limited loans from villagers. Caritas Nepal also supported Rs. 5,000.00 each two times for education of her kids. She joined the livestock training package given by Caritas Nepal and received cash or kind equivalent to Rs. 35,000.00. "I'm not afraid that this new house would collapse, as it was built as per suggestions of technical experts" she confidently expressed. "My daily life is busy working in household tasks and rearing goats and buffaloes, besides taking care of kids" she further elaborated.



women status, the local communities, ward office suggested her to be recipient of Caritas Nepal support. Accordingly, a two roomed single story house (brick in cement mortar with CGI roofing) was built by Caritas Nepal for her, and she has been staying in this 'model house' now for more than two years. A new toilet was also constructed outside.

Mrs. Jamuna is happy to live in this new house. She mentioned "there is no fear of earthquake now, even if earthquake comes I can go out of the house on." She further stated "I received wooden bed and mosquito net from Caritas Nepal, in addition to this house.

She found living inside the rooms comfortable due to ply wood false-ceiling insulation which protects her from cold and hot weather. She owns small plot of land where maize and wheat are planted. She has already paid Rs. 2,500.00 to Users Committee and hope to have access to drinking water soon.



Mrs. Gayatri Khadka

Mrs. Jamuna Tamang



# Majhi community of Chandenimandan: working together for housing and improving sanitation facilities





"Caritas Nepal's various suppor enabled me to build a new house. Majhi community has transformed into a hygienic settlement due to provision of permanent toilet and drinking water tap in each household, as a result of Caritas Nepal" –Mr. Karna Bahadur Majhi

Mr. Karna Bahadur Majhi, with a family of six members (two sons and two daughter) has been living in present location from many generations. Their two story house of stone in mud mortar and tiled roof collapsed during earthquake. He became very dispirited after the earthquake. Caritas Nepal motivated him and gave him social guidance. He also took some much needed medication accessed through the support of Caritas Nepal. In this way, he became strong enough to move forward and started to build a house. They had been staying in a temporary shelter of CGI sheets for almost three years. His new house was of two room single story structure with masonry wall of brick in cement mortar and CGI roofing. One room used for sleeping parents and other room to store agriculture products. Kitchen was made separately outside and animal shed was kept further away on the lower terrain. So far, the household spent NRs. 550,000.00 for new house. Mr. Majhi received NRs. 300,000.00 as house grant and additional NRs. 50,000.00 for transportation expense from Caritas Nepal. Instead of taking loans from villagers and cooperatives, his family saving was spent to complete the house.

In addition to technical and financial support for construction of new house, his family also received goats and cash support, total equivalent to Rs. 35,000.00 after joining livestock group. The household also owns two ropani of land, where they produce rice, maize, wheat and vegetables like potato, tomato, cauliflowers, enough for yearly consumption. His family has been earning NRs. 1500.00 daily on average, extracting sand from nearby river. They also catch fresh fishes from the river.

He observed many changes in the community after earthquake. "Implementation of Caritas Nepal's WASH program through installation of pipeline networking, construction of water tanks and fixing of water tap in each household can be seen in the settlement" he noted. He concluded "Quality of life has improved in this community post-earthquake period due to the various support extended by Caritas Nepal.".



After staying almost three years in a CGI covered temporary shed, Mrs. Kopila Majhi and her joint family constructed a new house of single story with two room with center corridor, spending NRs. 400,000.00. The walls were of 9"thick brick in cement mortar and roof was of CGI sheets. The center corridor has been used for temporary kitchen with gas stove. The main kitchen was built outside, adjacent to the house. Toilet was constructed near the house and animal shed at the lower terrain keeping a distance between toilet, kitchen and animal shed. Her family also received NRs. 300,000.00 plus transportation cost from Caritas Nepal for rebuilding the new house. Family members worked as laborers and old CGI sheets were used for roofing to reduce the construction cost.

Her husband joined agriculture group and received vegetable gardening training from Caritas Nepal. They also received drum, pipe, seeds and fertilizer and medicine during three days training program. Production of rice, wheat and maize from agriculture land and planting potatoes, tomato, cauliflowers, cabbages, radish and different types of vegetables has made them self-sustainable in regards to nutritious diet.

She observed many changes in the village after the earthquake. Newly built houses are earthquake safe. Each house has a permanent toilet. Kitchen, toilet and animal sheds were often kept outside the building, mainly used for living and sleeping.

"Life is very easy because of easily available tap in the front yard; before we used to carry drinking water from the spring, which took us 15-20 minutes walking," she differentiated before and after the earthquake. To store agriculture products, she plans to create attic space by removing CGI sheets and raising walls in future.

"Open defecation was practiced in the past, however, each house now has one permanent toilet with access to water supply. Households learned to prepare bio-fertilizer from animal waste and technique of keeping animal sheds, kitchens and toilets hygienic through trainings. Not only individual house but the whole village has transformed into a better place"

Ms. Kopila Majhi

#### CASE STUDY



Mrs. Anita Majhi and her father in law in front of her new house

The census of Nepal 2011 reports Majhi's population to be 0.32 percent of the total population. The educational level of Majhis is low and only few have completed higher education. In Chandenimandan(Mandan Deupur- 10, Kavrepalanchowk), *Majhi Gaun* has 90 Majhi households who live by the Indrawati river. This particular settlement was one of the worst affected areas in terms of destruction by the earthquake of 2015. Ten people lost their lives due to the earthquake. 89 households in Majhi Gaun have constructed houses.

One the Majhi households, Mrs. Anita Majhi, a 27 year old woman, and her husband have constructed their new house already. They have two daughters. She moved in to their new home in September 2017. It took the Majhis around 3 months to complete the construction of this two roomed house. Each room is 10 feet by 12 feet in size.

The Majhis are a close knit community and the households in the location provided labor to construct houses for each other. In other words, the households used labor sharing methods to construct their houses. Labor sharing is a good community practice among Majhis and other rural communities, it is known as 'parma'.

"This house is much more comfortable to live in as compared to our temporary shelter a tin shed. My daughters suffered from common cold and cough many times during our stay in the tin shed. In this house, we have not become sick as earlier" expressed Mrs. Majhi.

Mrs. Majhi noted with a grin in her face, "Engineers from Caritas Nepal visited us 6 times to supervise our construction, I therefore believe ours is a strong earthquake resistant house".

Mrs. Majhi and her husband have a small plot of land in which they grow vegetables and rice. Her husband also works as a mason from time to time.



Mr. Bhami Majhi infront of his house

Bhami Majhi, aged 50, is a permanent resident of Chandenimandan -9, Kavrepalanchowk who resides with his eight family members including his wife, three sons, two daughter in laws and two grand-daughters. He and his sons work as agriculture labourers.

Despite all their hard work they have difficult time providing for their big family. His only shelter made with stone and mud was demolished by earthquake killing one buffalo and two goats.

During the emergency period, Caritas Nepal supported him with food and non-food items, WASH kits, and corrugated roofing iron sheets to prepare a temporary shelter.

He notes that he was able to re-build a house with the financial and technical support of Caritas Nepal. Caritas Nepal's shelter team helped him to select house design, undertake lay out of the house, and supervise construction. They also helped him to fill necessary forms to receive the housing grant tranches. He has received the full housing grant amount of NRs. 300,000 from Caritas Nepal.

His house is made of cement and bricks and has two rooms. The roofing is done by corrugated roofing iron sheets. It's been 4 months since his family moved into the new home.

He exclaims, "My family members feel safe and my grand-daughters can sleep peacefully in our new home. We are happy and grateful towards Caritas Nepal for supporting my family and the villagers." He notes that although it is a small house (about 260 square feet) it is providing a much needed shelter for his family.



## Master Sanjay Tamang, a 12 years old child, has a new earthquake resistant house



Master Sanjay Tamang's stone mud masonry house with wooden bands.

### Assurance of security through construction of Earthquake resistant house

The devastating earthquake April 25 and May 12 of 2015 took many lives. Among those who had to bear the grief of losing family members was a young person, Master Sanjay Tamang, a 12 years old boy. Sanjay is a resident of Banspanitole, Orang (Bigu-2, Dolakha) who was orphaned by the earthquake. In his young age he had to bear the grief of losing father, mother and a two year old sister. He was 9 years old when his parents and his younger sister were traveling to nearby market of Singati when they lost

their lives due to the second major earthquake on 12th May of 2015.

He now lives with his grandmother in his newly built Earthquake resistant house. Caritas Nepal supported Sanjay to construct his house for his earlier home had been demolished by the quake. He has received all the three installments amounting to Rs. 300,000/-to build his house from Caritas Nepal. Caritas Nepal has provided additional fund of Rs. 50,000/- as remote location transportation support.

His grandmother, aunt and other relatives were able to help him build his house. Caritas Nepal's village shelter team composed of social mobilizer and engineering technicians visited him, and helped his family to undertake house construction using earthquake resistant techniques such as wooden bands. He says that the fund provided by Caritas Nepal helped him meet the monetary costs of constructing the house. His family had stone and wood in their field, and in the debris of his old fallen house. These were used for construction of the new house. The small house has two rooms and an attic. There is a small toilet constructed nearby the house.

Sanjay is studying in grade 4 at Gaurishankar School. He has to walk for one hour to reach his school. He says, "I have many friends at school and I want join the army when I grow up". His remaining family members are glad that Sanjay has been able to face the loss and move on towards hope. They say he is concentrating in his studies and this keeps him busy and helps him cope with the loss.

His grandmother says, "We have a new house with the support of Caritas Nepal and Sanjay has been in good health and though obviously traumatized he has been able to cope with the situation".

The family's economic situation has also been affected due to the demise of the leading couple of the household. His grandmother and aunts are small farmers who raise livestock and sell the same for income. When he is not in school, Sanjay tries to help his grandmother in farming potatoes, maize and vegetable crops in a small plot (0.3 ha) of land and to raise goats. Caritas Nepal has provided livelihood support to the family through one of Sanjay's aunts, who is a member of the agriculture group of NERP.  $\blacktriangle$ 

12 years old Sanjay Tamang

# Mr. Chankhey Tamang andhis family have a new, safe shelter

### Among the first ones to reconstruct shelter and re-establish livelihood after the earthquake in the village of Bulung is Mr. Chankhey Tamang!

The monstrous earthquake of 2015 literally shook the lives of thousands of people. Chankhey Tamang, aged 48, resident of Bulung (Bigu-3, Dolakha), is one of them. A disabled man with a family of six to look after, initially he was scared and worried. His house was demolished by the earthquake and he was faced with the challenge of building a new one.

Mr. Tamang says, "I can't sleep on my back because I have a hunch-back, I can't carry anything on my back, and I can't walk long distances. Some people of other caste groups look down upon me because of my disability, and because I am just an ethnic person. But I was among the first ones in the village to reconstruct shelter, and I am extremely thankful to Caritas Nepal for all the support they provided me to accomplish this task".



Looking at his new three room house, Mr. Tamang adds, "Now there is no fear of the wind taking away our roof because we have a proper roof. I am really glad that I constructed this earthquake resistant house on timely manner". He says he is using the temporary shelter constructed earlier to store things.

The technicians and social mobilizers of Caritas Nepal visited him 7 times to help him to construct a new house. Initially, they helped him to get enrolled in the NRA's list. Then they supported him and his construction team to undertake layout of the house, and to monitor construction work. The team also prepared and provided reports to NRA and local government on the progress made by Mr. Chankey Tamang in house construction. This helped him to get the remaining housing grant tranches on timely

manner. Stones for the house was brought from Kami Khola (a stream located a kilometer away). Wood was bought from the nearby community forest and from some neighbors. He spent about Rs. 650,000/- to construct his three room house, and Caritas Nepal provided Rs. 350,000/- or 53% of the cost. That is Rs. 300,000/- housing grant and Rs. 50,000/- as remote location transport support.



Tamang and his children in his new shelter

Mr. Tamang's wife cultivates wheat, maize and millet in the 3 Ropanis (0.15 ha) of the family's farming land. The produce from their land provides food grains for their family for 3-4 months. Mr. Tamang works as a carpenter and at times as a mason. He earns Rs. 1000-1200 on daily basis. He also keeps local bees in a traditional bee hive and sells honey earning Rs. 9,000 annually.

Mr. Tamang is a member of the livestock group formed in the location by NERP. He has obtained training on raising livestock and has received livestock grant fund as well. He had five goats earlier, and with the support of the livestock grant provided by Caritas Nepal he has added four more goats. Now the goats have given kids and there are 15 goats in total. He has 2 cows, two oxen and a few chicken.

Mr. Tamang says, "After the training I now know how to take care of livestock better. My livestock number has been multiplying (growing). I shall sell some of my goats and the kids after few months". He notes that livestock raising is an alternate occupation for him now.

### 8.

### Mrs. Sita Bhandari of Thokarpa is a proud owner of an earthquake resistant house

Mr. Sita Bhandari says, "we have safe shelter and my children have improved their performance in studies!"



Mrs. Bhandari being interviewed by M&E officer

Among the many lives that the Earthquake of 2015 affected in Thokarpa (Sunkoshi-1, Sindhupalchowk), Mrs. Sita Bhandari's was one. Thirty nine year old Mrs. Bhandari became a widow 6 years ago. She has a son and a daughter studying in grade 6 and 10 respectively. Mrs. Bhandari is educated up to secondary level. Earlier her main occupation was farming in her small plot of land (6 Ropanis or 0.3 ha of land), and later she joined the local government as an Office Helper. Her total annual income is NRs. 108000/- or about 900 Euros.

The earthquake totally destroyed her house

and rubble was all that was left. Mrs. Sita was devastated. She then made a shack of corrugated iron sheets but the small space was very uncomfortable. She says, 'Monsoon water trickled inside our rooms, my children couldn't study well. Their mattresses would dampen with the falling of water from the cracks in the roof and they couldn't sleep peacefully. I can't forget how my children used to become afraid and scream with the howling of the wind'. Hence, she started construction of her permanent house as soon as possible.

Mrs. Bhandari has constructed a house of stone and mud masonry having two rooms and a small attic, she is a proud owner who now has a house and is providing good shelter to her children. She is also able to provide good living space to her elderly mother in law when she visits her. Caritas Nepal's technicians visited her five times and helped her to decide on house design, layout, and supervising construction process. The total cost of the stone mud masonry house is Rs. 550,000/-. The room size is about 12 by 12 feet. Caritas Nepal has provided all the three tranches of housing grant to her amounting to Rs. 300,000/-. The remaining funds she has arranged herself and part of it is by getting a loan.

Mrs. Bhandari's family started living in their new house eight months back and says that its very comfortable now

Her daughter, who is in grade 10, is thankful to be living in the new house because she can study well in this improved environment. They are proud that they have built an earthquake resistant stone mud masonry house upon learning about the important issue from Caritas Nepal's village team and awareness materials.

She continues to do some farming activity. She has 2 buffaloes and 5 goats. 2 of the goats were purchased after she received livestock grant from Caritas Nepal. She is hopeful of selling goat kids in the future. "Caritas Nepal's approach of intervention has been very helpful and I'm thankful for all the support provided to a single woman like me," expressed Mrs. Bhandari.

## Mrs. Swostika Khatri leads in reconstructing houses in Orang

### A woman mason, Swostika Khatri has put her community into awe!

"I have put the whole community into awe. People are surprised that women can work as a mason to build walls and structures. I am very glad to have received the Mason training. I am an independent woman now and do not have to ask for money from my husband. You'll gladly be surprised to note that I have become healthier after I started working as a mason", said Khatri.

Swostika Khatri, a 33 year old lady, was one of the 25 Masons trained in Orang (Bigu-2, Dolakha) by Caritas Nepal in a seven day long Mason training. After the training she worked with the team and was glad to support in the reconstruction of houses in her village. "People have been requesting for masons in the nearby villages," says Mrs. Khatri. She says she and her team members plan to go to nearby villages to provide construction services since reconstruction work is now completed in Orang village. She says she is happy with her earning of Rs. 1000 to 1800 (euro 9 to 16) per day as a Mason.

The enthusiasm with which trained masons like Khatri have provided reconstruction services is one of the reasons why Orang was the first village to complete shelter reconstruction out of more than 600 villages

damaged by earthquake. Caritas Nepal's team has helped the rural households and the trained Masons by providing technical guidance during the re-construction effort in the village and is glad to promote women to take up new roles such as of the mason in the villages.

"We are now well equipped with knowledge and skills to utilize locally available resources like stones and wood to construct earthquake resistant structures and we will always practice this even after Caritas Nepal is gone," added Mrs. Khatri.



Swostika Khatri constructing a house in Orang (Bigu-2)



## Mr. Tilak Bahadur Budhathoki of Thokarpa pursues socio-economic recovery



Mr. Tilak Bahadur standing outside his house

### A couple with a resilient spirit enjoys the fruits of patience and hard-work!

Mr. Tilak Bahadur Budhathoki, a 49 years old permanent resident of *Ghartigaun*, Thokarpa (Sunkoshi-2, Sindhupalchowk) exemplifies the resilient spirit of the people affected by the earthquake. He and his wife have built their earthquake resistant houses and are pursuing farming livelihood and labor work actively. Recovery has been possible for them because of their patience and hard work.

Mr. Tilak Bahadur Budhathoki, a 49 years old permanent resident of *Ghartigaun* and his wife have hearing problems and also have speech disorder. They have three sons and

a daughter. Two of their sons are working, and their third son is pursuing his studies. Their youngest daughter is still small and will pursue schooling later. Mr. Budhathoki says his cash income is about Rs.30,000 (euro 261) per year only and this he her earns from doing labor work. Recently he has been able to earn some money by doing vegetable farming as well.

After the earthquake, the family had built a small tin shack where they lived. It was very uncomfortable to live inside the temporary shelter during winter and rainy season.

He notes that his stone mud masonry house cost about Rs. 450,000/- out of which Caritas Nepal provided him Rs. 300,000/-. He was among the first people in his village to finish house construction and he has been living in it for about one year now. He thanks Caritas Nepal team for providing much needed support for house construction. Caritas Nepal's technicians and social mobilizers guided him to construct a new earthquake resistant house through regular visits during the planning and during the whole construction period. He is now living in this stone mud masonry earthquake resistant house with two rooms. He has also constructed a toilet outside his house.

Mr. Tilak washing his hands and his daughter helping him pour water He has received a three day agriculture training and farming materials (plastic, water pipe, sprinkler, 100ltrs. tank etc.) from the NERP programme. He gladly shares that he grew tomatoes in the plastic green-house he constructed and earned NRs. 6,000 from selling tomatoes. He irrigates his vegetables by using excess water of the community tap nearby.



He says, "I am grateful towards Caritas Nepal for doing recovery work in this village."

Mr. Khatri is a good example of the resilient spirit present in the hardy rural people supported by the NERP program. This spirit present in him and his family members have helped them to move on with their lives toward hope. He says he is confident now that he can fully recover from the earthquake's impacts by pursuing livelihood opportunities such as farming and labor work in the future.

# Mr. Sarkiman Tamang is a proud owner of a model house in the village!

Mr. Tamang and his son have 357 square feet of living space!



Mr. Tamang's house in Kavrepalanchowk

Sarkiman Tamang of Chandenimandan (Mandan Deupur-10, Kavrepalanchowk) is a 51 year old physically challenged person living with his 14 year old son. His house was demolished by the earthquake of 2015, augmenting his vulnerability. A poor man with disability, he was unaware about the provisions of government to support the people affected with the earthquake. Unfortunately, his name was missing in the NRA's list of eligible beneficiaries to receive shelter support.

Caritas Nepal undertook a vulnerability assessment together with local stakeholders and selected Tamang to provide a demo or model house. This provision would provide him with an earthquake resistant house whilst disseminating knowledge and skills in regard to earthquake resistant structures to the people of Chandenimandan.

The shelter team of Caritas Nepal then designed and constructed the house using locally produced bricks and local masons and labor. Tamang now has a brick cement masonry house with two rooms and a small porch. This house is in compliance with the standards of the Nepal government in regards to earthquake resistance construction. The house provides Tamang and his son with 357 square feet of living space.

This brick house with ground floor only cost a total of NRs. 600,000. Considering Tamang's mental condition, his son was oriented about earthquake resistant shelters and informed of the construction of a two roomed house to support his family.

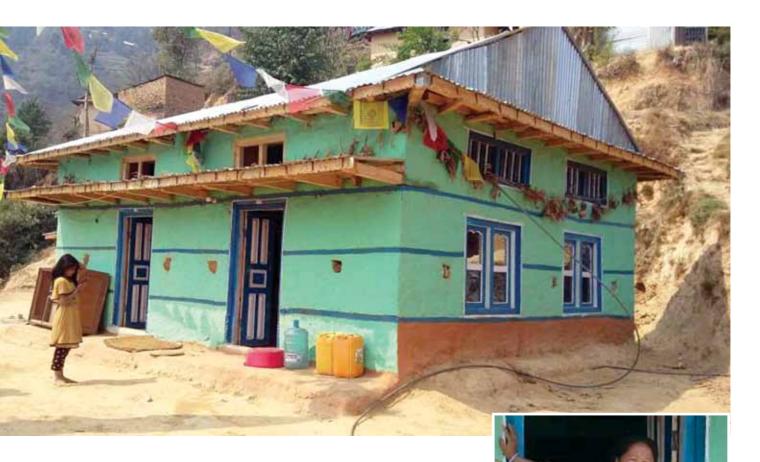
Tamang, along with his son are grateful to Caritas Nepal for reconstructing their shelter. "We believe that this house will not collapse like the older ones in the event of an earthquake. We are really happy to live in this safe house" expressed Tamang's son with a shy smile. ▲



Mr. Sarkiman Tamang with his son infront of his new house

### Mrs. Maya Kanchi Tamang of Chaap has a new safe shelter

Proud and happy to have a new home!



Mrs. Maya Kanchi Tamang, a 43 years old lady, lives in Chaap (Panauti-11 of Kavrepalanchwok). Some time ago her husband left her and married another woman. Now she has to take care of herself and two children - one son and a daughter. Her elder daughter is already married and is living with her husband. Her main source of livelihood is farming in her limited land(0.15 ha). Recently her son, now a youth, has gone to Malaysia to work as a migrant worker.

After the earthquake she was living in a tin shed and now she has a safe earthquake resistant stone mud masonry house with two rooms and an attic. She has received the full amount of Rs. 300,000/- from Caritas Nepal. She says with the family members doing labor work she could complete the house in a reasonable price (Rs. 350,000/)

She thanks Caritas Nepal for taking care of families like herself and providing funds and technical guidance for constructing a safe shelter. She is happy that she and her children now have a nicer environment, a safe home to live in.

# Ms. Kanchhi B.K. has built a house, has access to drinking water and is raising goats for income generation





56-year-old Ms. Kanchhi B.K. lives alone in the hills of Orang village, Dolakha. Considering her parents would have nobody to look after them during their old age, Ms. B.K had decided not to get married. She had a sister who suffered disability in speech. Now her parents along with her elder sister have passed away and Ms. BK has no one to look after her.

Ms. B.K. washing up in her new tap. Her toilet in the background.

The earthquake of 2015 took away her home and she had been living in a cottage until Caritas Nepal motivated her to construct an earthquake resistant house. She built a 2 roomed stone mud mortar house 2 years ago and says that the house is more comfortable than the cottage she had been keeping up with.

A single Dalit woman with only a small plot of land for cultivation, Ms. B.K is both socially and economically vulnerable. She used to work as a wage laborer around the village to make a living. Unfortunately, she was diagnosed with ulcer after the earthquake, which made her unable to work.

Caritas Nepal provided her with livestock grant and technical support to help expand her livelihood security. "Caritas Nepal provided me with grant support with which I bought 2 goats. I sold one for Rs. 12,000 some months back and have another goat that would bring me another 12,000 at hand. I now have 5 goats, including two kids, and am hopeful of earning my living like this," she says.

Ms. B.K has also been supported with WASH project and has a tap installed right nearby her house. "It used to take almost an hour to bring a single gagri of water before CN constructed this tap. You see there, we had to go to that end of the hill. Our legs trembled having to walk uphill. My elder sister died with the cold," adds Ms. B.K.

Moreover, she received Rs. 25,000 as toilet grant support to construct a safe toilet with septic tank, considering her economically vulnerable situation. "It is a matter of shame probably but I used to go to the fields to defecate. Now I can proudly use my toilet. There is no fear of being spotted defecating or urinating in the open anymore," affirms Ms. B.K.

Considering her deteriorating health condition and inability to seek medical treatment, she was provided with Rs. 4,000 as referral support. "I bought medicines for diabetes and ulcer with the money. Caritas Nepal has done all that they could to support a woman like me. The staffs have been very approachable and receptive, I can't thank them enough. I just hope they don't leave the village now," she adds.  $\triangle$ 

## WASH CASE STUDIES



# Puranagau Khetpuchhar Water Supply System

### Pahari Community constructs a drinking water system in three months!

#### Background

Geographic location: Khetpuchhar Village lies in Kalika of Sunkoshi Rural Municipality. The location is situated in the middle of hills in Sindhupalchowk district in Nepal. The ridge of the hill faces towards the north and west. In the north lie the higher mountains and the Himalayas. In the immediate west flows the Sunkoshi River and next to it is Araniko Highway. Khetpuchhar is about an hour's drive from Sukute, a market place at Araniko highway.



A view of Sunkoshi River from Khetpuchhar

Social and economic context: 56 of the 78 households belong to 'Pahari' indigenous group in the location. The census of 2011 reports Paharis as one of the smallest indigenous groups of Nepal contributing 0.05 percent to the total population. They have their own language and own set of customs and traditions. But, having lived with Brahmin and Chhetris, more of the youth are speaking Nepali language. They have limited land holding and most are tenant farmers and wage laborers. Some of them are skilled workers such as Masons and Carpenters. Women are largely confined to in doing household chores and farming activities. The men and women have completed only primary or secondary school education. Most of the households belong to poverty level and some belong to low income economic status.

A Pahari woman from Khetpuchhar

The Paharis are close knit society and they have been working in numerous committees and groups for various purposes. Other members of the community belong to Nepali "Pahadi" caste groups, namely Brahmin and Chhetri. There is also a primary school in the location named Saraswoti Primary School.

#### Drinking water situation before the intervention:

The community had only two taps which was linked to a small tank and a limited water source. Water was not available regularly. Many of the households went to a stream called "Bhitte Khola" to collect water. The

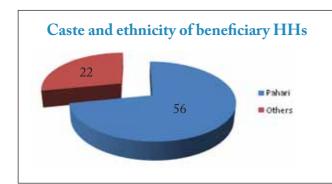


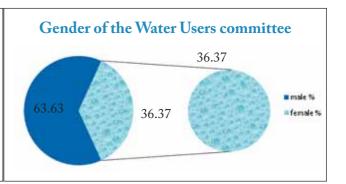
water of the stream was not safe to drink. Also, it was not sufficient during dry seasons. Moreover, the villagers had to walk for fifteen minutes and more to obtain water from this source. Many of the families noted that they had significant difficulty in obtaining water in dry season (at least 3 months) with the nearby water sources drying out. Collecting drinking water itself was challenging, let alone accessing water for bathing, washing and farming activities. These conditions resulted in community people being affected by water borne diseases such as diarrhea, cholera, typhoid etc.

Table: Beneficiary information

S.N.	Particulars	Number
1	Total number of households	78
2	Total Population	460
3	Total number of members in "Purana Gaun Khet Puchhar Water User Committee"	11 4 female, 7 male

Source: Field Survey





#### Description of Intervention undertaken

a. Village Water, Sanitation & Hygiene Coordination Committee (VWASHCC) and Caritas Nepal jointly identify the project: Caritas Nepal had undertaken post-earthquake need assessment in the location. Then the location was given priority upon discussion with Kalika's

Water User Group Committee Board			
S.N	Name	Gender	Designation
1	Dhakal Bahdur Khadka	Male	Chairperson
2	Dil Kumari Pahari	Female	Secretary
3	Dikshya Pahari	Female	Treasurer
4	Tara Devi Khadka	Female	Member
5	Dev Bahadur Karki	Male	Member
6	Khaga Bahadur Pahari	Male	Member
7	Prem Kumari Pahari	Female	Member
8	Bhakta Bahadur Pahari	Male	Member
9	Krishna Bahadur Pahari	Male	Member
10	Ram Bahadur Pahari	Male	Member
11	Kumar Khadka	Male	Member

Village Water, Sanitation & Hygiene Coordination Committee (VWASHCC). This Committee that comprises of 25 local people emphasized the need for supporting the economically poor Puranagaun Khet Puchhar households for accessing water. They also agreed to coordinate to entitle any suitable water source to the needy community.

b. Participatory feasibility study: Feasibility study was undertaken in about 5 days, with active participation of the community members. Caritas Nepal's technical team comprising of three engineers and sub engineers along with 4 local community members identified a perennial water source 2.2 kilometers upstream of the community. This source was approved to provide water to the community by VWASHCC, village government and District Water Sanitation Office.

c. Water user group led approach applied for construction of the system: Nepalese communities are known to work together effectively on common concerns such as accessing water and developing community forestry. Given this scenario, Caritas Nepal applied the 'water user group led approach' for construction, management and mobilization of local contribution for the construction of the system. 'Water user group committee' was formed in a democratic manner with members selected on a consensus basis. This committee was responsible for the management of the construction. The committee was sub divided into sub committees such as construction facilitation committee and monitoring committee. The construction committee learned of the technical design from Caritas Nepal after which they disseminated the knowledge to the other of community members. They worked in close coordination with Caritas Nepal to obtain quality construction materials (pipes, cement, iron rods) from the local market. The committee members mobilized local families to transport materials to construction sites, to clear sites of bushes and trees, to dig in pipe lines and to support in the construction of tap stands. Each household contributed labor for 15 days. With remarkable enthusiasm from the community to contribute, the construction that was estimated to be completed in four months was actually completed in three months (23rd November 2016- 19th Feb 2017).

The depth of the trench dug for transmission line was at least 60 cms to prevent it from being affected by agricultural or other digging and/or plowing activities later. Both men and women led the effort to construct the system.

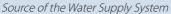
- d. Technical support and overall guidance: Caritas Nepal teams have been trained on undertaking feasibility of rural drinking water systems and preparing design for the same. The teams were very diligent in working with the local people to identify suitable perennial water source, and to provide technical and management guidance to the water user groups' leading committees. They held regular meetings to review and plan the construction activities.
- e. Addressing sustainability: Upon the completion of the construction of the drinking water system, the committee members held a social audit wherein representatives of the benefiting households were present. Here the committee members put forward transparently the design, cost, local contribution, Caritas Nepal's contribution for the construction of the drinking water. They also requested the beneficiary households to look into their proposal for future sustainability of the project. This includes establishing a fund for operation and maintenance with annual user fee collection. This fund would then cover the cost for a technician with plumbing skills who would solve any minor repair problems. Caritas Nepal is also undertaking further training and workshops with the user groups' committee to enable them to develop a 'water safety plan' that would address sustainability concerns. Caritas Nepal is also providing plumbing skills' training to the local plumbers.

#### **DW System Information Table**

Constructed Structure	Total No.	Description and Function
Intake type I	1	From source to tap and protect source
5,000 Ltrs Ferro-Cement Tank	1	Storage of water
10,000 Ltrs Ferro-Cement Tank	1	Storage of water
Stone Masonry BPT	1	To break the hydraulic pressure at distribution
Tap stand (Type III)	16	Outlet at settlement including attached tap
Transmission Line	1690	Length from intake to reservoir tank
Distribution Line	5168	Length from reservoir to tap stands
Total Pipeline	6858	

#### Khetpuchhar Water Supply System in Pictures







Women and men digging trench to place transmission pipe line





Reservoir tank



Locals digging a trench to put in water distribution pipe line



A structure to break water pressure being constructed



Community members constructing tap stand



Water running through the tap



Children drinking water at one of the taps

#### Result in terms of safe water access

The 78 households are now accessing safe water for drinking and this has improved their health. The user group members note that they and their family members are not becoming ill from water borne diseases now. They use surplus water for livestock and farming purposes. Many of the families noted that they use 100-150 liters of water per day. This is largely to meet drinking water, cooking, and basic sanitation needs. Water is then also collected from the taps to provide for livestock. Households are also using their waste water for kitchen gardening. Excess water from the taps is also collected by nearby households for irrigating their vegetable gardens. In addition to the above, families usually go to the taps to bathe on Saturdays. Bathing has become relatively comfortable due to adequate amount of water and with the appropriate height of the tap stand. Both adults and children are seen bathing regularly now.







Water being used for shelter construction



Water used for kitchen gardening

Families do not have to walk for more than five minutes to the nearest tap stand to fetch water. As noted by 78 year old Mr. Maan Bahadur that the nearby access to water has been a boon to him and his wife. The elderly couple earlier had to walk for about an hour to fetch water from a nearby stream. Now they fetch water within five minutes' walking distance.

Mrs. Sita Pahari, who lives by herself, is glad there is a tap stand near her house. She is happy to learn that many children and disabled people are accessing drinking and bathing water from the taps. People stated that they saved both time and energy from the nearby access to water.

Water quality tests were undertaken before the construction of the system. Water quality was tested in the source (intake), in the reservoir, and in tap stands. There has been no problem in the quality of water till date. Caritas Nepal has trained the local Female Community Health Volunteers (FCHV) to collect water samples, especially during Monsoon when water is highly likely to be polluted. The FCHVs collect samples to check the water quality. In this way, the user group is proud that it could work with Caritas Nepal and establish a permanent source of water for their community. The user committee has made plans to manage the system in a sustainable manner in the long run.

### Table: Good practices noted on PuranagaunKhetPuchhar drinking water construction in the location

S.N	Particulars
1.	Strong technical team that was able to support local user group for feasibility, system design (as per Nepal standards), construction management, construction quality concerns, and sustainability planning.
2	Joint decision making facilitated at the village level to identify and select project and to approve water source etc. This was done with coordination with the VWASHCC, Village Government Secretary and District Water and Sanitation Office.
3	Leadership and participation of the Pahari and other households of the community for construction management and mobilization of local contribution (namely labor contribution). The benefiting households showed strong ownership of the project by working together to construct the system. Project agreed to be done in three months took no more than three months with the enthusiasm of the community. They were led by a Water User Group Committee with men and women leaders such as Mr. Prabhu Ram Pahari and Ms. Dikshya Pahari. The management by the User Group Committee helped the system to be constructed with unexpected local contribution, thereby, completing the work in time less than expected (three months in place of four).
4	Transparency and Sustainability: The social audit event held ensured accountability by the User Group Committee towards the community and Caritas Nepal. It provided a general guideline on how to operate and maintain the system in the long run. Besides, the Water User Group gathers for monthly meetings to discuss operation and management of the system.

#### **Quoting People**





"I'm glad that we could work with Caritas Nepal to construct the Drinking Water Supply Scheme. Now the people of our village don't have to walk for half an hour to collect water. It has been a special boon to the elderly who would otherwise be gasping for breath while walking long distance to collect water."

- Mr. Prabhu Ram Pahari, Coordinator, Construction Committee





"Having been the Treasurer of the Water Users' Committee of Khetpuchhar WSS, I feel that I'm a more empowered woman now. I did labor work for the construction of the system and provided advice as the treasurer. I feel thankful to Caritas Nepal for making it mandatory to have a woman to in the committee and especially in the post of a treasurer. It helped me realize that I can lead as men in the society."

- Ms. Dikshya Pahari, Treasurer, Water User Group Committee

## Mr. Bishnu Pahari of Kalika, Sindhupalchok

Mr. Bishnu Pahari finds it easier to take bath in the new tap stand!



Mr. Bishnu Pahari collecting water from the tap stand constructed in Kalika by Caritas Nepal

Mr. Bishnu Pahari is a 22 year old man disabled in right hand. He is categorized under 'category C- Moderate Disability' by the District Women and Children's Office. He is literate with basic schooling and is unmarried as of yet. He "dislikes staying idle and likes to farm. Of course it would have been easier if both my hands worked", says Pahari upon being inquired about the struggle he faces. "But I can still work and earn my living," he adds.

The Tap stand constructed two minutes from his house, under Puranagaun Khetpuchhar Water Supply Scheme has helped in making his life easier. "It's now way easier to take baths", says Pahari indicating to the fact that the tap stand is now tall enough for any average adult to take a shower underneath it. "I now don't have to ask anybody to put water over me while bathing, and I am very pleased that I can take a shower by myself at the tap", adds Pahari.

"I want to thank Caritas Nepal for helping us to construct the drinking water supply system in our village. I'm really grateful to the organization for making my everyday life easier".

## Ghokshila Drinking WaterSupply System

Mixed community work together in user group to develop and sustainably manage drinking water system

#### **Background**

Geographic location: Ghokshila Village lies in ward number 7 of Basheshwor VDC, Sindhuli district. It is located 60 kilometers North East of SindhuliMadhi, the headquarters of Sindhuli district. The nearest road head Khurkot is 20 kilometers from Ghokshila, which is 35 Kms from SindhuliMadhi. A walk to Ghokshila from the highway would take

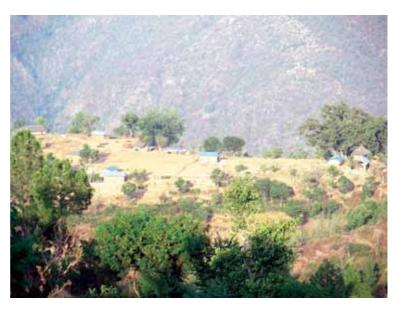
approximately two hours. **Social and economic context:** Ghokshila houses a variety of caste and ethnic groups. Out of the 116 households, 63 belong to ethnic groups (i. e. 'Janajatis' in Nepali), 12 are Dalits, and 44 belong to Brahmin and Chhetri caste groups. 55.3 percent of the total population belong to female gender while 44.7 percent belong to male. Most people in the village

have low levels of education or are illiterate. Some people have migrated to the cities for work and to get a better taste of life than what Ghokshila offers.

Ghokshila has a Secondary School named Mangala Madhyamik Vidyalaya that hosts 226 students.

### Drinking water situation before the intervention:

Ghokshila's water sources had dried after the earthquake of 2015, thereby increasing vulnerability of the rural people. They had to walk about half an hour to collect water from the nearest stream. This included elderly people, men, women, children and people with



Ghokshila at a glance

A Dalit family in Ghokshila

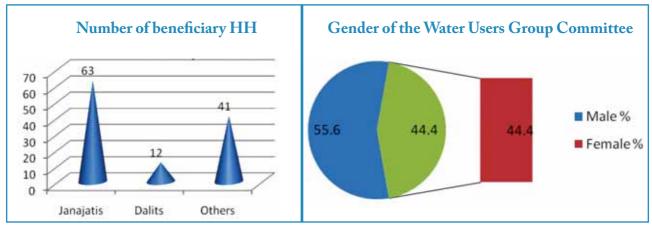


disabilities. The stream would dry during the summer season which would then oblige them to walk for more than an hour to obtain drinking water. Water brought with such hardship was used address drinking water needs the most, keeping at bay hygiene and sanitation needs. Because of the poor quality of water and limited water access, the community was more prone to health problems such as cholera, diarrhea and skin diseases.

**Table: Beneficiary information** 

S.N.	Particulars	Number
1	Total number of households	116
2	Total Population	690
3	Total number of members in Ghokshila Water User Group Committee	9 4 female, 5 male

Source: Field Survey



Source: Field Survey

#### Description of Intervention undertaken

a. Village Water and Sanitation & Hygiene Coordination Committee (VWASHCC) and Caritas Nepal jointly identified the households and community with problem of water access:

A post-earthquake need assessment was carried out by Caritas Nepal after the earthquake of 2015 which helped to identify the needs of the area. A thorough discussion with Ghokshila's VWASHCC comprising of around 25 people helped CN to identify drinking water needs of the people there. Accessing enough water for drinking and sanitation purposes was pretty much a Herculean task to the community. In this way, the community was selected to be supported for drinking water access.

**b.** Participatory feasibility study: A feasibility study was carried out with active participation of the community members. The study lasted for about a week. It was carried out by Caritas Nepal's technical team of one engineer and two junior engineers along with 6 local community members. The team identified a water source 7 kilometers uphill from the village. The isolated water source situated away from direct human contact was approved by the VWASHCC, the District Water and Sanitation Office and the village government.

#### c. Water user group led approach applied for construction of the system:

S.N	Name	Gender	Designation
1	Kumar Baral	Chairperson	Male
2	Manju Bayalkoti	Treasurer	Female
3	Gopal Achami	Secretary	Male
4	Pampha Ramtel	Vice-Chairperson	Female
5	Nanu Maya Shrestha	Member	Female
6	Krishna Bahadur Baral	Member	Male
7	Dinesh Pokharel	Member	Male
8	Janardan Pokharel	Member	Male
9	Kalmali Achami	Member	Female

Caritas Nepal applied 'water user group led' approach for the construction of the drinking water system. This approach recognizes the fact that rural Nepalese people like to contribute to efforts that address common concerns. A Water User Group Committee was formed by the community members, which would be responsible for the construction and management of the system. Other sub-committees such as Construction Committee and Monitoring Committee were formed specifically to facilitate construction and monitoring of construction process.

Caritas Nepal oriented the various committee members of the possible technical design. The committee then shared the same with other community members. They worked in close coordination with Caritas Nepal to obtain quality construction materials (pipes, cement, iron rods) from the local market.

Water User Group's members then transported the construction materials and prepared the construction by removing trees, bushes, and debris. They dug trenches to lay pipelines. The depth of the trench dug for transmission line was at least 60cms to prevent it from being affected by agricultural activity such as plowing. The locals also supported in the construction of tap stands. The total labor contribution amounted to 2552 days. That is each household contributed around 22 days each.

- d. Technical support and overall guidance: Caritas Nepal teams have been trained on rural drinking water system feasibility and design concerns along with social mobilization for participatory drinking water construction activities. The teams were very diligent in working with the local people to identify a suitable perennial water source. They provided technical and management guidance to the Water User Group Committees. The Drinking Water System construction is done as per required Nepal's standard and on timely manner.
- e. Addressing sustainability: Upon the completion of the construction of the drinking water system, the committee members held a social audit wherein representatives of the benefiting households were present. In the meeting, the User Group Committee members presented the technical design, budget and expenditure including fund received from Caritas and local contribution from the community. They obtained feedback and advice of community members to make a wider plan for the sustainability of the project. This included establishing a fund for operation and maintenance with monthly user fee collection. They have been collecting a monthly fee of NRs. 20 per month from each household. Some funds collected from few households not willing to provide labor contribution was also kept aside as fund for future sustainability. A plumber has been employed at NRs. 1500 per month for smooth

functioning of the system. Similarly, the WUGCs have been holding monthly meetings on the first Saturday of every Nepali month and those who do not attend the meeting will be charged Rs. 50/- as a fine. The Water Users Group Committee in Ghokshila is a good example of good leadership, cooperative action, and ownership and leading to plans for sustainable management of the system.

Caritas Nepal is undertaking further training and workshops with the Water User Group Committee to enable them to develop a 'water safety plan' that would address drinking water system management and sustainability concerns. Besides, Caritas Nepal is providing plumbing skills' training to the local plumbers.

#### **Drinking Water System Information Table**

Structures constructed	Units	Function
Intake type I	1	Collect water
9,000 Ltrs Ferro-Cement Tank	1	Storage of water
10,000 Ltrs Ferro-Cement Tank (New)	1	Storage of water
Interruption Chamber	1	To break the hydraulic pressure in the transmission line
Suspended Cable Crossing 60 m	1	To cross the pipe line over the springs
Transmission Line	7150 m	Length of pipe line from intake to reservoir tank
Distribution Line	5135 m	Length of pipeline from reservoir tank to tap stands
Total Pipeline	12285 m	Total of transmission and distribution pipe line
Tap stand (Type III)	17	These are the taps for community to use

#### Ghokshila water supply system



Undertaking feasibility Survey



Locals constructing reservoir tanks



Construction of Interruption Chamber



A tap stand constructed



A Dalit woman filling Drinking Water



A Dalit girl waiting for her vessel to fill water

#### Result in terms of safe water access

The 116 households located in Ghokshila Village are now accessing safe water from a reliable source. Water flows two hours in the morning and two in the evening in the taps constructed and/ or repaired. This timing placed for water distribution ensures that the water does not go to waste from any open taps.

The people in the village are happy that water is available within five minutes' walk now. Earlier, they walked for around half an hour or more to collect water. "It's very easy now. I can fetch water much quickly within 15 minutes now" says Ms. Ganga Damai, a 50 year old single woman living in B.K settlement.

The families of Ghokshila have now increased the quantity of water used from 50 liters to 120 liters per day on average. This covers drinking, cooking, basic sanitation and livestock needs. The leftover and waste water is used for kitchen gardening, which has helped the people to produce their own pesticide free vegetables and fruits. Similarly, the frequency of bathing has increased. Children are bathed by parents at least once a week. "Anita's mother used to bathe Anita once a month earlier. Now Anita takes bath on weekly basis in the nearby tap", says Jagat Ram Nepali, referring to her 20 year old mentally disabled daughter. The tap was constructed near the house of the mentally disabled girl and a single woman residing in the area as per suggestion of the protection team of Caritas Nepal.



Beneficiaries filling water







Beneficiaries grew vegetables by irrigating from the water system

#### CASE STUDY

In regard to water quality, tests were undertaken before the construction of the system. Water tests have been undertaken at the source (intake), the reservoir and tap stands. No water quality problem is seen till date. Caritas Nepal has trained the local Female Community Health Volunteers (FCHV) to collect water samples, especially during Monsoon when water is highly likely to be polluted. The FCHVs collect samples on a regular basis as a checking mechanism to ensure people are accessing potable water. The community people have been remarkably accountable not just in terms of construction of the water supply system, but also in terms of keeping water in the source and reservoirs free of contamination.

#### Table: Good practices noted on Ghokshila Drinking Water System's Construction and Operation

S.N	Particulars
1	Participatory need assessment before the intervention The VWASHCC, village government secretary and District Water and Sanitation Office helped assess the needs of the people of Ghokshila in regard to drinking water. They selected the project and approved the water source for Caritas Nepal to support.
2	Community / Water User Group Led Approach The Water Users Group Committee (WUGC) led approach for the establishment of the water supply system led to noteworthy community ownership and contribution. The WUGC with technical assistance from Caritas Nepal constructed the system which led to timely completion of the system. Different sub committees like Construction Committee, Procurement Committee and Monitoring Committee were formed for the accomplishment. This approach not just developed ownership, but also built capacity of the community people.
3	Women Leadership 44.4 percent of the total Water Users Group Committee members are women. The WUGC has women in leading roles as Treasurer and Vice Chairperson. There was notable contribution of female members from the Water Users Group in digging and laying pipelines and establishing the overall structure of the system.
4	Local Contribution/ Participation  Local contribution and participation in the construction and sustainable management of the water supply system was commendable. The members of the Water Users Group showed strong ownership. They contributed 2552 days of labor altogether. The families who could not contribute labor paid NRs. 6500. The Water Users Group Committee of Ghokshila is the most vibrant of its kind, and has responsibilities and rules for their members to follow. There are penalties for the households who do not abide by the rules to contribute for the operation and sustainability of the system.
5	Strong Technical Team There was a strong technical team that was able to support the water user group for feasibility, system design (as per Nepal standards), construction management, and sustainability planning.
6	Transparency and Sustainability Management Mechanism  The process of establishment of the water supply system, having been led by the WUGC upheld transparency. Social or public Audit meeting held made the construction and future plans clear to all and this was a significant event in terms of ensuring transparency and accountability to all stakeholders. A Water Safety Plan was formulated for operation and maintenance of the system while reducing the risks of disasters in the long run. Monthly fee of NRs. 20 is collected from each household and a plumber is employed with monthly salary of NRs 1500. The source of water is in the process of being registered in the new local government as per standard process.
7	Exemption of user fee for the most vulnerable  The poorest or the most vulnerable people in the village are exempted of the monthly fee of NRs. 20 for accessing drinking water.



Reservoir tank at Ghokshila

#### **Quoting People**

"I'm very thankful for the Water Supply System brought about to Ghokshila. Life here has become a lot more comfortable than it was before. People don't have to walk for half an hour or more to fetch water now. Water is available in a walking distance of 2-5 minutes. I'm glad that I could be a significant part of this pious work initiated by Caritas Nepal."

- Kumar Baral, Chairperson, Water Users Committee





"It's a nice feeling to be in a position of Treasurer of the Water Users Group Committee and contribute for the establishment of the drinking water system. It has made me confident and made me strong to be able to contribute. As a Dalit woman, I also want to work and bring support for Dalit girls' education. Thanks to Caritas Nepal and the Water Users Group Committee for helping me unfold these things."

 Manju Bayalkoti, Treasurer, Water Users Group Committee

## Rupse: A sustainable water supply system!

### Access to safe water has improved health and increased productivity of local farmers



A woman collecting water before the construction of Rupse WSS



Mr. Sundar Nepal collecting water at a tap stand constructed by Caritas Nepal



A girl collecting water in CN constructed tap stand

The earthquake of 2015 not just destroyed the taps existing in Rupse, but dried water sources too. The 60 households of Rupse, Chandenimandan (Mandan Deupur 10, Kavrepalanchok) that were reliant on 4 existing taps were now obliged to walk half an hour to collect water. Amount of water consumed on a daily basis was reduced. The level of hygiene was degraded. Farmers' productivity had gone down too.

Caritas Nepal in collaboration with SJASK (partner organization) and the community constructed 10 new taps and repaired the 4 old ones of Rupse to ensure that people have access to safe drinking water. 4-5 households now share one tap. Taps are located at distance that doesn't take more than 5 minutes to walk. Water is available at any hour of the day in the taps constructed.

"Most of the people in this area are engaged in farming and animal husbandry. When the earthquake took away our water supplies, our productivity went down. Meeting drinking water needs itself was a challenge for us, let alone irrigating our farms or feeding our livestock" says Sundar Nepal, a beneficiary of Rupse Water Supply System. Mr. Nepal was one of the active members of the water user group who contributed meaningful labour for the construction of the system. Rupse's community contribution for the construction of the system was noteworthy. The people contributed in laying the total pipeline of 2409m that accounted to 40 percent of the total cost of construction. "Community contribution has increased the capacity of water user's group and developed the feeling of ownership towards the system. Ownership eventually helps in sustainably managing the system and we are glad about it" added Nepal.

"We can now access water in less than a minute. It saves our time and effort that we can utilize for farming or livestock raising. This has in fact helped raise productivity. Also, the number of conflicts regarding water has been reduced. So these tap stands have been a real boon for the people here. We are really thankful to Caritas Nepal for the support they provided us to construct Rupse WSS. And I would gladly support other of villages nearby in the construction of water supply systems. After all, there is nothing that can replace water" expressed Nepal with a smile on his face.

## Lekhatole Water Supply System

### Lekhatole community constructed water system simultaneously with their Homes!

Situated in the North Eastern part of Dolakha in Bulung (Bigu-3), Lekhtole village suffered a scarcity of water. The village that comprises of 49 households with a total population of 229 had four taps to cater to its needs of water. The flow of water in these taps was irregular and many of these households collected water from a stream called 'Barkhekhola' located around 15 minutes from the village. The water from the stream was neither safe to drink, nor sufficient during dry seasons. Collecting water to drink itself was challenging, let alone accessing water for bathing, washing and farming activities. These conditions resulted in community people being affected by water borne diseases such as diarrhea, cholera, typhoid etc. Lack of water left the hills of Lekhatole dry and unproductive.



Water being used for kitchen garden

Caritas Nepal along with partner ECARDS supported the community to construct a Water Supply system. The community contributed in digging pipelines and laying pipes as unskilled laborers. 17 taps were for 2-4 houses to share one tap.

The 49 households are now accessing safe drinking water and have better health conditions. The water user groups noticed that family members and community are not becoming sick from water borne diseases after starting to access water from this system. Most of the family members consume 150 liters of water per day for drinking, cleaning and washing clothes, according to Jagat Bahadur Khatri, the Secretary of Water User Group Committee of Lekhatole. Lekhatole is a medium scale water supply system to cater to drinking and sanitation needs of the people of the location. But the needs of domesticated animals as cows, buffaloes,

goats are also catered with the water. Waste water is used in kitchen gardens and farms nearby to grow vegetables.



Tap stand constructed by CN with soaps

Families now do not have to walk for more than five minutes to the nearest tap to obtain water. 65 year old Mrs. Bishnu Kumari Khatri expressed that the tap stand nearby her house has made collecting water really easy for her and her neighbours. Tap stands in the village were reported to have soaps, an indicating factor of behavioral change of the people of Lekhatole who didn't practice washing hands earlier.

"We are very happy to have gotten such regular technical support in the community to construct the water supply system. We wouldn't have been able to estimate the cost, design the system and work, if not for Caritas Nepal. The technical and financial support provided to us by Caritas Nepal is very much to be commended" said the Secretary of Water User Group Committee of Lekhatole.

The system that has Water User Group Committee formed with more than 33 percent of women participation also boosts confidence of women while supporting the reconstruction of shelters. "A woman, I was indulged only in fetching water. Indulgence in the construction and management of a water supply scheme was out of imagination. I am very happy to be standing as the treasurer, to have worked to make water accessible to the people of my village. Caritas Nepal is no less than God, that it helped bring water to our village. The construction of our house along with the restoration of our livelihood have been supported with the coming of water here" expressed Ms. Man Kumari Khatri, Treasurer of the Water User Group Committee of Lekhatole.  $\blacktriangle$ 

# Building back better to provide drinking water - Sauryabhanjyang Khanepani Aayojana



Monitoring visit by WASH team of Caritas Nepal. Solar panels seen on top

### Solar powered system to lift water

After the major earthquakes in April and May of 2015, the people of Hariharpurgadhi faced water scarcity. They had to walk up to one hour just to fetch water. This is because whatever little water supply infrastructure was present was destroyed by the massive earthquakes. Several water sources nearby had also dried up.

People walked far to fetch drinking water from springs or other sources. They could manage to take bath once in about two weeks and similarly washed their clothes after long intervals due to difficulty in accessing water. The locations that had water scarcity were namely 5, 6, 9 of Hariharpur Gadhi (as per the earlier political map of the village). Now all these locations fall

within Hariharpur Gadhi – 1 Rural Municipality (as per new political mapping of the location)

Caritas Nepal, local partner Relief Nepal, and the community looked at the challenge of accessing water for the village as a new opportunity to build back better.

This time the community could be provided water only from a spring source lying below the community in terms of altitude. The technical team of the programme measured water discharge and quality. Upon finding it suitable, the team supported the local water user group to construct the system providing necessary technical guidance, support in procurement of quality materials, and funds for the construction of the system. The community contributed by transporting materials, digging trenches to lay pipeline, and by providing labor for construction.

The main challenge was to see that the community is able to lift water from the source below, to the higher location on a sustainable manner. The village has no regular supply of electricity and also there is no access to high electric power (3 phase) lines. This was when the build back better idea was further materialized. The programme team decided to do research on solar powered lifting machine



WASH Coordinator monitoring Sauryabhanjyang WSS

and was able to ensure that the user group was able to procure the same. The drinking water is pumped to the reservoir using the solar powered pump. This energy supply is green and sustainable.

Infrastructures established are as follows:

Name of structure	Total number
Intake	1
Reservoir Tanks	3
Tap stands constructed	6
Tap stands repaired	12
Pipeline laid	2159 m

The total beneficiaries of the drinking water system of this sparsely populated village are 38 households with 76 males, 81 females, 1 person with disability and 1 single woman. These people now have access to at least 65 liters of water on a daily basis.

One of the beneficiaries, Mr. Som Bahadur Bholan expressed that they can now utilize the time taken to fetch water in other of household work. His wife added "We are obviously very happy to have this easy access to safe drinking water. I am now able to send my children to school on time. Also, there is water for my livestock and to irrigate my kitchen garden." The user group members like Mr. Som Bahadur expressed heartfelt thanks to Caritas Nepal and partner Relief Nepal for building a sustainable (solar powered) drinking water system. They concluded that their health and hygiene have much improved now.

Caritas Nepal is constructing three solar powered systems through the earthquake recovery programme, 2 of which are in Hariharpurgadhi, Sindhuli and one of which is in Thokarpa, Sindhupalchok.

## People of Pasal Tole do not drinkmuddy water from Koshi anymore





Ms Shrestha's kitchen garden being irrigated with the system's water

Five households in Pasal tole, Baseswor, had been drinking water directly from the river Sunkoshi prior to CN's intervention with a water supply system. During the monsoon, the color of the water would turn red, mixed with mud. "Boiled rice used to look brown because of the water from Koshi," says 60-year-old Ms. Dhanamaya Shrestha. With unsafe water, children and adults often suffered from diarrhea and dysentery.

Caritas Nepal village team identified the water scarcity problem in Pasal Tole and advocated to include these households in a water supply system.

The Chhihira Bandh Water Supply System serves 38 households and the construction was completed in 2017. The residents of Pasal Tole have been drinking safe drinking water since then.

The water user group committee of Chhihira Bandh, with Caritas Nepal's guidance, formulated a Water Safety Plan for the system. They have been collecting Rs. 100 per household as a monthly tariff for drinking water. This sum of money is mobilized for loans amongst the members at an interest rate of 2%. A maintenance worker has been assigned for Pasale Tole for Rs. 500 per month. He provides minor repairs and maintenance around the settlement.

The construction of Chhihira Bandh Water Supply System has brought about several changes in the settlement. There is water running 24 hours a day mostly. This has the people consuming more water for drinking and sanitation purpose than in the past. "We managed a day with one gagri (water pot of around 10-15 liters) water earlier, but we use almost 2 gagris now," says Ms. Dhanamaya Shrestha.

Upon being asked about changes in the number of times they take bath now, Ms. Shrestha says: "We took bath once in two weeks or so earlier. Bathing was of no point really because the River's water is not clean. But now, bathing is done once in alternate days."

The inflow of water has also helped the people plant vegetables in their kitchen garden. "We had to buy vegetables earlier, because even collecting water for drinking purpose was not easy, let alone for kitchen garden. But now we've planted onion, garlic, spinach, cauliflower, etc. While we basically consumed potatoes and gundruk in the past, we have started taking in a variety of vegetables now," says 25-year-old Ms. Sharmila Shrestha, a resident of Pasal Tole.

4 people with disability of the 5 households of Pasal Tole also benefit largely with the system.

# Plumbing training for sustainability of water supply systems



Mr. Kale Tamang constructing Fyafulla drinking water system in Chandenimandan



Mr. Kale Tamang during the training

"Caritas Nepal has been doing a wonderful job of constructing water supply systems and ensuring access of community people to drinking water. But what is even more wonderful is that it is training local people with different skills, such as system management and plumbing so that we can manage the systems on our own in the future," says Mr. Bishnu Mani Pokharel, the ward chairperson of Chandenimandan, Mandandeupur.

Aiming to increase capacity of local stakeholders to help them manage minor repairs and maintenance problems on their own, Caritas Nepal provided a Plumbing Training to local community members. "I was wandering around aimlessly. That is when Caritas Nepal came to me with an offer of training," says Kaley Tamang. He is one of the 18 community members from 10 different water supply systems to receive Plumbing training. "An uneducated man, I had no idea that I would ever possess the skills and knowledge that I do now. I am really glad that I can now help my community people while helping myself. I have started earning Rs. 5000 per month and am very hopeful of earning more in the days to come," adds Mr. Tamang. Ten out of the 18 members trained are working actively.

Mr. Tamang is assigned for Fyafulla Water Supply system, one of the largest systems, catering to water needs of 252 households in Chandenimandan. "Kaley Tamang was trained by Caritas Nepal for three days. He shall look after the needs of repair and maintenance of Fyafulla system now. We are thankful to Caritas Nepal for such a design that not just constructs water supply systems but capacitates local people for the stability and sustainability of the systems as well," says Mr. Kumar Tamang, the Chairperson of Fyafulla Water Supply System.

Mr. Tamang is committed to the roles and responsibilities assigned to him. "With the training and the job, Caritas Nepal instilled in me a hope to work and move forward in life. I will work whole heartedly for the sustainability of the system" he adds.



## **LIVELIHOOD** V CASE STUDIES





### Mr. Somlal Tamang

#### An enterprising farmer of Balthali Village!







Mr. Somlal Tamang is a resident of Balthali (ward no.5). There are five members in his family: himself, his wife, one son, one daughter-in-law and one grandson. Mr. Somlal Tawmang belongs to the Tamang ethnic group. He is an enterprising farmer.

He and his family members are working together cultivating off season vegetables. He undertook training for wider vegetable farming from Caritas Nepal's agriculture technicians. He is pursing sustainable agriculture practices. He uses farm yard manure and compost to fertilize the soil of his farm. Sometimes he even has to buy the farm yard manure from his neighbors given the large scale of his activity.

Given the need for irrigation for his farm he had constructed one rain water harvesting pond earlier by himself. Now there is a second water harvesting pond he has established with the support of Caritas Nepal.

Caritas Nepal provided the plastic lining for the pond. Besides the ponds, he has also dug a canal in-between the green-houses to collect water. In this way, he is able to provide much needed irrigation to his vegetable plants under the 22 plastic green houses.

All his family members pitch in to support in the commercial vegetable farming activity. At times he even hires laborers. His main commercial crop is tomatoes. He says he can harvest tomatoes for 5 months once they are grown in the green house. The tomatoes are supported with proper staking and this provides each plant space to provide more fruit.

He sold about Rs. 200,000/- of tomatoes last year, he notes with a smile. He takes the items himself to the nearest market places. He happily notes that he made a net profit of about Rs. 100,000/- in the past year.



Mr. Somlal and his wife are glad to show their tomato harvest to Mr. Manindra Malla, Programme Manager of NERP, Caritas Nepal

## Mr Ram Bahadur Pahari and his family are self-sufficient

Mr. Ram says, "I will now continue farming in the future!

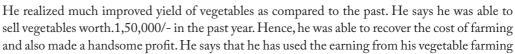


Mr. Ram's tomato tunnel farm

Mr. Ram Bahadur Pahari, belongs to an indigenous and marginalized community. He lives in Kalika (Sunkoshi-3 of Sindhupalchowk) with his wife and his eldest daughter. He used to do some work in Kathmandu but he came back after the major earthquake to be closer to his family and started to pursue mainly farming work.

In the following year, he got an opportunity to learn about improving vegetable farming when he was selected to be a participant of Caritas Nepal's training on agriculture provided to small farmers affected by earthquake. He learned of sustainable vegetable farming practices and off season vegetable farming methods. After the training he built two plastic green houses and started off season vegetable farming – primarily tomatoes which he could sell for a good price. Along with tomatoes, he planted various vegetables like peas, eggplant, onion, garlic, coriander etc.

Mr. Ram observes his off season vegetable farming plot covered by plastic sheet to protect from rain and hailstorm



activity to pay for his house construction and for his household expenditure.



He expresses, "I am privileged to get an opportunity to be trained in vegetable farming, and I am able to improve yield and produce vegetables in large scale. This has helped me to realize a good profit. Thank you so much Caritas Nepal. I will continue to do farming in the future'.

laura.ouseley@cafod.org.uk

### Mrs. Chameli Maya Tamang, a small farmer, is able to provide for her family

### From traditional farming to small scale commercial farming

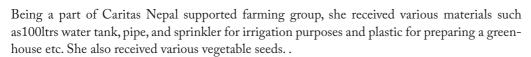
Three quarters of a million Nepali people lost their houses and livelihood assets due to the earthquake. The per capita loss of assets was about Rs.119200/- from the earthquake in the district of Kavrepalanchwok (PDNA done by UNDP / Nepal Government).

Mrs. Chameli Maya Tamang, a 35 years old lady of Mandandeupur Ward No-10, Chandenimandan, Kavrepalanchwok lives with her son, daughter and husband. She and her family members are engaged in farming for livelihood.

Right after the earthquake, she received various food and non-food relief items and corrugated roofing iron sheets for temporary shelter construction.

Later, she became part of Caritas Nepal's agriculture group and received vegetable farming training. In the training she learned about sustainable and eco-friendly methods of vegetable farming such as

preparation of bio-fertilizers and bio-pesticides. She learned how to mix cow urine and various plants and ferment them to prepare a bio-fertilizer liquid. She now uses this new learning to provide nutrition to her vegetable plants and to control pests.



She says that she was farming earlier but with the training and input support of Caritas Nepal she has been able to pursue farming more effectively and is earning about Rs. 90,000/- on annual basis. She has produced cauliflower, radish, spinach, tomato, onion, and chilies in her farm with her husband's support.

She also cultivated off season tomatoes in plastic green house. Agriculture technicians of Caritas Nepal provided regular technical support for constructing a plastic greenhouse, for setting up tomato plant plots and pest control.

She notes that she is also doing small scale mushroom production and earns about Rs. 5000/-from the enterprise.

"Caritas Nepal's team have worked very hard for all of us in the village. Now, I can earn money for myself and it gives me confidence that even I can do well for myself without having to depend on others", says Chameli Maya Tamang. She says she is using her farming income to pay for basic needs such as children's education and clothes etc.



Chameli Maya Tamang working in her kitchen garden

### Mrs. Laxmi Budhathoki, an agriculture group member of Bulung Village



Mrs. Laxmi working in her field.

Mrs. Laxmi besides the rainwater harvesting plastic pond used to collect water for vegetable farming.

### Family's nutritional status improved by Mrs. Laxmi!

Laxmi Budhathoki, a 45 years old resident of Gole Tole, Bulung (Bigu-3, Dolakha) lives with her husband and her mother in law. They do not have children. Like others in her village, she received a lot of assistance from Caritas Nepal during the emergency phase after the earthquake. The materials she received included CGI sheets, WASH kits, and food materials.

Mrs. Laxmi and her husband are engaged in farming and animal husbandry. The social mobilizers and volunteers of Caritas Nepal talked to her and then enlisted her for the three days agriculture training on sustainable and improved farming practices.

She says she learned good practices of agriculture in the training and these were: growing off season vegetable crops in plastic green house, using organic fertilizers such as compost, use of organic or botanical sprays for pest control, collecting rain water for irrigation of vegetable fields etc. She notes that once she started using organic compost widely she had less of a problem with ants in her field that used to damage her crops. She confidently notes that she has already grown a lot of tomatoes in plastic green house and also other vegetables such as radish, peas, cauliflower, turmeric, and chilies. This has improved her family's nutrition status and she has also been able to sell about Rs. 9,500 worth of tomatoes and turmeric in the past year. The cash income has helped her to address some of the basic needs of her households.

She says, "I am very happy for extensive support received from Caritas Nepal. It has changed our lives. Many people in this village like me now have improved food security and are making some

earning by improving our farming practices".



She has also agreed to be a demonstration farmer to test the usefulness of plastic water tank for farming purposes and plans to continue vegetable farming in the future in her small plot (0.06 ha) of land. She is hopeful that she can continue to provide diverse vegetables for her family and also sell some to her neighbors for income generation.

## Mr. Kancho Nepali's family improves livelihood security

### A tailor by occupation pursues an alternative livelihood option successfully

Mr. Kancho Nepali is a 42 year old Dalit man living in Balthali, Kavrepalanchok. He, his wife, two daughters, a son, a daughter in law, and a grandchild make his family of seven. Kanchho and his wife were engaged in their traditional caste based occupation of tailoring before Caritas Nepal supported his family to expand their livelihood. Kancho's family's economic situation was quite poor earlier. The earthquake of 2015 further worsened the family's economic status and well-being.

Kanchho Nepali, a member of the Livestock group formed by Caritas Nepal's Earthquake Recovery Programme team underwent a three day long Basic Livestock Training organized by the team.

He is being provided with a grant fund amounting to a total of Rs. 35,000. Out of this, he has received Rs. 35,000 already. He will receive the remaining as final installment in 2018. He utilized the fund received to initiate poultry raising.

He was also able to receive a low interest loan (at 5 percent interest) amounting to Rs. 25,000 from Balthali Saving and Credit Cooperative. The cooperative had earlier received a sizable grant from Caritas Nepal's recovery programme to provide soft or low interest loans to individuals in the earthquake affected community.

Kancho Nepali's wife feeding poultry

"The training and grant support by Caritas Nepal helped me change my profession for the better. Tailors like me thought we could only sew clothes. Caritas Nepal helped me to change this perspective. It lit a fire of hope in me," says Nepali. He and his wife working together have made a good profit from poultry raising. They have successfully sold two lots of poultry with a profit of NRs. 30,000.

"The profit gained helped me to clear my debts. I now plan to save money in the Cooperative for future use," expressed Nepali. He added that he is also using some of the earnings to address his family's basic needs, and this has improved his basic well-being. He concluded, "Many thanks to Caritas Nepal for boosting my confidence and helping me to find an alternative occupation."



## 6 Motor Road with Cash for Work



Road before CN's intervention



CN's technicians undertaking a survey of the road



A vehichle in the motor road constructed

### Motor road helps in reconstruction of shelter and expands livelihood

The monstrous earthquake of 2015 damaged most of the houses of Neupane village. Neupane is a small village located in the far end of Balthali VDC (Panauti-11 Kavrepalanchok). All 195 households located in Neupane belong to Tamang ethnicity. The level of education of these people is low and most of them are engaged in subsistence agriculture. A survey done by the government of Nepal listed 177 of the 195 houses as fully damaged by the earthquake of 2015 and therefore liable to receive grant and technical support to reconstruct their houses.

Remote Neupane village had no access to transportation which resulted in a very slow process of reconstruction. Lack of motor road linkage to the village not just slowed the reconstruction of the village, but also hampered the expansion of livelihood of the villagers. "With such narrow a pathway, we couldn't bring in construction materials to reconstruct shelters. We couldn't take our buffaloes to the market to sell," said Maan Bahadur Tamang, a social worker of Neupane village.

Addressing the requests of the people of Neupane village, Caritas Nepal decided to construct a motor road connecting Todke and Chhap. A survey was undertaken by the technical team and a 1.5 km road was constructed with NRs. 606,356 under Cash for Work. Local people were mobilized for around two months.

The road was welcomed with notable enthusiasm to reconstruct shelters. 175 households completed safe shelter reconstruction with the onset of the road. With technical guidance from Caritas Nepal, all the houses were able to pursue Nepal Building Code. Similarly, the road has helped expand livelihood of the people. People can now buy and sell their agricultural products and livestock. "Nobody bought the buffaloes of our village with the fear that they would meet accident in the small pathways we had. With this motor road, there are people coming to buy one buffalo at NRs. 80,000 when the same wouldn't be bought even at NRs. 30,000 earlier," expressed Maan Bahadur Tamang. Around a 100 people of Neupane directly benefit with the road.

# Kanchi Maya Boju of Hariharpurgadi pursues vegetable farming as an enterprise

### The first successful season of a new vegetable farming entrepreneur

Kanchhi Maya Boju, 22, lives in Hariharpurgadhi village of Sindhuli district. This is one of the remotest locations of Sindhuli and here majority of the households are of Tamang ethnic group. Most of the residents of the village are not educated (i. e. have not completed formal school education) and Kanchhi Maya Boju is one of them. She was married at a very young age and has two kids. She can only write her name and is not able to read or write properly.

Earlier Kanchhi was engaged in agriculture in a small plot of land her family owns. But the income wasn't satisfactory.

Kanchhi Maya is a member of an agriculture group formed by NERP recovery programme. She recieved a three days 'Basic Agriculture

Training' and a grant amount of NRs. 35,000. From the grant she received, she bought pipes worth NRs. 16,000 for drip irrigation, owing to the fact that her village suffers a scarcity of water. She has been putting the knowledge and skills received in the training into practice. The traditional tools and techniques she applied previously are replaced with modern ones such as a plastic greenhouse, drip irrigation system, and organic farming practices. She earned NRs. 19,000 by selling 150 kgs. of tomatoes, 150 kgs. of cauliflower and 50 kgs. of cucumber that she produced in the last season. In addition, she has potatoes and cabbages that are ready to be harvested and

Agriculture technicians of Caritas Nepal visit her regularly to provide the technical guidance for intensifying her vegetable farming enterprise. She very much appreciates Caritas Nepal's work. "I would have been struggling in agriculture confined by traditional techniques, if Caritas Nepal had not shown the way of widening my vegetable farming. Now that I have the knowledge and skills required, I feel confident in myself. I feel a different kind of gladness because I am able to contributed to the income of my family." She added further, "I am planning to invest more on my vegetable enterprise so I can earn more in the future".



Kanchi Maya Boju weeding her drip irrigated cauliflower

## Mr. Rajendra Shrestha of Basheshwor improves his farming livelihood

### Vegetable Farming improves economic condition of a farmer





Rajendra Shrestha is a 33 year old permanent resident of Basheshwor, Sindhuli. He has a family of six and owns 7 Ropanis of land. His main source of income is agriculture. But earlier agriculture for him was limited to cereal based farming of rice, wheat, maize etc. His farm's produce was not enough to feed his family for the whole year, let alone help him make money. He grew vegetables in a small area. His knowledge regarding farming vegetables for greater income generation was limited.

Caritas Nepal supported the earthquake affected location with livelihood sector support and formed agriculture and livelihood groups. "Since I have some land and I have always liked to do kitchen gardening, I chose to stay in agriculture group," said Shrestha. He received a three days Basic Agriculture Training along from Caritas Nepal and materials such as Sprinkler, Bio Fertilizer, Knapsack sprayer, Plastic drum, tunnel, seeds etc. He also received grant support of Rs. 35,000.

The training helped him enhance his knowledge and skills regarding commercial vegetable farming. He constructed plastic sheds or green houses, and has been growing off season tomato and cauliflower. He notes that due to farming in off season with improved techniques (i. e. greenhouse, improved staking, timely irrigation, organic fertilizer and organic spray), he was able to produce 4.5 quintals of tomatoes and 80 kilograms of cauliflower. He sold his produce in nearby market and earned Rs. 29,000. He still has potatoes in 2 Ropanis (0.1 ha) of his land ready to be harvested and sold.

"I prepare organic sprays myself and use it to prevent and treat plant diseases. Also, I have started inter-cropping the vegetable crops with marigold, onion and garlic crops to control pests," said Shrestha referring to the practices he is using to reduce the use of chemical pesticides in farming.

"My family now has varieties of vegetables to eat. Besides this, I have improved my farming livelihood and I am able to save money for the future. I am grateful to Caritas Nepal for the livelihood recovery support I have received," expressed Shrestha. He added that he wishes to construct more of plastic greenhouses to expand his vegetable farming enterprise in the future.

## Women from Baseswor, Sindhuli on the way to being entrepreneurs



Ms. Rita B.K and Ms. Devi Shrestha (Right) posing for a photo

"We want to expand the business and remain independent women," says Ms. Devi Shrestha

Four women from Baseswor village, in Sindhuli, are on the way to become notable entrepreneurs. Ms. Devi Shrestha (34), Ms. Rita B.K. (40), Ms. Rim Kumari Shrestha (65) and Ms. Asmita Majhi (28) participated in a 5 days pickle making training provided by Caritas Nepal. The women now have a pickle business in the vicinity of Deuralitar in Sindhuli district.

Coming from marginalized caste and ethnicities of Baseswor, this is indeed a great achievement for the women. The pickle making training worked as a door for them to understand their potentials. "We didn't know we could be entrepreneurs like this. We had never thought we would come out of our homes to work and earn money for ourselves," says Ms. Devi Shrestha.

Ms. Rita B.K. adds, "I am very happy to have received the training and the motivational support from Caritas Nepal. I believe our confidence has reached very high now. I believe that women like me who belong to marginalized caste groups can also stand independent on our own feet".

Considering the boost in these women's confidence, Caritas Nepal requested them to facilitate a pickle making training in Hariharpurgadhi village and they readily accepted it. Around 40 people from Hariharpurgadhi village were trained by Ms. Devi Shrestha and Ms. Rim Kumari Shrestha in December 2018. Hariharpurgadhi village is one of the most remote work locations of Nepal Earthquake Recovery Programme and its residents were happy to receive the training. "We didn't know that pickles could be made like this. We shall make pickles from the vegetables we grow from now onwards," says Ms. Hiramaya Bholan, a participant from Hariharpurgadhi.

The women have registered their business as cottage industry and requested grant support from Golanjor Rural Municipality to buy weighing machine and other goods required for a small scale industry. They have received a clearance certificate from the Department of Food Technology and Quality Control. "We want to expand the business and remain independent women," says Ms. Devi Shrestha. "You should buy a few bottles of our pickle," she adds with a giggle.  $\blacksquare$ 



### Protection and Psychosocial: Achievement, Good Practices and Case Studies

Objective four: Earthquake affected communities obtain services in an accessible, safe, .dignified manner and improve their physical and mental well-being

Caritas Nepal implemented NERP with emphasis on protection mainstreaming. The protection team worked with other sectoral teams to ensure that the recovery services were delivered in a socially accountable manner. Village and neighbourhood level protection committees were set up to ensure that the service delivery was done in a 'accessible, safe, and dignified manner' to the beneficiaries. Special effort was made to ensure most vulnerable households received multisectoral services of the programme in timely manner. As per end line survey, the programme effectively reached single women households (12%) and households with people with disability (9%).

#### Result one: Protection mainstreaming is pursued by Caritas Nepal's Team and Partners

All program and administration personnel have been trained on protection mainstreaming concerns, and services have been delivered by ensuring there was good information flow to the communities. The targeted households had good access to the services provided. 327 programme personnel and volunteers were trained on the issue. In addition, 1200 people of the communities were oriented on protection mainstreaming and 2756 people were trained on feed back mechanism. In this way, both Caritas Nepal's personel and communities took socially accountable service delivery as an important issue and implemented the NERP programme accordingly.

### Result two: Earthquake affected communities have mechanisms in place to address protection concerns

Oriented and trained local organizations (drinking water user groups, livelihood sector groups, cooperatives, and protection committees) undertook review and planning meetings and implemented the programme by ensuring that all the beneficiaries received the program services in a timely manner. These organizations received feed back from the people and responded by addressing the concerns of the people as far as possible in coordination with NERP team in the village. As per end line survey, households (HHs) preferred providing feed back as follows: 35% .HHs - orally, 15% HHs - feed back boxes, and 3% - HHs noted toll free number

Protection team worked with local stakeholders such as district police force to create awareness on prevention on alcoholism, child marriage, unsafe migration and trafficking. District Women and Children's Development Office and later the newly established local governments were supported hardware (computers/printer) to document work on social protection more effectively.

### Result three: Earthquake affected communities have systems in place to address psychosocial needs

72 Local volunteers were trained to identify and provide basic support to psychosocial cases. They visited households in their neighborhoods and provided advisory to people affected by depression and trauma. 229 psychosocial cases have been provided funds to access medication support. 240 disabled people have also been provided funds to register at local government or to access medication support. Technical back stopping support provided to local volunteers

by accessing guidance from specialised organization (Transcultural Psychosocial Organization-TPO). Seven camps were held in villages to identify and register people with disability at local government offices.

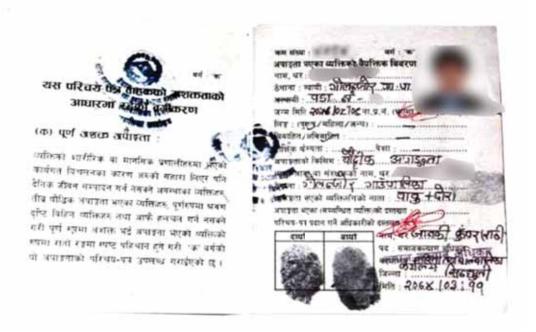
### Table: Fact Sheet for Protection and Psychosocial Sector (some progress and (achievement indicators

s.no.	Particulars	Output	s.no.	Particulars	Output
1	Number of volunteers trained placed in protection concerns:	72 local volunteers	6	Number of registered feed-back that were responded to	238 units
2	Number of household visits undertaken by volunteers for ensuring protection mainstreaming and to identify psychosocial and disability cases:	6860 units	7	Number of people provided psycho-social referral support fund	229 people
3	Number of protection mainstreaming orientations and trainings, and participans	41 orientation on protecton mainstreaming and 1200 people trained	8	Number of disability registration camps held in coordination with District Women and Children Office and Village Health Centers Number of people with disability provided referral fund	7 camps  240 people with disabililty
4	Number of protection mainstreaming committees	8 Village Protection Mainstreaming Committees	9	Number of child clubs of schools undertaking awareness in protection concerns (children's rights, women's rights, gender violence, safe migration and trafficking) with the support of the programme	14 child clubs of 14 schools
5	Number of Feed back boxes  Number of Toll Free Phone lines  Number of Feed back mechanism Training  Number of staff and local people trained	98 Feed back boxes  1 unit toll free phone line  67 units of training  327 staff trained  2756 local people trained	10	Number of local government strengthened to undertake their role for provision of justice and mediation services.  Number local government and district government offices provided hardware (computers/printers) to document social protection work more effectively	7 local government and their Judicial Committee members  15 offices of district and local governments

Table: Good practices in protection and psychosocial service delivery

Intervention strategy	Description of practices			
1. Protection mainstreaming and feed-back mechanism installed by training staff, volunteers and other community members	<ul> <li>a) Staff members of Caritas Nepal and partners were provided four days long protection mainstreaming training, and additional one day training on feed-back mechanism held.</li> <li>b) Community members oriented on protection mainstreaming and on feed-back mechanism. Regular review of protection concerns in all sectors done together with related households and community groups, neighbourhood committees and village level committees.</li> <li>c) Local programme teams, user groups, agriculture and livestock groups, cooperatives mobilized to address equal access, inclusion, accountability, transparency, and effective participation concerns during activity planning, implementation and reviews in their teams, groups and communities.</li> <li>d) Feedback boxes and toll free phone lines installed and feed back received were replied to and taken into consideration in programme management.</li> </ul>			
2. Capacity of local volunteers to support psychosocial and disability concerns improved through training and coordination with related stakeholders	<ul> <li>a) Psychosocial case identification and basic guidance (counseling) training provided to local volunteers, and volunteers mobilized to visit each household to map the support needed. Technical back up provided to volunteers by accesing consultation support of psycho-social specialist organizaton (TPO) organization that visited the field locations.</li> <li>b) Disabled people supported to register with local government by hosting disability identification camps held in coordination with Districts Health Offices, District Women and Children Office etc.</li> <li>c) Referral fund support provided to help psychosocial and disabled people to register at local government and/or to access medications etc.</li> </ul>			







Fr. K. B. Bogati, Executive Director, orienting new NERP staff on Caritas Nepal's organizational principles and staff code of conduct (2017)



Villagers hold a meeting to discuss protection concerns (Dolakha)

### Ms. Sita overcomes depression with the help of psycho-social support from Caritas Nepal



Sita being checked at PHC by a Psychiatrist

Ms. Sita, 31-year old woman lives with her husband and four children in Bigu Rural Municipality of Dolakha district. She is from a low income family. She had a very happy family until the massive earthquake of 2015. She lost all her household belongings and rubble was all that was left of her house. She and her family then started living under a temporary tin shelter constructed with the CGI sheets provided by Caritas Nepal.

Her family later received housing grant worth NRs. 300,000 from Caritas Nepal to build a

house. Traumatized by the monstrous earthquake, she fell into a depressive state. She says, "I did not feel like talking, eating, and I had fears and irritation without any reason and sleeping disorder as well. I hid this problem for six months until a social volunteer from Caritas Nepal visited my house. The volunteer's visit and counseling helped me find out that mental problems are treatable."

She went to the Public Health Community and received counseling from a certified psychiatrist. She was prescribed medicines after the intake of which she has been feeling better. She now does her daily tasks happily. She lives in an earthquake resistant house her family built with the support of Caritas Nepal. She is also a member of Livestock group and has received cash support to expand her livelihood. "I am very happy now and would like to express my gratitude towards Caritas Nepal for supporting me and increasing my income. I have overcome depression and it would not have been possible without the support of Caritas Nepal." She expressed with a smile in her face.

#### Mrs. Parvati addresses domestic violence!

Parvati, 55, comes from Sunkoshi Gaunpalika of Sindulpalchowk District. She got married at the age of 20. She says, "After the birth of my first child, my husband started beating me. I accepted this treatment for 35 years without telling others because I thought it would adversely affect my family's reputation. I gave him so many chances to get sober, not to drink and become violent, however, it only got worse day by day."

She was identified by Protection Social Volunteer while visiting houses in the ward. She, at first, hesitated to share her problems and later opened up and noted that it was very difficult for her to live with her abusive husband. She was one of the participants of Protection and Feedback Mechanism Orientation held in the location. The orientation motivated her to open up about the abuse she had been facing. Later, with the support of a psychosocial volunteer of Caritas Nepal's programme, she developed courage and filed a case against her husband in local government office. "The government officials have warned my husband to be careful. He has not been abusive since then. I owe thanks to Caritas Nepal for encouraging me to speak up against the wrong that had been going on with me."

**Note:** Due to sensitive nature of the cases, names are changed and photos are blurred.

### Mr. Ram's disability stipend helps him buy medicines

Ram, 50, farmer by profession, is a resident of Balthali (Panauti-11, Kavrepalanchowk) and lives with his wife and a daughter. He is partly paralyzed after having fallen off a tree two years ago. He was hospitalized for Spinal injury treatment. He was on physiotherapy and counseling treatment while in the hospital.

He says, "I spent almost all my savings for the treatment. My wife and daughter worked and supported me in paying the hospital bills. The cost of the medicine was very expensive. I couldn't afford the medicines prescribed for me, so I stopped taking them. Thus, I requested Caritas Nepal for disability referral support."

After Caritas Nepal Protection team identified his case, they provided him small referral support. This helped him to access stipend given to disabled people from the government (category B disability). "Although the stipend is small it helps, I use the money to buy medicines," he added. His family has also received funds to raise livestock from Caritas Nepal's programme.



### Shyam receives Citizenship and Disability Cards

Shyam Shrestha, 18 year old boy from Baseshwor (Golanjar-6, Sindhuli) is a mentally challenged boy. He is an introvert and prefers talking only with his family members. He was noticed by the Protection Social Mobilizer playing outside his house. They found that he has been ill since he was 9 years old. His parents added, "He was sent to school but could not grasp much and eventually became forgetful. Therefore, we were worried about him and took him for a check-up."

His parents depend on agriculture for livelihood. Therefore, they thought that

acquiring citizenship for him would not be so important in his life. His parents explained, "When we brought him to the Health camp for check-up, we came to learn that having a citizenship is very important. Even making a Disability Card is dependent on citizenship." So, with the support of Social Mobiliser of Caritas Nepal they took him to the district office to acquire a Citizenship Card. After acquiring a citizenship card, he was able to receive a Red category card from the Social Welfare Office. He now receives a small monthly disability stipend. "We are very thankful towards Caritas Nepal for the support. Our son would not be receiving the government's allowance for the disabled if not for Caritas Nepal. Caritas Nepal's staffs who are selflessly working to help the poor and needy like us are to be commended" added his parents.

## People move on after receiving psychosocial rehabilitation support



Ms. Suku Tamang lives like a normal woman now.

30-year-old Ms. Suku Tamang started to present symptoms of a psychological disorder in the aftermath of the devastating earthquake of 2015. "Her hands and legs would tremble just like that and she would start crying and screaming. Sometimes she would start singing songs like a nonchalant child," says her 43-year-old husband Mr. Bahadur Tamang. They live together in the hills of Baseswor with their two school-age children.

Mr. Bahadur Tamang was weary of treating his wife with traditional healers and quacks that produced no positive result at all. "I spent around 4-500,000 Rupees taking her to jhakris. I don't know how many roosters were sacrificed in the name of Gods. But nothing positive happened. With my wife's worsening condition, I had to leave work to look after her. She needed one person after her," he adds. Ms. Suku Tamang's condition was diagnosed by the Transcultural Psychosocial Organization (TPO). However, TPO was exiting from the village and therefore handed the case over to Caritas Nepal. CN followed up on her, provided her with a grant support of Rs. 4,000 and referred her to a psychiatrist, who prescribed medicines. The social mobilizer of CN visited her family frequently and kept reminding them to continue with the medication prescribed by the doctor.

With regular medication, Ms. Suku's condition has now greatly improved. "She lives like a normal woman now. She doesn't wail and whine like she used to. And she doesn't need a caretaker," says Mr. Tamang. With the improved condition of his wife, he has opened a small shop in the village and now earns around 1000-1500 Rupees per day. "If not for CN, my wife wouldn't be like she is today and I would have to be running after her like a babysitter. My kids feel happy too. They used to be anxious when their mother started behaving abnormally. I was worried that it would affect them too. I can't express how glad I am that she is normal now. All thanks to CN for choosing to help my family," he beams.

Note: names changed due to sensitive case study.



## **Articles on NERP by External Experts**



## 1. Ensuring safe water, decent toilets and better hygiene

Goal of Caritas Nepal's WASH interventions within NERP: Earthquake-affected households have access to safe drinking water and improved hygiene and sanitation facilities.

Caritas Nepal's WASH interventions targeted 4,946 households across the programme's four districts.

As a result, people who, before the project, had to spend more than 30 minutes to fetch water from often polluted sources, today have access to safe water within a five-minute walk from their homes.

Caritas Nepal also supported schools, health posts, ward offices and key public places for water supply and toilet facilities, based on local priorities.

#### Good Practices:

- Tailoring interventions to the location. Different approaches and technologies were adopted based on the different types of communities and their geographic location.
   For example, although most of the drinking water schemes were gravity-fed, lifting-schemes (using solar-powered and sensor-based operating technologies) were deployed for villages that are more remote and elevated.
- 2. WASH coordination committees were formed under the leadership of local government representatives. These groups identified WASH priorities based on local needs, and prepared plans to respond to these. For example, the coordination committees in Baseswar, Chandenimandan, Bulung, Orang, Balthali, Hariharpur Gadhi, Kalika and Thokarpa villages led local 'open defecation free' campaigns. All these villages have now achieved ODF status. The coordination committees also support Water and Sanitation Users' Committees to manage water supply systems, and promote environmental sanitation and hygiene in their communities.

- 3. Users' committees as key drivers. Ownership and leadership from the community were prioritised in every activity of the project. Water and Sanitation Users' Committees were formed for all the water supply schemes, and were trained on the necessary financial and organizational management skills.
- 4. Furthermore, the users' committees are actively engaged in collecting monthly water tariffs, which has made it much easier to finance minor repairs and maintenance of the systems. Tariff collection and management, community mobilization and awareness, and regular monitoring from 'source to mouth' are key to the sustainability of the systems. This is set out in the village Water Safety and Sustainability Plans, developed by the users' committees. The committees have also taken ownership of ensuring water quality, equipped with field kits to test the water quality at source and taps.
- 5. Caritas Nepal and its local partners collaborated with these committees during feasibility studies, design and estimates of the water supply systems. The committees then mobilized beneficiary households to contribute their labor to the transportation and laying of drinking water pipes and to the construction of reservoirs and intake points equating to an "in-kind" support of 30-40% of the total project cost. This greatly facilitated the timely completion of the work.
- 6. Water Safety Plans sustainable safe supply from 'source to mouth'
- 7. Financial, environmental and social sustainability of the water supply systems were at the forefront of all WASH initiatives of Caritas Nepal.

Ultimate goal - hygiene behavior change

Once water systems had been established, the next challenge was to maximize their impact, by influencing people about hygiene and hygiene behaviors that would improve their health.

Awareness campaigns were a core part of the programme's behavior change communication, with school children integral to these activities. Social mobilizers and Female Community Health Volunteers (FCHVs) made door-to-door visits to educate households on drinking water treatment, proper use of toilets, and handwashing best practice. Street drama and 'lok dohori' competitions during important festivals also drew a lot of public attention.

In the last few years, diarrheal cases have reduced by more than 20% in most of the NERP's WASH intervention areas and people's health seeking behavior has changed. For example, people visit healthcare facilities rather than relying only on Dhami-Jhakri (shamans), particularly in the Tamang communities of Dolakha district.

Some stories of Change

Helping the elderly with a water supply at their doorstep

Mrs. Tamang had suffered a life of hardship from the daily burden of fetching water.

In the 2015 earthquake, the elderly Tamang couple lost their house and took long-term shelter under a tarpaulin. With the village's already-fragile water supply system destroyed, they resorted to drinking water from a nearby stream. Later that year, even this water collection point was swept away by a landslide. The villagers were forced to rely on a turbid water source: not only dangerous for drinking, but inadequate even for cleaning clothes, bathing and kitchen gardening.

Identified by the programme for support with a sustainable new water supply, the Tamang couple and their fellow villagers worked for seven days to help construct water tanks and distribution lines. Some also contributed their land to build a water tank. With two years now passed since the water supply was built, households continue to monitor the 'nuts and bolts' and make financial contributions when required in order to sustain it.

<sup>&</sup>lt;sup>1</sup> "Lok Dohori" is type of Nepali Folk song sung by two teams of men and women. It is mostly in the form of question and answer.

#### People maximizing their saved time

Sita Sarki, 40, lives in Darimbot village in Golanzor-6, Sindhuli, with her husband and three children. For the first time in her life, she has now access to drinking water in her courtyard. Until recently, villagers in Darimbot had to undertake an hour's round-trip to fetch water. Now, her family shares a tap stand with the neighbor, giving both families sufficient water not only for their households but also for livestock rearing and kitchen gardening. They maximize the resource by using grey water to support their kitchen gardening. With a safe water supply now so close at hand, Mrs. Sarki explained that her children can spend more time on their studies while she has more time for farming.

In addition, bathing has become relatively comfortable due to adequate amount of water and appropriate tap stand size and location. Nowadays, both adults and children regularly bathe - a practice made possible by the access to water.

#### Empowered for good: The young change makers

Students from Janajagriti Secondary School proudly share their experiences of the role they have played in changing local practices and behaviors. Through activities such as quizzes, painting and village street dramas, the Child Club helped to spread information about safe drinking water and handwashing, as well as wider themes including child marriage and safer buildings.

With a contribution of 40,000 rupees from Caritas Nepal, the club used half of the money to buy sports and music equipment to support various awareness-raising activities. They plan to organize more activities with the remaining funds, and they meet monthly to keep momentum behind their ideas. Conscious of the limits of depending on external support, the young people contribute 10 rupees per student each month to generate further funds for their activities.

#### Ending the constant fear of water vulnerability

Sushila Shrestha, 40, of Chandenimandan, is an executive member of the Phyafulla Drinking Water and Sanitation Users' Committee. Like many rural women, she also bears responsibility for managing the water for cooking and domestic activities for their family. The days after the earthquake were extremely hard in Chandenimandan. Almost all the houses in the village were destroyed and 36 people died. Among its impacts on the community, it triggered a deepening water crisis which made day-to-day life unbearable.

"Availability of water for drinking and other household activities has always been a problem in the village, forget about water for irrigating the fields," Sushila said, adding, "The situation went beyond control after the earthquake."

"We used to wake up at midnight and make our way through difficult terrain to fetch water from a source located at a distance of 3-4 kilometers from the village," she said, adding, "If we started late, the chance of getting water was less as there would be dozens of villagers queued up."

"There was not a single moment when I wouldn't think of water. Even in my dreams, I would see myself fighting with my neighbor for water and sometimes see an empty water source and would wake up terrified."

"Without work there was no money to buy water distributed through tankers for drinking purpose and for rebuilding the earthquake-damaged houses."

The availability of water has made life easier for Sushila who now has time to rear goats. "Now, that I don't have to worry about water all the time or spend hours fetching it, I have time to think about ways to earn money and support my family," she says.

## 2. Livelihood re-established in earthquake affected locations

#### Mr. Ajay Kumar KC and Shekhar Giri

The major earthquakes of 25 April and 12 May, 2015 followed by hundreds of aftershocks devastated parts of central Nepal. Approximately 9,000 people lost their lives and more than 22,000 people were injured with more than 600,000 houses completely damaged. Public infrastructure, including schools, Government offices and health posts were severely damaged. The global community on request from government came for supporting in exceptional volumes of technical, financial and humanitarian aid. Number of NGOs/INGOs were in the field to provide the humanitarian support to the people from the very next day, of which one was Caritas Nepal with support from different affiliation of Caritas International.

With over four years from earthquake, the reconstruction work is still ongoing and a good portion of reconstruction work is still remaining in many earthquakes affected districts. Government hasn't been very successful and smart in utilizing the fund that was generated for the reconstruction work from international communities. NGOs/ INGOs and UN agencies have already invested millions of dollars for the recovery and reconstruction works. On this scenario, I was amazed to see the impact of the program of Caritas Nepal in the field supporting government of Nepal to meet its goal for recovery and reconstruction. The organization had aligned its program as per government housing reconstruction strategy and further support to households for elevating living condition through livelihood activity, access to safe water & improved sanitation with social dignity.

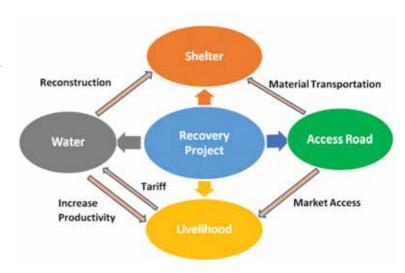
During my field visit to different program districts of Caritas Nepal, I found work done in very smooth and sustainable manner enhancing the ownership of the community. The best part that we found in the community was that the program evolved as per the necessity and interest of the community. Looking into the programmatic aspects, the earthquake damaged 96% of households surveyed, house reconstruction of houses is already completed in 99% households. Caritas Nepal provided support to households in different stages with support ranging from Tarpaulin, CGI sheet to Cash grant and technical support. The cash grant of NPR 3,00,000 was provided as per norms of government of Nepal along with transportation support of either NPR 50,000 or NPR 5,000 as per the remoteness of the areas for house reconstruction.

The service level of access to water has improved as now 87% of the households surveyed have access to either public tap stand or individual household taps. The latrine coverage is 99 % of surveyed households and remaining 1 % households also use their neighbour's latrine. The community seems to have very good knowledge on household water purification, hand washing and personal hygiene. Similarly, there is very good practice of hand washing with soap on critical times as there is practice of handwashing in 98% surveyed households before taking meals, 97% after using latrine, 97% after working in the field and 77% before cooking food.

The best impact of the program after construction of houses was seen in improvement of the livelihood status of the communities as 95.2 % of surveyed households have received training on agriculture or livestock rearing and now 79.58 % of the households have monthly income more than NPR 10000. As per the communities, earlier the agriculture products were only enough for household consumption while now 79% households sell their agricultural and livestock products. Similarly access to financial institutes like co-operatives, banks or microfinance has improved and 89.5% households have monthly saving ranging from NPR 100 to more than NPR 20,000.

It was very pleasing to hear in the communities about what the organization had done in transforming the place, living condition of the people and the impact in the society. Some of the voices from the communities were

"The development has increased after earthquake and people have gained skills because of different trainings, livelihood has improved due to training on agriculture and livestock management. So now we can call it constructive earthquake rather than destructive." – Mr. Raju Khadka, Ward chair Person Sailung-6, Dolakha, 23 August 2019



"I had never worked as a mason before. After

taking part in Caritas's mason training, I started construction of my own toilet. The wall didn't go on line and level so I called the more skilled person and made the correction, through this I learned more. Then I constructed latrine in my father-in-law's house. This boosted my confidence to build my own house. After construction of my house, I got involved in reconstruction work in communities too. Now I can completely construct a house. I have already completed reconstruction of 4-5 other house in this community." Ms. Subhadra Thapa, Mason (Thokarpa, Sunkoshi -1), 25 August 2019

"After receiving livestock first installment I bought one goat and it was sick, sold it then bought a pregnant goat and after a month, the number of goat increased and sold it to buy a buffalo worth NPR 30,000, now soon it will start producing milk then it will be worth more than NPR 80,000. This amount is nothing for rich people but it's very much for us". – Ms. Gita Karki, Sailung-6, Dolakha, 23 August 2019

"The most appreciated program for us was water supply system. After earthquake all our water source dried, so we had to walk for an hour to river just to bring a bucket (Gagri) of water. Now it's one in the yard for every three houses. This has saved our time and helped to focus on other priority work"- Dal Bahadur Khadka, Sailung-6, Dolakha, 23 August 2019

"If this organization will stay for long, the place will change its face. If this organization wasn't here, there would have been no development and there would have been more pressure to ward office for reconstruction work. We have worked together to reach here. Now we need to protect it and move forward. We want this organization to come back to our place". – Mr. Krishna Thakuri, Ward Chairperson, Bigu-2, Orang, Dolakha, 17 August 2019

The holistic program approach of Caritas Nepal seems to be very effective in communities as the program first supported on enabling access to the project areas through cash for work in road maintenance followed by reconstruction of permanent shelter which were affected by earthquake. This eased the reconstruction work as transportation of material to the project areas became easier. In some areas water supply system was supported prior to shelter reconstruction work, this on one hand improved access to drinking water and on other hand the availability of water supported reconstruction work.

The support in improving access to basic needs was then followed by re-establishment of livelihood of the communities. The livelihood support is provided for all those reconstructed households who are staying in the village with grant of NPR 22,000 or 35,000 per households to recover, expand and/or diversify their livelihoods. The households have used the grants for farming inputs to re-establish their livelihood activities such as vegetable farming, livestock



Photo of poultry farm of Mishra Roka constructed with support from livestock grant of Caritas Nepal.

rearing, and poultry farming. The households accessed plastic tunnel, sprayer, sprinklers, pipe, goat, seed, fertilizers with the cash grants as well as three days training on basic agriculture and livestock rearing.

One livestock beneficiary shared his experience and success in livestock farming as "Erstwhile, I had three goats only, after getting livestock grant, I bought three additional goats. I also obtained additional support of one breeding buck from Caritas. With this I have been growing and increasing the number of goats. At the moment, I have altogether 14 goats. Before, my earning from livestocks was only NPR 10,000 to 15,000 per year but now I earn five times more than before, I earned NPR 50,000 to 60,000 by selling the goats."- Mr. Tapendra bahadur Chhetri, Bigu-3, Bulung.

Similarly, another beneficiary from Sindupalchowk said "Before earthquake my income source was daily wages and goat rearing and I had problem to manage household expenses via daily wage and goat rearing. All my family members' expenses were dependent on my husband's income. I received CN grant support NPR 35000 for poultry farming and training. Then I started poultry business. Initially I did poultry raising with 100 chicks and earned only NPR 7000 to NPR 8000 per lot and now I have raised 500 chicks and earned more than NPR 40000 per lot. Thus I have earned NPR 200000 per year and I have managed my household's expenses easily and increased my monthly saving by NPR 15000". – Ms. Mishra Roka, Poultry Farmer, Sunkoshi-1, Thokarpa.

The program has not only brought impact on the society but also developed skilled human resource for future emergencies in the country. I highly appreciate the good work of the organization in such remote areas and further encourage the organization to continue and replicate similar work in future in different part of country.

## Success Story of Women Led Cooperative: A Case of Mahila Aadharsheela Cooperative

Mahila Aadharsheela Saving and Credit Cooperative limited is a female led cooperative operating at Bigu Rural Municipality-03, Bulung, Dolakha. In 2010, Italian foundation conducted the workshop in legal literacy in Women and Child rights and Domestic Violence. Among the participant was Ms. Kabita Khadka who gathered 24 other enthusiastic females to start the cooperative. They discussed with Italian foundation to establish the female based cooperative for women empowerment.

Italian foundation supported them financially to be registered in Division Cooperative Offfice, Dolakha and named it



Cooperative members in front of their building after taking the training on management

'Mahila Aadharsheela Saving and Credit Cooperative Limited.'. In the initial phase, there were 25 share members in the cooperatives. They collected Rs. 27,500 as capital to run the cooperatives. These members were mostly limited to the household chores before the start of cooperatives. It was difficult for them to have saving, and they started the business with saving of Rs. 10 per month per person. Ms Khadka operated the cooperative in her own house without taking the rental charge.

The team later on initiated the financial access campaign and started to convince the other females in community to join them and to start the savings. Though with the little fund, the team was operating in small profit but the team was hopeful to achieve big (such as to have their own building, strong financial base). Meanwhile, earthquake of 2015 shattered the dreams of the cooperative. The house in which cooperative was operating was damaged and lost their assets. Despite the loss, the women did not lose hope and started the cooperative in temporary shelter. This time, these women were not limited to financial literacy but partnered with local NGO named Sarbodaya Nepal to distribute the relief material. During this period, they received Rs. 135,000 as administrative cost to operate the relief program but the members used the sum as the seed capital. Their response during emergency was well appreciated by the district government (District Development Committee) and provided them with support of Rs. 100,000. After having seed capital of Rs. 235,000. The team started to saw their dream coming true of having their own building but the money was not enough. The profit from the cooperative business was also booming but were unable to generate income enough to buy the land and to construct the building. Then in 2017, CN supported the cooperative with Rs. 300,000 as admin grant and the Bigu Rural Municipality supported them with Rs. 450,000 as support. With this amount, and the 1711 square feet land donated by Ms. Khadka, they constructed own building for cooperative

The cooperative started with the 25 shareholders have now 823 members and the paid up capital of Rs. 27,500 has reached to Rs. 637,000 with saving of Rs. 7,873,837.

In this way, the members of cooperatives are proud on their achievement. It gives us immense pleasure to go back and see on how we started and what we achieved. It is good to help the people in need through cooperatives', says Ms. Khadka, the Manager of the cooperatives.

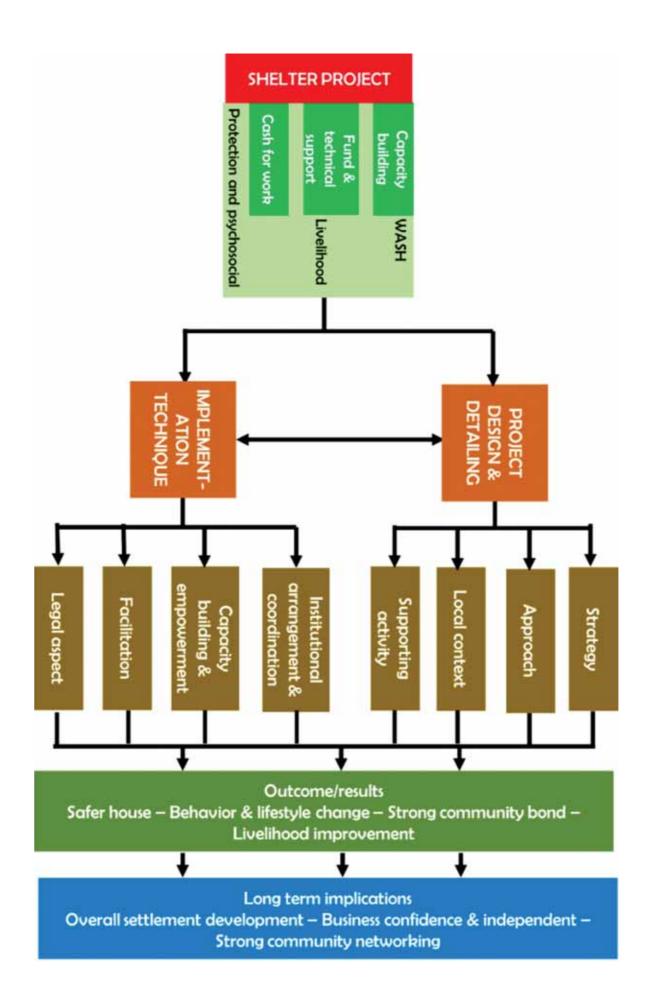
Note: This article is prepared by Mr. Bibek Thapa and Mr. Dipak Tamang of NERP Core Team

### 3. Lesson Learned and Policy Recommendations on Shelter Reconstruction by Caritas Nepal

### Dr. Bijay Krishna Shrestha

Shelter project within NERP implemented by Caritas Nepal in three districts (Sindhupalchowk, Dolakha and Kavrepalanchok) between 2016 and 2019 is successful due to multiple reasons. Numerous positive results and long term implications are not only due to innovative and integrated project design and detailing but also because of systematic and coordinated way of execution of various activities during implementation period (Fig. 4.1). Shelter project comprises of cash for work and technical and financial support and the whole shelter project is linked with livelihood improvement, water and sanitation, protection and psychosocial counselling. In the design and detailing of the project, four important aspects namely strategy, approach, local context and supporting activities have been emphasized and integrated. The strategy adapted includes earthquake safer house construction with quality control and timely completion, including all beneficiaries (leaving no one alone), addressing individual's socio-economic problems and planning various activities in a systematic and coordinated way. The approach is fully participatory with empowerment of local communities and beneficiaries with intention of self-help. National Reconstruction Authority's owner driver approach was applied. Local context was considered by exploiting locally produced and available building materials, technology and above all engagement of local people.

All these proposed activities were systematically and coordinated way executed complementing each activity to other. Awareness among beneficiaries and local people were created through serious of orientation programs, IEC material and engaging beneficiaries into various committees and individual counselling from door to door. It not only helped to disseminate the program and its activities but also supported to understand beneficiaries views and concern. Once they were aware, capacity building activities through various masons training and orientation were carried out. Along with shelter activity, their livelihood improvement capacity such as training on agriculture or livestock was also parallely carried out. Along with training, the beneficiaries were also given extra support: cash for work and transportation charge (NRs 5,000.00 each) and support of cash or kind equivalent to NRs. 35,000.00 to each household participating either in vegetable gardening or livestock. Each household was facilitated in technical and financial matters from concept to completion. Technical staffs supported in cost estimate, selecting appropriate design type, foundation layout, construction supervision. Similar type of support was also given to ensure timely release of grants in different instalment. The caritas staffs and social mobilizers (local people) who were also trained did excellent coordination with public agencies (NRA district office, rural municipality and ward officers as well as various committees formed from beneficiaries). Extra care and support was rendered to vulnerable persons such as single women, economically weak household and so on. All these activities could conducted in time due to excellent institutional arrangement (by creating site and district office and deputing adequate staffs in each office) and good communication. NRA's rules, regulations and guidelines were followed thereby making no confusion in approving construction work and realizing grant in each instatement. As a result, each household was able to build a new permanent earthquake safer house in time without compromising quality. Each of them also developed skill and knowledge on safer construction as well as in agriculture or livestock sector thereby increasing their family income. There has been significant improvement in living condition and change in behavior and lifestyles. Each household has a separate toilet outside the building. They have learned how to



keep their houses and surrounding environment neat and clean (such as animal shed and disposal of animal waste for making bio0fertilizer). Almost all case, the kitchen, toilet and animal shed are separated from main building block used for sleeping and living. Many of them have replaced the traditional wooden woven into gas stove. They use wooden bed and mosquito net. New houses do not require to mud with cow dung coat on floors and walls from time to time. Working in a team through various committees for a long period has created a human networking among local people, Caritas Nepal and government agencies and among themselves as a strong community bond. Permanent safer housing construction, skills and knowledge development and community networking will have long term positive implication. However, there are some weaknesses too in this project: inadequate consideration of traditional vernacular architecture and townscape. Replacing earlier large single building by multiple small units in post-earthquake period means the limited agriculture land has been consumed by building units. Haphazard positioning of toilet, kitchen and animal sheds of different households has resulted in some cases close proximity of toilet, kitchen and animal shed thereby raising the issue of health and hygienic condition. Responding of individual beneficiaries in each villages further confirms the successful project design and its implementation. Those household living in new houses are happy, improved income and enhanced their lifestyle and living condition.

#### Lessons learned

- (a) Design of shelter project requires a holistic approach considering multiple activities that addresses households' livelihood improvement and better living standard. Parallel activities under different themes (livelihood, WASH, psychosocial) with provision of training as well as cash and in kind support has encouraged households actively participating in shelter project.
- (b) Social approach of putting households at the centre for leading reconstruction work by trust building, awareness raising, capacity enhancing and then engaging them in reconstruction has been found effective in owner driver process. Numerous social issues such as sharing of plot by two beneficiaries, extra support from village infrastructure project and construction of toilet for vulnerable household and singe woman and identification of appropriate beneficiary for demonstration (or model) houses could have addressed without any debate, confusion and controversy simple because all decisions were taken by the households only with facilitation by Caritas Nepal, ward office and rural municipalities.
- (c) Direct or indirect additional support is essential for inclusiveness, ensuring safer house construction by vulnerable persons, single women and differently able persons. Caritas Nepal itself constructed many demonstration houses addressing specific needs of the beneficiaries (such as disable person toilet, four room house for two single women, etc.) with spending beyond the grant support amount. Some of the vulnerable beneficiaries were also assisted by providing extra amount of small money for construction of toilet and direct payment to labors engaged in house construction. Still others were participated on 'cash for work' for earning small amounts.
- (d) Consideration of local context utilization of locally available materials (or producing locally), familiar construction technology with earthquake resilient detailing and engagement of local people – is essential for smooth and cost effective reconstruction process. Cost effectiveness has been further achieved through sharing of labor work 'Parma system' among neighbours, involving beneficiaries and their families as masons, carpenters or laborers, using materials from old house and shed such as stone in foundation and CGI sheets for roofing and sharing drums for water storage, pipelines etc. during construction time. Though same standard preapproved limited design typology was adapted by all households, nonetheless, flexibility in design to suit their individual needs and budget was achieved through variation in building volume especially in the height of the attic space. Some of the houses have higher attic spaces with small windows around so that the upper spaces can also be used for sleeping, in addition to storage of agriculture products. Other households having limited budget built a low height attic without windows and can be used for storing agriculture product only. Use of CGI sheets in the roof has further provided flexibility in increasing height of attic space in future with availability of budget. Constructing toilet block and kitchen whether attaching with the main house (at least one wall common) or completely detached and away from the house has also provided some level of flexibility in terms of construction cost.

(e) Establishment of site and district offices of supporting agency and formation of social institutions in the form of different committees together with effective coordination and facilitation in carrying out activities (some of them in linear way and other in parallel) is essential for success of the shelter project while implementing shelter project with multiple activities.

#### Policy recommendations

- a) Numerous lessons learned from shelter project leads to key basis for policy formulation. The following are the key policy recommendations based from the experience of shelter project.
- b) Always link shelter project with other themes such as livelihood, psychosocial counselling, WASH and so on that have also been destroyed by the earthquake.
- c) Single activity such as house construction or mason training alone does not yield effective result. Capacity building component must be integrated with its application such as engagement in house construction, agriculture farming or livestock. Provision of small amount of cash or in kind further encourages participants in practicing them.
- d) Create enabling environment for leading the reconstruction work by households or community themselves by facilitating technical, financial and coordinating at various levels. Working in a team and including all beneficiaries irrespective of their economic and social background help to build a team work, which creates strong community bond;
- e) Develop additional provisions to support in terms of cash or in kind, technical or any other appropriate support for vulnerable people, single women and differently able person
- f) For long term sustainability, develop a mechanism for ensuring continuation of important activities generated in the project. Developing trained masons, veterinary doctor and farming expert during project period help households to consult them in case of any problem even after the end of the project period.

### 4. Summary of End Line Survey of Nepal Earthquake Recovery Programme

#### By Final External Evaluation Team

The devastating earthquakes struck Nepal on April 25, 2015 killing 8,891 people, seriously injured more than 22,300 and rendered millions homeless. More than 600,000 houses were completely damaged with a further 300,000 partially damaged along with public infrastructures. Caritas Nepal, with the support of Caritas Internationalis Member Organisations (CIMOs) aptly responded to the immediate needs of the people by providing relief support in the affected districts and continuing to recovery program in the affected communities through a three-and a half year recovery and reconstruction programme completing it in September 2019.

The end-line evaluation was conducted in order to assess, ascertain and document NERP's results, constraints and learning. The evaluation has made an independent and objective assessment of the investments and results made in NERP and also to contribute towards generating knowledge for deeper understanding of the operations of a complex humanitarian response for future. This document is a part of end-line evaluation documents which reports the finding of the households' tablet survey.

Household tablet survey was conducted in 524 households of 8 previous VDCs of four district (Dolakha, Sindhupalchowk, Kavre and Sindhuli). The household survey was collected using

ODK collect application in the tablets. The collected data was analysed using excel for getting the desired result. Similarly, qualitative data were collected through FGD and KII in the communities and schools which are presented in the main report of this end line evaluation.

The household survey was conducted in 524 houses of which 52% respondent are male and 48% are female representing all major ethnic groups of Nepal. The major findings of the survey on each of the sectors are stated below.

Shelter: The earthquake damaged 96% of households surveyed in the projects areas and 98% were forced to stay in temporary shelter of tarpaulin and CGI sheet. Of the damaged house, reconstruction is already completed in 99% households. Only 6% of houses were displaced from their original location but are within the same municipalities. Caritas Nepal provided support to 96% of the surveyed HHs in the form of shelter support ranging from Tarpaulin, CGI sheet to cash grant and technical support for house construction. The NPR 3,00,000 cash grant was provided by Caritas Nepal as per norms of Government of Nepal along with transportation support of either NPR 50,000 to 60% surveyed households and NPR 5,000 to 33% households.

Similarly, 92% of the surveyed households received technical support for construction of house from Caritas Nepal. Of the 92 % households, 45% households reported visit of a technical person for monitoring and supervision of house for more than 6 times, while 43% households reported 4-5 times followed by 12 % households reported 2-3 times. The mason training, orientation and shelter meeting was seen more effective as 90% of the households used for reconstruction of house and 14% responded as working as mason in reconstruction after orientation/training. While 10% were involved as labour exchange for reconstruction of house in neighbourhood.

Stone and woods were the most common local material used in all three districts as about 90% of house used wood and stone for reconstruction of house. The stone and wood were also reused from the old damaged houses. Sand, aggregate and mud were also used for reconstruction of house. The survey shows that 96% of households are satisfied with the design of new house and 97% households feels their new house are safe due to follow up of proper construction practice. The time for material transportation for 68% houses was more than one hour of which 18% houses have material transportation time higher than 3 hours from the nearest market.

Although the fund supported as per government norms was not sufficient for 89% of households they have managed from different other source, labour exchange with neighbours and loans.

WASH: The service level of access to water has improved as now 87% of the households surveyed have access to either public tap stands or individual household taps. There is substantial change with people accessing safe water source and dependency of people on open spring water has decreased from 27% to 7%, well water from 10% to 2 % and of river from 6% to nil. Now, 97% of households have water fetching time of less than 15 minutes, while 92% has less than 5 minutes of water fetching time. Similarly, 96% of households have water queuing time less than 5 minutes. The survey also shows that 90% of households have adequate availability of water for HH uses of which 77% have additional water for other use like kitchen gardening. There is also remarkable increase in household water consumption. On average 92% of households are happy with the water supplied to them.

For the operation and maintenance of the water supply system, only 49% of the surveyed households collect monthly tariff as Cash collection and 59% households contribute in operation and maintenance as labor contribution while 21% of surveyed households responded there is no provision of tariff collection neither in cash nor in labour contribution. Cash tariff collection seems more effective in Kavrepalanchowk district as 85% households have cash tariff collection system while the labour contribution seems more effective in Dolakha with 71%.

The community seems to have very good knowledge on HH water purification, hand washing and personal hygiene. Similarly, there is very good practice of hand washing with soap on critical times as 98% practice hand washing before taking meals, 97% after using the latrine, 97% after working in the field and 77% before cooking food. Hygiene promotion session and monthly meeting was found most effective medium for promotion as 71% households perceived through this followed by 51% from radio program and 41% from FCHVs. The latrine coverage is in 99 % households and remaining 1 % households also use their neighbour's latrine.

Livelihood: Now 79.58 % of households have monthly income more than NPR 10,000 as 95.2% of the households have received agriculture or livestock trainings and are selling their produce while the baseline survey shows that 80% households average income was below NPR 5,000. The survey shows that 78% of the household reported improvement of livelihood practice as a result of training provided to them. The findings show that 41.6% of households reported increase in livestock income and 39.7% of households reported increase in agriculture income through training and grant support. Now 79% of the households sell their agricultural and livestock products and 78.3 % of the products are sold to villagers or retailer/ collection centre within the village.

Similarly, 96.37% of households have access to either co-operative, banks or microfinance and 89.5% have monthly saving ranging from NPR 100 to more than NPR 20,000. Now the people's food security seems very good as 81.3% households feel secure on food. And the food consumption analysis shows that, 81.3% households are in acceptable food consumption state as they are consuming protein, carbohydrate and vitamin rich foods.

DRR: DRR program was implemented in communities as mainstreaming program embedded with other WASH, Livelihood, Shelter and other infrastructure program. Landslide protection work was carried out in roads, water supply system and other prone areas. Similarly, different vaccination program was conducted in different place to prevent livestock and communities from different epidemics. In Bigu-2 (Orang) stray dogs were vaccinated against Rabies, as a boy died of rabies as he was bitten by stray dog.

Protection: Out of the total surveyed households, the households with special needs such as single women, physical disability, psychosocial cases, pregnancy and others were included. The major identified households with special needs—with single women (12%), followed by physical disability (9%). The identified special need beneficiaries obtained support such as referral for psychosocial counseling, support to get disability card and support for transportation.

The most commonly used complaint/feedback registration mechanism (by about 35% of the HHs) among the surveyed households was oral communication with CN staff during group meetings. The second mostly mentioned mechanism was suggestion box (by about 15% of the HHs). On the contrary, the least used mechanism was toll free number (by about 3% of the HHs) and complaints through Caritas Nepal formed committees. Out of surveyed households who had told that they were acquainted with feedback/complaint registration mechanism, only 29% of them registered any sort of complaints or feedbacks. The majority of the respondents who had registered the feedback were from Dolakha with 10% and least 5% was from Sindhuli. In comparison between the households who had registered feedback and who obtained response, Dolakha district has the highest response rate with 90% of the registered complaints responded whereas least in Kavrepalanchowk with 71% response rate of the complaints registered.

The holistic program approach of Caritas Nepal seems to be very effective in communities. The integrated support for households in improving access to motor-road for material transportation, financial & technical support in reconstruction of houses with improving access to drinking water & latrine in selected areas followed by livelihood training & grant support played a vital role in overall uplifting in the living condition of the people in communities.



## Educational infrastructure support to community schools

Seven school buildings have been constructed in seven community school locations and it has benefitted more than 1200 school going children. The photos of newly built school buildings are presented below.



Shree Gyanodayo Basic School, Hariharpurgadhi, Sindhuli.



Shree Balkanya Basic School during costruction, Baseshore, Sindhuli.



Shree Devlingeshore Secondary School during costruction, Orang, Dolkha.





Shree Kalika Basic School, Chandenimandan,Kavre.





Shree Sarada Basic School during costruction, Bulung, Dolkha.



Shree Devlingeshore Secondary School during costruction, Orang, Dolkha.



## Community buildings built in eleven locations

The community buildings have been constructed on the land provided by the respective local governments. The community buildings have been fully constructed and handed over to the communities. The communities will use the buildings as community office, meeting place and training venue



Community building at Bulung, Dolakha



Community building at Orang, Dolakha

## Orang Community Celebrates completion of house construction with support of Caritas Nepal (April, 2018)



aritas Nepal was able to mobilize villagers of Orang to complete house construction following earthquake resistant technologies in a timely manner. It was the first village out of more than six hundred villages to fully construct houses. 560 houses were constructed by households who were in the NRA list with technical guidance, social mobilization support and financial grant support of Caritas Nepal. The pictures show the ceremony held by joyful local stakeholders to mark notable milestone. State and local leaders, government officials, villagers and Caritas Nepal personnel were present at the occasion. Given the symbolic importance of the event it was widely covered by the national media.







Honorable Mr. Ananada P. Pokharel (Minister for Culture, Tourism and Civil Aviation), Caritas International President Cardinal Luis Antonio Tagle, Nuncio Salvatore Pennacchio, Bishop Paul Simick, Caritas Nepal's Executive Members and staff, representative of Caritas Organizations and Missions, and invited dignitaries at conference held to report on achievements of earthquake relief work and to present the plan for recovery of Caritas Nepal (Dhulikhel, Nepal–2016)



It is a non-profit organization solely devoted to the service of the poor, most disadvantaged and marginalized people irrespective of, caste, creed, ethnicity, and nationality.

Registered as a Non-Governmental Organization under Nepal's District Administration Office, Lalitpur, with the registration no: 85/047/48, and in accordance with the Society Registration Act 2034 B.S, Caritas is the social service arm of the Catholic Church in Nepal and member of the Caritas Internationalis confederation and Caritas Asia.

It is also affiliated with Nepal's Social Welfare Council (SWC) under registration no: 248-356.

Caritas Nepal applies animation approach and sector-specific participatory approaches to empower the poor, marginalized, and disadvantaged class of people to reduce poverty, hunger, secure humanitarian assistance in the situation of man-made and natural emergency and therefore to realize social justice and peace.

With the vision of creating peaceful, equitable and just society, where there is solidarity among people and respect for human dignity, Caritas Nepal works on the sectors of social justice and community development, disaster risk management, sustainable livelihoods, migrants, refugee and anti-trafficking, emergency and recovery supports as well as advocacy on social concerns.

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New earthquake resistant houses built with the support of Caritas Nepal at Bigu, Dolakha.







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