

NEPAL EARTHQUAKE 2015



REVIVING SANITATION CAMPAIGN

GLOBAL SANITATION FUND LESSONS



UN HABITAT
FOR A BETTER URBAN FUTURE



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COLLABORATIVE COUNCIL

NEPAL EARTHQUAKE 2015

REVIVING SANITATION CAMPAIGN

Reviving Sanitation Campaign after 25th April 2015 Earthquake: Global Sanitation Fund Lessons

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Foreword

Over a year has passed since the devastating April 2015 earthquake but thousands of people are still struggling to resettle in terms of fear, trauma, water and sanitation, shelter, livelihood and dreaming towards normal life. The year 2015 has been very difficult for Nepal coping with destructions of earthquake and making efforts for reaching the affected and planning for reconstruction and recovery. The damage recorded in the WASH sector due to the earthquake is alarming. Out of a total 11,288 water supply systems in the 14 most affected districts 1,570 sustained major damages, 3,663 were partially damaged and approximately 220,000 toilets were partially or totally destroyed.

The Global Sanitation Fund (GSF) Programme is also not spared by this devastating earthquake. Out of 17 GSF working districts, 5 districts were severely hit by the shake. The setback of the progress claimed by the programme is alarming. Two GSF working districts, Dolakha and Sindhupalchowk reaching 99% and 98% sanitation coverage respectively before the earthquake, encountered a steep downfall of sanitation coverage within few seconds of shake into 20% and 5% coverage respectively. Fortunately, the toilets built in minds of people were still intact though the physical toilets in the ground were damaged. Thus, due to this gained awareness level and improved behavior change no open feaces were detected and no significant diarrheal outbreaks encountered after this disaster which is normally anticipated.

GSF programme's sole effort after the earthquake focused on revival of the sanitation campaign in these districts. This documents tries to capture the lessons that GSF programme went through in last 12 months after the disaster in this revival effort. We are looking forward for accelerated transformation in the revival of the campaign so that the national sanitation target is not shaken by the residues of this disaster in the sector.

Sudha Shrestha
Act Chief Technical Advisor/ GSF Programme Manager
UN-Habitat



A 7.8 magnitude earthquake struck Nepal on 25 April 2015 with more than 8,000 human casualties



CONTEXT

consecutive nights, in spite of the falling rain. According to initial estimations and based on the latest earthquake intensity mapping, over 8 million people are affected in 39 of Nepal's 75 districts. Over 2 million people live in the 14 most critically hit districts. According to the government the earthquake caused more than 8,000 deaths. The Central and Western Region, including the Kathmandu Valley districts, are the worst affected with the full impact of the earthquake in mountainous and hilly districts (in bold GSF supported districts): Dhading,

Gorkha, **Rasuwa**, **Sindhupalchowk**, Kavre, **Nuwakot**, **Dolakha**, Kathmandu, Lalitpur, **Bhaktapur** and Ramechhap. Secondary data analysis and earthquake intensity mapping suggest that over 600,000 houses have been damaged and that 2.8 million people have been displaced.

A 7.8 magnitude earthquake struck Nepal on 25 April at 11:56 am local time creating large scale damage and many casualties. The epicenter was located 81 km northwest of the Nepali capital Kathmandu in Gorkha District at a depth of 15 km. The earthquake also caused a number of landslides and avalanches. Strong aftershocks, including a 6.7 magnitude quake on 26 April and 7.3 magnitude on 12th May 2015, continue to threaten the lives of thousands of people and to further damage of buildings and infrastructure. Many people are afraid and slept outside for several

Among the 17 GSF supported districts, 5 are significantly affected: Sindhupalchowk, Dolakha and Bhaktapur as well as Rasuwa and Nuwakot. The tables in following pages (10, 24 & 25) present some preliminary information based on rapid assessments of the 3 most heavily affected districts supported by GSF with pre- and post-earthquake coverage information.



GSF RESPONSE IN DISASTER



The key support committed from GSF is the allocation of USD 1 Million within 48 hours of the disaster to restore the sanitation status of 3 affected GSF districts (Bhaktapur, Dolakha and Sindhupalchowk). This is solely planned not for WASH humanitarian support but to capacitate and backstop WASH Clusters at the district level and for long term revival plans. Besides, UN-Habitat also secured USD 300,000 plus from Central Emergency Relief Fund (CEFR) through UNICEF for immediate WASH relief support to these most affected three districts and Kathmandu Valley. Though, GSF programme was prepared for such devastating disaster of the nation, the programme responded quite well during this mega crisis. The major strength demonstrated by GSF programme is the national and district level coordination and backstopping. Some of the key coordination actions are:

- Strong Coordination at WASH clusters (National and Districts)
 - Focal coordinating agency for Bhaktapur, Sindhupalchowk, Dolakha and Nuwakot
 - WASH cluster Co-lead in district WASH Clusters

This is basically the technical backstopping at national and district level WASH Clusters for Information management, coordination for WASH humanitarian support in all VDCs of the districts for reaching the unreached, and secretariat role for WASH Cluster operations, mapping the support agencies in the districts and informing the new agencies interested to fill the gaps in district level.

- Initial assessment immediately after the disaster
- Mobilization of volunteers for detailed assessment of WASH as per checklist provided by WASH Cluster
- District level phase wise District WASH plan (Short term and long term)
- Strengthening district WASH relief and response through WASH technical backstopping and coordination
- Intervention ongoing with D-WASH-CCs and partners on planning for long term restoring sanitation status and strategic transition of WASH Cluster into D-WASH-CCs' regular WASH development activities



QUICK INITIAL ASSESSMENT FINDINGS

Immediately after the mega earthquake the assessment of the sanitation coverage was made on the basis of damage reported by respective Districts' District Disaster Response Committee (DDRC). The estimated sanitation coverage as per damage reported by district (First week after EQ): GSF working Districts



First week

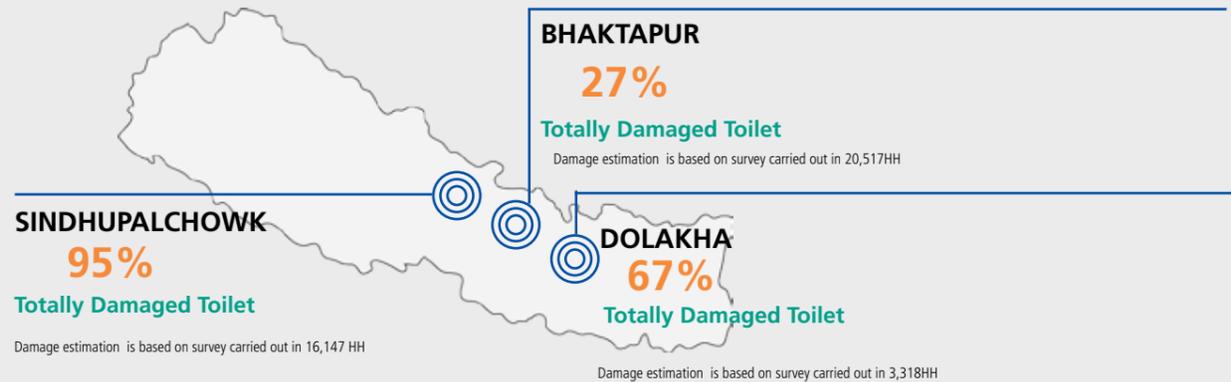
Districts	% Sanitation Coverage before earthquake	% of Damage reported	Sanitation Coverage after earthquake
Sindhupalchowk	98%	99%	15%
Dolakha	99%	100%	20%
Bhaktapur	100%	75%	50%
Nuwakot	59%	80%	20%
Rasuwa	56%	90%	15%

After the first week of earthquake, the initial VDC wise assessment was made through mobilizing GSF mobilizers based on the government WASH checklist with some additions to it to incorporate the status of toilets. The finding of this assessment as of third week after the earthquake is:

Fourth Week

Districts	Assessment coverage	Totally Damaged toilets	Partially damaged Toilets	Not Damaged Toilets
Bhaktapur	58,711 HHs	18,456 (31%)	11,155 (19%)	29,355 (50%)
Sindhupalchowk	34,468 HHs	24,894 (72%)	6,200 (18%)	3,374 (10%)
Dolakha	34,064 HHs	15,328 (45%)	12,944 (38%)	5,790 (17%)

After October 2015

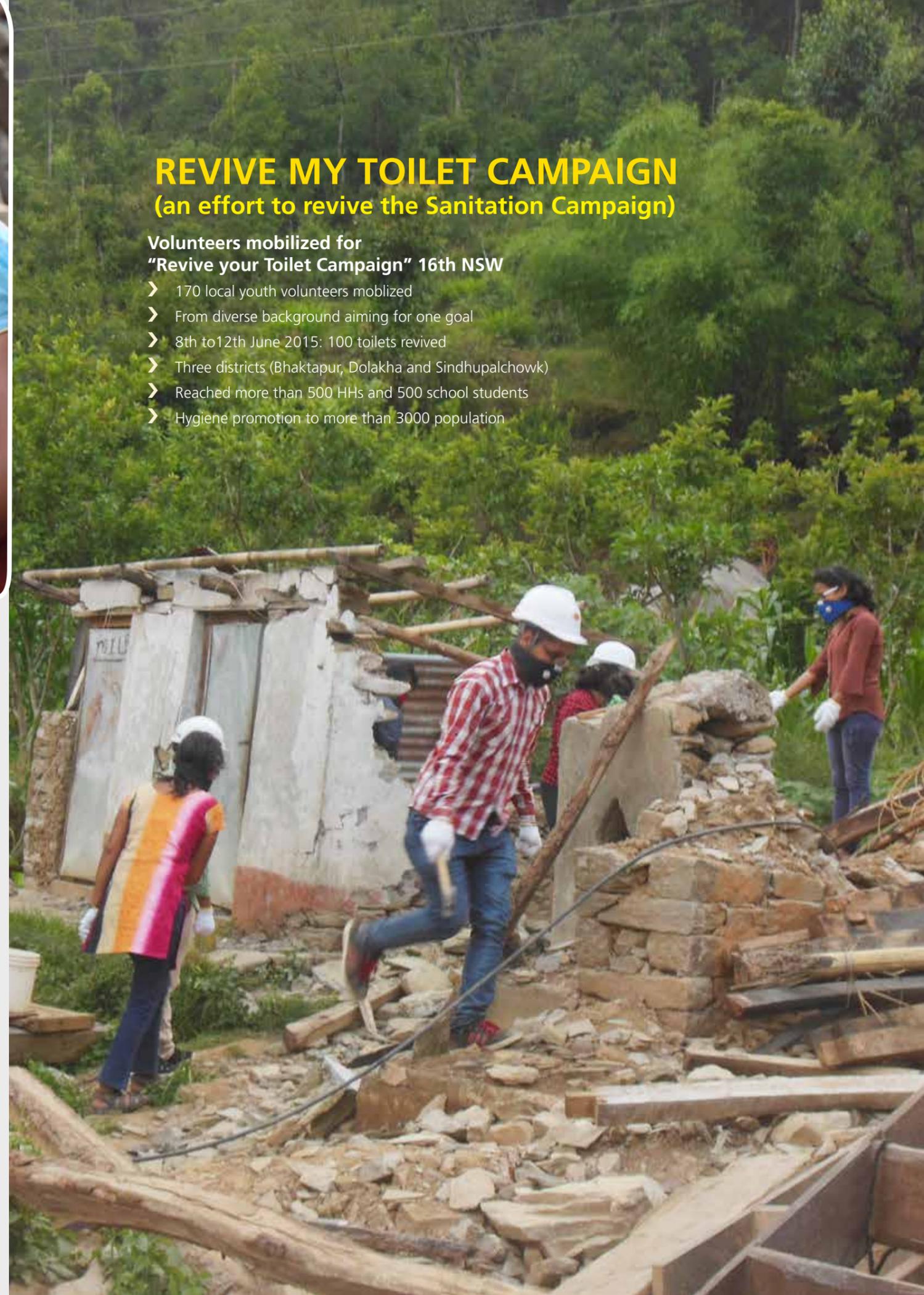


However, these figures fluctuated significantly due to difficulties in accessing many areas uncertainties while aftershocks continued to hit the affected areas.. GSF planned and facilitated the district WASH clusters, Water supply and Sanitation District Office (WSSDO) and D-WASH-CCs for the detailed assessment.

REVIVE MY TOILET CAMPAIGN (an effort to revive the Sanitation Campaign)

Volunteers mobilized for "Revive your Toilet Campaign" 16th NSW

- > 170 local youth volunteers mobilized
- > From diverse background aiming for one goal
- > 8th to 12th June 2015: 100 toilets revived
- > Three districts (Bhaktapur, Dolakha and Sindhupalchowk)
- > Reached more than 500 HHs and 500 school students
- > Hygiene promotion to more than 3000 population



GSF INITIAL STRATEGIES IMMEDIATELY AFTER EARTHQUAKE TO RESTORE THE SANITATION STATUS



During this disaster relief response period the regular development perspective is diluted within the priority of life saving effort from numerous humanitarian agencies. Thus, GSF concept for long term support in affected districts where programme is present and planning to continue required strategizing in this context. The initial strategies of the programme immediately after the earthquake were:

- Numbers of humanitarian agencies are supporting for immediate response, so GSF is to plan for long run commitment. GSF waited for 6 months till December 2015 to analyze the scenario of humanitarian support and the status left behind.
- GSF planned to allocated re-programmed budget of USD 1 Million tentatively segregated as
 - USD 200,000 : Bhaktapur
 - USD 500,000 : Sindhupalchowk
 - USD 300,000: Dolakha
- As for the approach in this given context, the first priority is to extend partnership with existing partner but as they are stretched with this disaster opportunities, the programme is re-thinking on managing and planning the support to the district
- Restore the ODF Status in two additional new districts (Rasuwa and Nuwakot) as well since the programme has already committed for it on regular scenario. However, the planning required to wait till monsoon ends (especially Rasuwa to be waited for the scenario after monsoon which may totally change due to landslides) where the scenario may change totally due to subsequent possible landslides and re-locations of the affected communities.

Though these initial strategies changed with the given context of the time and scenario of the districts eventually.

**Toilet reconstruction is
totally in our hands!**



GSF PROGRAMME'S KEY ENGAGEMENT

Coordination - As there were many new agencies in the districts after the earthquake, GSF district coordinators took on the responsibility for supporting the Water Supply and Sanitation District Offices (WSSDOs) in Bhaktapur, Dolakha, Nuwakot and Sindhupalchowk districts in coordinating the District level WASH clusters, while the central team was an active member of the National WASH cluster for policy guidance and technical backstopping. GSF supported in managing information, preparing district level plans and monitoring progress of emergency response efforts.

Assessment - After the first week of earthquake, GSF conducted an initial VDC wise assessment, which found that damage to toilets was most extensive in Sindhupalchowk district, where prior to the earthquake about 99% of the households had toilets. However, the figures kept changing as the areas continued to get hit by aftershocks and landslides. Furthermore, some remote areas were not accessible and many people had moved out of their homes and villages to safer locations. Therefore, GSF continued to support the District WASH Clusters in regularly updating information.

Emergency WASH – GSF also reprogrammed USD 1 million from its own resources and mobilized USD 300,000 from CERF through UNICEF to assist with emergency WASH needs and to strengthen the WASH Clusters at district level. It also mobilized volunteers who supported with hygiene education and revival of toilets. As a result of GSF and many other partners, led by the government, the earthquake affected areas did not suffer from epidemics even during the monsoon season which followed the earthquake.





**4,515 Hygiene Kits distributed
to avoid diarrhoeal outbreak**

CHALLENGES



BROADER SECTOR CHALLENGES

Some of the core broader level challenges are:

- Process of transition from relief support and resumption of regular development activities is not clear.
- The amount of subsidy support for sanitation facilities, even for households that do not own sanitation facility yet before the earthquake, and the process through which it is to be given is not clear.
- Reported damage is 220,000 toilets in 14 affected districts. At the rate of NRs. 5000 (USD50) per toilet, above NRs 1.1 billion is required. It is not clear where this fund can be arranged from.
- As several communities, eg. 60 communities of 13 VDCs of Sindhupalchowk, need to be relocated, sanitation facilities need to go together with the relocation plans.
- As some camp settings may continue to provide shelter for extended periods, sanitation issues beyond emergency sanitation need to be addressed,
- With destruction or drying up of many water sources, water for sanitation and hygiene is a concern.

To streamline and address the policy level confusion, National Sanitation and Hygiene Coordination Committee (NSHCC) had issued guidelines to maintain the principles of master plan without violating its norms. The three areas that the guideline addressed were i. Water supply and water quality; ii. Sanitation and iii. Hygiene. The basic guidance had been proposed by respective thematic groups under National WASH cluster and endorsed by NSHCC. The basic norms maintained is the segregated defined support for toilet facilities to the bottom segment of affected groups who cannot afford at this stage where everything is lost due to disaster. The endorsed guideline was disseminated to district level by second week of July 2015. However, the enforcement of the guidelines was a challenge with many uncertainties and different support agencies in the field.



INTERNAL CHALLENGES (IMMEDIATELY AFTER EQ)

There were various internal challenges encountered that affected the efficiency and delivery of the programme. Some of the key internal challenges are:

- Existing partners are very much stretched with "emergency responsibilities" from various support agencies
- Partners' human resources also had been transitioning with many hopping to better positions and monetary benefits
- Human resources of partners themselves were affected by the disaster and took time to resume the regular commitment and pace
- Delay in tracking and mobilizing field level mobilizers by partners due to added emergency load
- All support agencies mostly provided material support at this stage and low priority was given to software component
- WASH Cluster at districts had no clear indication on how long and what will be the supporting modality through the in relief response period and beyond
- The support modality varies from agency to agency which raised confusion at district level and also to our programme partners.





**MORE THAN 5000 TOILETS
REVIVED IN A MONTH**



RELIEF TO HAVE TOILET - SARU KHATRI



CERF was executed by UN-Habitat/ GSF after the April 25 earthquake with the aim to provide support for revival/ reconstruction of HH level toilets after earthquake, and support the vulnerable families for preparation of seasonal outbreaks

It was implemented in Dolakha, Sindhupalchowk, Nuwakot and Bhaktapur Districts. CERF had planned to reach to 4500 HHs for revival of toilets; and reached to 5219 HHs finally. Out of it, support has been made to 2126 HHs in Dolakha, 750 in Nuwakot, 1792 in Sindhupalchowk and 751 in Bhaktapur.

Similarly, hygiene kit was distributed to 4,515 HHs; and more than 6000 HHs have been benefited through technical education support. Due focus was given on technological option of HHs level toilets, monsoon preparedness, personal and household level sanitation, and liquid and solid waste management in the technical education.

Altogether, investment of US\$ 224,412 has been made by UN Habitat and CERF for revival and reconstruction work.



Bhaktapur, Saru khatri, inhabitant of Changunarayan municipality has been bed ridden for a year due to tumor. On April 25, 2015 11:58 AM the earth shook so harshly that the 52 years old was forced to witness her house collapse to the ground along with their toilet. They took refuge at nearby hospital and later they were shifted to the makeshift shelter.

But the bigger problem was the toilet. "Our mother can't go far, so we used to make her excrete on a plate, and dig a hole at the field and bury it there", her daughter shared as she was lying on bed with a heart so heavy it brought tears to her eyes. As the volunteers of SOYA proposed to help build a toilet for them she took a long breath of relief. Help came instantly, Ward office provided pan and pipe, WSSDO helped with volunteers and CERF took care of financial issue. With this help and hard work from the family members she was able to become the first to have a toilet in the ward. Now, she uses the toilet with help from her daughter and she has no more feeling of being a burden to the family.

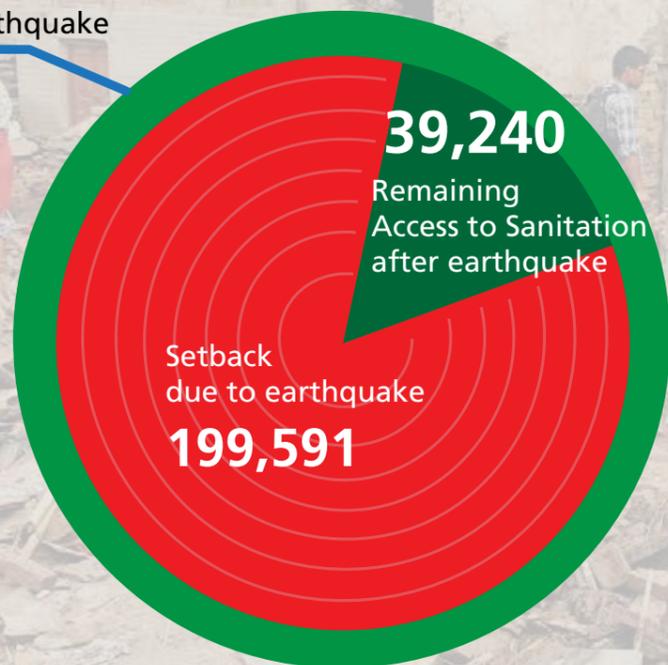
"The health and sanitation material support from the program has helped us to maintain family health and keep the toilet clean", thanked Shova, daughter of Saru Khatri.

CURRENT SETBACK CALCULATION OF GSF PROGRESS

238,831

GSF Achievements
Access to Sanitation
before earthquake

**ACCESS TO SANITATION
(POPULATION) SETBACK
DUE TO EARTHQUAKE IN
GSF SUPPORTED VDC OF
BHAKTAPUR DOLAKHA AND
SINDHUPALCHOWK**

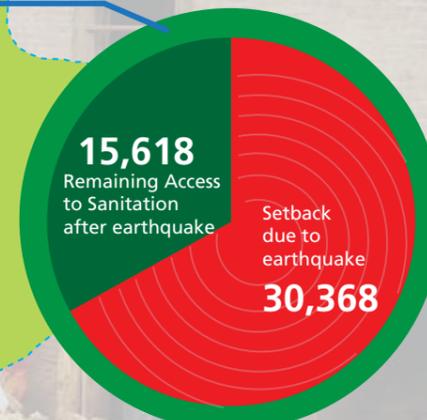


DISTRICT WISE SETBACK:

45,325

GSF Achievements
Access to Sanitation
before earthquake

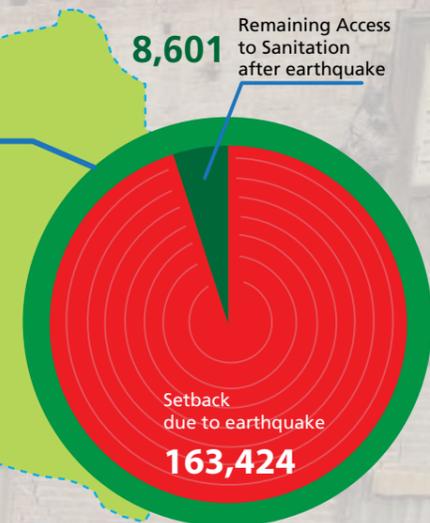
DOLAKHA



172,025

GSF Achievements
Access to Sanitation
before earthquake

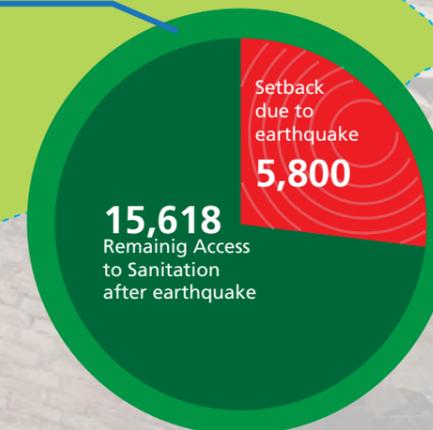
SINDHUPALCHOWK



21,418

GSF Achievements
Access to Sanitation
before earthquake

BHAKTAPUR



S.N	Districts	People living in GSF target area	GSF Baseline: people with access to sanitation	% Baseline: sanitation coverage	GSF Achievements: people with access to sanitation : 2015 before EQ	Damage estimation %: after EQ	Setback (people with access to sanitation before but now without access)within GSF progress	Approximate HHs toilet set back within GSF progress (no. of toilets)	Setback on GSF baseline (people with access to sanitation)	Setback in baseline (HHs with toilet)	Total setback (people with access to sanitation before EQ now without access)	Total setback (HHs toilet)
1	Bhaktapur	94,836	73,505	78	21,481	27	5,800	1,160	19,846	3,969	25,646	5,129
2	Dolakha	129,144	50,171	39	45,325	67	30,368	6,074	33,614	6,723	63,982	12,796
3	Sindhupalchowk	258,039	89,694	35	172,025	95	163,424	32,685	85,210	17,042	248,633	49,727
TOTAL Set Back							199,591	39,918	138,671	27,734	338,262	67,652

KEY LESSONS

Coordination is key:

After a disaster, there is usually a lot of confusion and uncertainties in the field, while many humanitarian agencies who are not familiar with ground conditions fly in to offer their help. Effective coordination is essential during such as time. The coordination effort should be led by local government officials but partner agencies with knowledge about the local conditions as well as WASH in emergencies can provide much needed support.

Behaviour change protected from major diarrheal outbreak:

The disaster anticipated major diarrheal outbreak as the earthquake occurred at the verge of monsoon. But the high level of behavior change adapted by the population protected them from major outbreak even in this crisis period.

People first revived their damaged toilet:

The toilet built in people's mind stayed intact though the physical toilet damaged by the disaster. So the first revival they started was with toilet to utilize in the crisis.

Continued WASH humanitarian support:

The Initial understanding of the WASH Cluster led by government was that the emergency humanitarian support will be till December 2015. However, even after 15 months from the disaster the support is still there. The regular development are campaign affected and people are staying back with expectation of the support for shelter and toilet. Thus, GSF programme also faced difficulty in continuing the campaign with support ongoing where the awareness level had already been built to certain level. Thus, these districts did not require further continuity of re-educating behavior change though the 100% coverage may take some time.

ODF campaign continued:

The intervention planned for three most affected districts took time as the current mobile situation of humanitarian relief support is still bringing the changed scenario for the restoration of the sanitation status. However, the ODF revival campaign had not been totally defunct as ODF declarations are ongoing and targeted to meet the district ODF within the national sanitation target 2017. In the 15 months following the earthquake, ODF has been declared in 6 VDCs and some wards of municipality in Dolakha; 8 VDCs in Sindhupalchowk; 10 VDCs in Nuwakot; and one VDC in Rasuwa and the trend is ongoing.

Need for strengthening the institutional capacity in emergency:

The coordination and technical backstopping immediately after the disaster indicated the need of institutional strengthening of the key WASH institutions at district level for emergency preparedness in various aspects like assessment, coordination, monitoring, and information management. Besides, clear communication and institutional backstopping from the central WASH Cluster and government authorities is also vital.





We do not have influence over natural disasters but preventing outbreaks is totally in our hands!



Survived earthquake with physical damages, but still strong enough to rebuild better!



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