



Do Toilet Subsidies Result in Toilets?

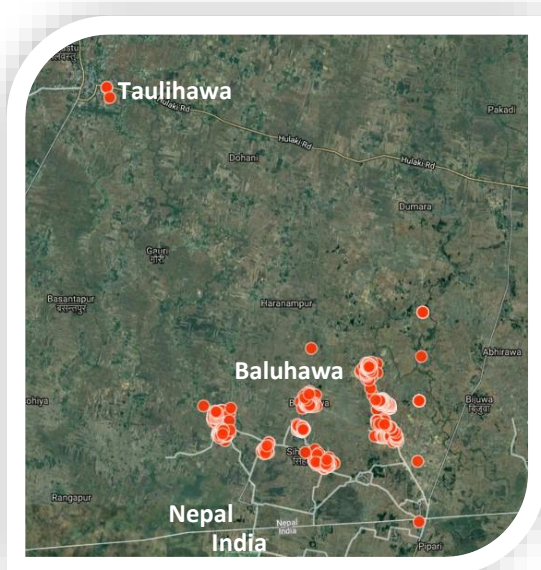
Case 764 households of Baluhawa VDC, Kapilvastu District

RWSSP-WN BRIEF 11-2016

WHAT DID WE STUDY?

This survey covered all 764 households in Baluhawa VDC, Kapilvastu district. The purpose of the study was two-fold: to verify whether the VDC was truly ready to be declared Open Defecation Free (ODF) and to establish which households received subsidy from the VDC for the toilet construction, and if they did, what exactly was it and did it result in constructing and using the toilet? Since one of the main motivations was to establish what exactly had been given as subsidies, it was necessary to cover all households that were found within this Southern Tarai VDC, located on the Indian border.

The entire survey was carried out September 21-26, 2016, using smart phones and KoBo Toolbox application that allowed mapping the results. The spatial data will be important for the future follow up, and serves as a base line for Total Sanitation when Baluhawa finally declares 'ODF' and moves towards the next step. Altogether, 59% of the respondents were head of family.



Baluhawa VDC, Kapilvastu district

This Brief raises the following questions:

- Have the subsidies resulted in constructing household latrines?
- Have the subsidies resulted in household latrines that are completed and used?
- Are they used by all family members?
- Is there any difference in between those who received the subsidy and those who did not?
- What kind of differences are there in between the different clusters and in between the different ethnic/social groups?

This study was coordinated by Ms. Kalpana Dishwa, RWSSP-WN II, and analysed and reported by Sanna-Leena Rautanen. The complete report is available upon request from RWSSP-WN II.

Date: 25.11.2016

WHAT IS THE OVERALL SITUATION IN BALUHAWA VDC?

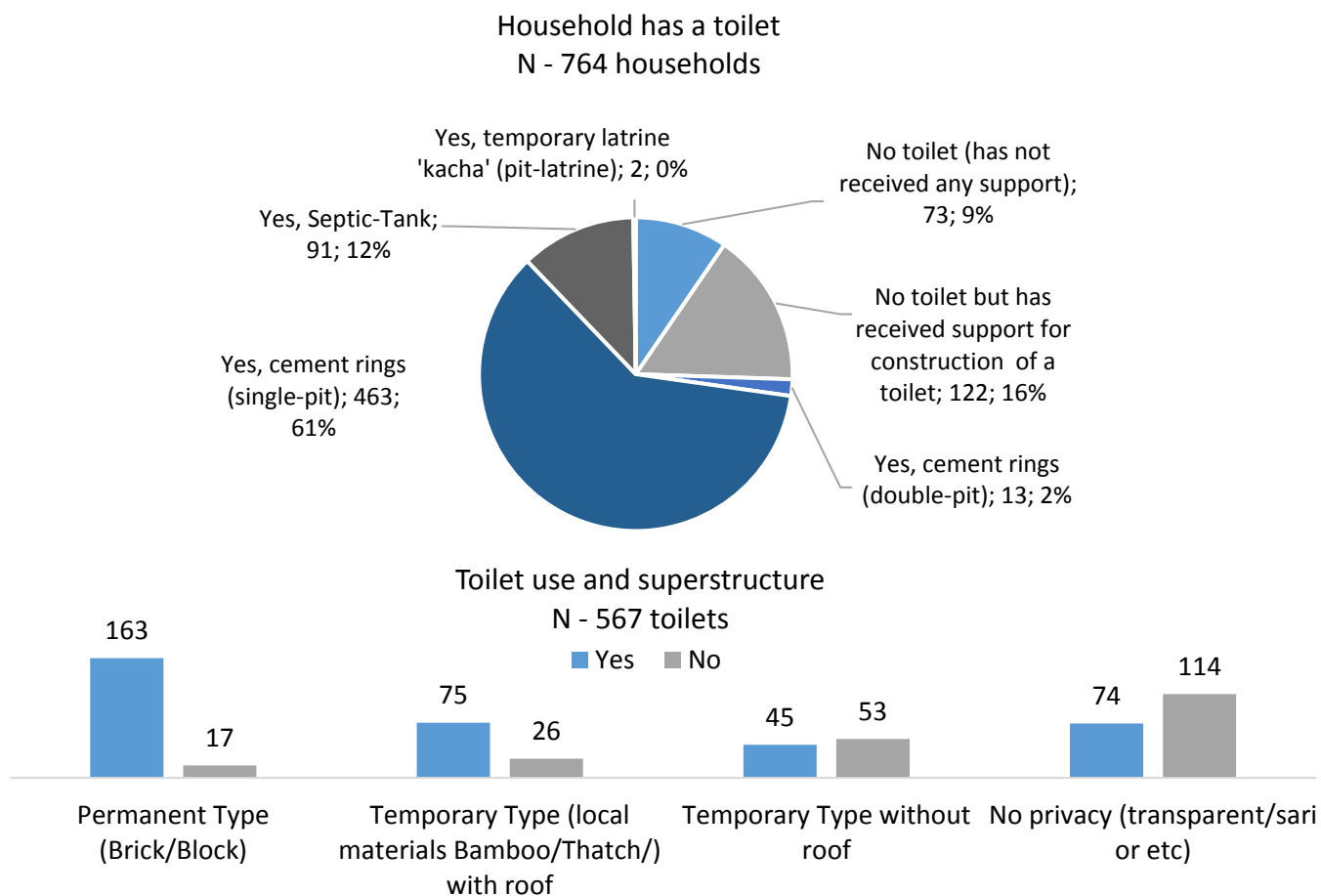
Out of total 764 households, 577 (76%) had received a subsidy for the household toilet construction. Many households had received several types of subsidies. Out of those who received a subsidy (N=577), 93% received pan and pipe, 90% received ring/s for the pit, 36% received cement and 6% received cash.

Is Baluhawa VDC ready to declare 'ODF'? It is not as there are still 195 households (26%) without any toilet. 326 (91%) households report as having a toilet that is regularly used by all family members while 33 (9%) report that the toilet is used but not by all family members. Children under 5 years was reported to be the group not using the toilet in 63 % of these cases. No significant difference was found in the behaviour of men and women.

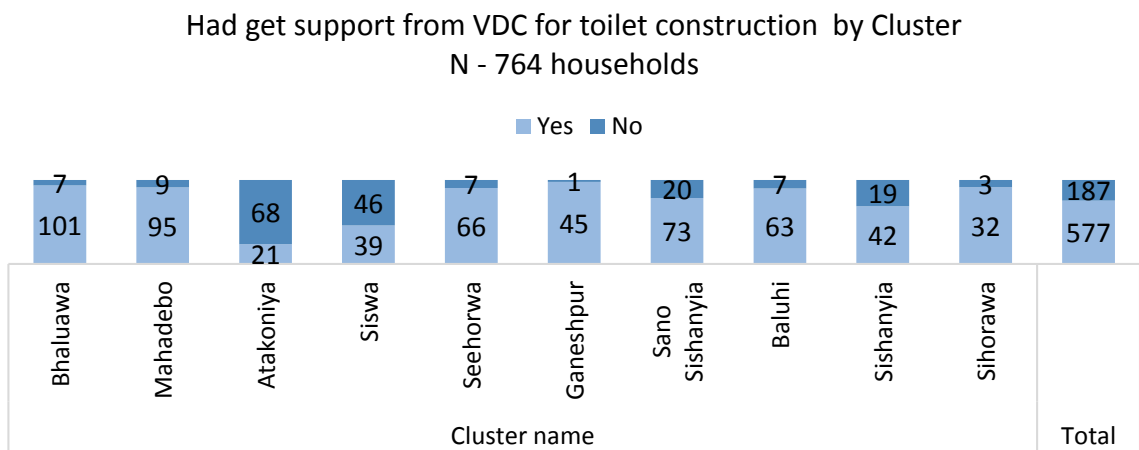
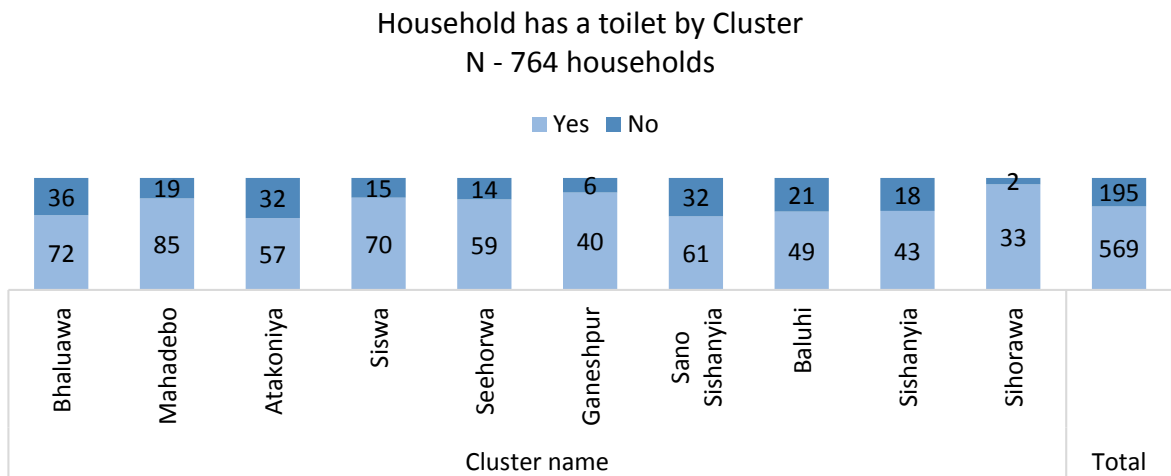
Did subsidies help in latrine construction? No, they did not help. There were 122 (16%) households without a toilet even if the household had received subsidies for it.

Is the superstructure completed? The toilet superstructure was observed in 567 households. Even when the subsidies are provided, the superstructure typically remains the household's own contribution. This study found that 180 (32%) of the observed 567 toilets had a permanent superstructure, and in 101 (18%) cases the toilet was made of temporary materials and had a roof. These cases can be considered as acceptable. In another 98 (17%) the structure was temporary without a roof.

Does the superstructure provide any privacy? In 188 (33%) cases it was stated that there was no privacy as the walls were made of transparent or otherwise see-through materials, such as old saris. Yet, surprisingly, the existence and quality of the superstructure did not correspond strongly with the use of the toilets: 91% of toilets with permanent superstructure, 74% of temporary types with a roof, 46% of temporary types without a roof and most surprisingly, 39% of those without privacy were used! This is somewhat positive finding, better than expected.



ARE THERE CLUSTER-WISE DIFFERENCES? YES, SIGNIFICANTLY:

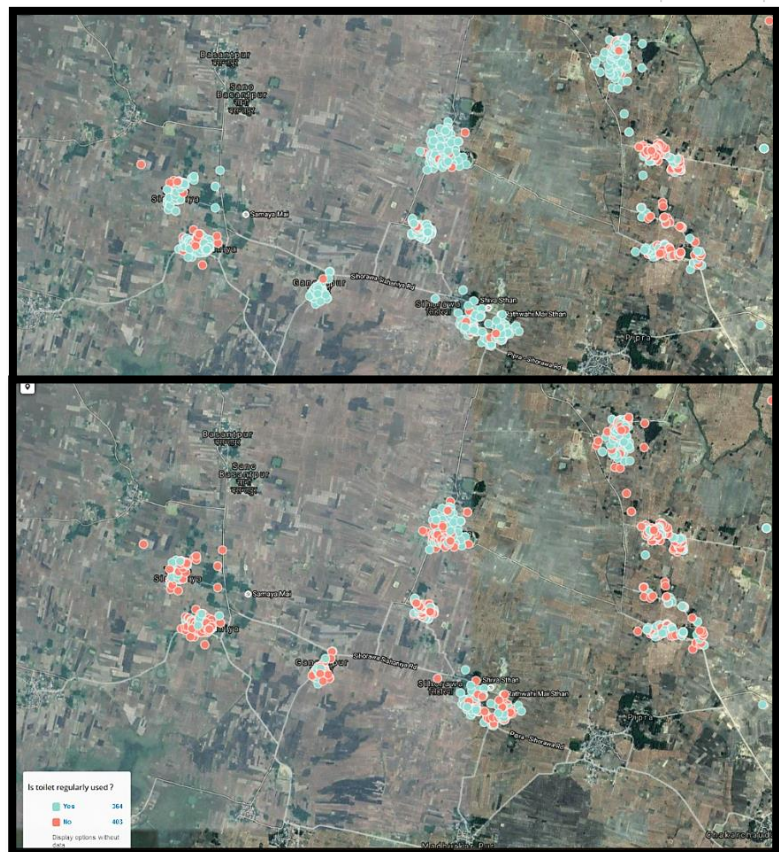


Map overlays:
Getting subsidies,
building toilets?

The two maps show
the same information
as the figures above.

The upper map shows
in green colour the
households that
received subsidy for
toilet construction.

The lower map shows
the same households
and the green colour
indicates the
households in which
toilets are also used.





Map overlays: the cluster-wise dynamics vary. This is also evident in the statistical analysis – the overall VDC result does not describe adequately any individual cluster! In the maps above, the green dots are the 'yes' answers. Practically all households got support for toilet construction but not all are regularly using a toilet!

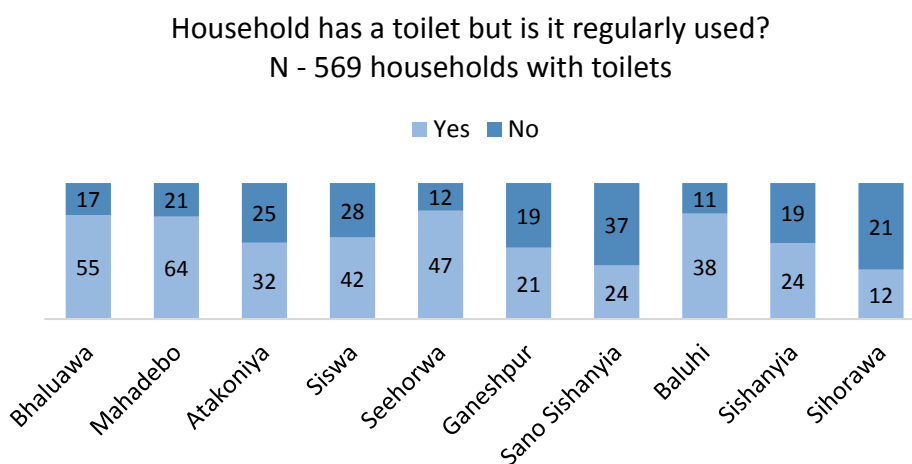
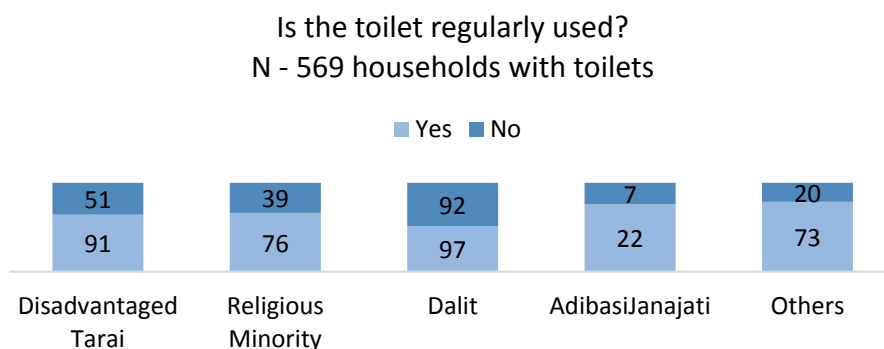
WHAT KIND OF STATISTICAL EVIDENCE WE FOUND?

The asymptotic test was used given that sample was greater than ten. Pearson's Chi-Square Test of Independence was used to explore causal relationships and independence in between the different variables. It tests whether one variable is independent from another one, i.e. whether or not a statistically significant relationship exists between a dependent and an independent variable. In this case the interest was in whether getting subsidies for toilet construction and actually having and using a toilet were independent from each other. The null hypothesis assumes that there is no association between the two variables, i.e. they are independent from each other.

- At VDC-level, for “getting subsidies and constructing a toilet”, the null hypothesis is rejected as the result $\chi^2 = 23.788$, $p < 0.001$ shows that there is a statistically significant association in between getting subsidies and in constructing a toilet. Yet, the association is weak as is shown by the Phi, Cramer’s V and Pearson’s R which are closer to ‘0’ than to ‘1’. The situation changes at the cluster-level where in nine out of ten clusters the null hypothesis is accepted. In these cases, $p > 0.005$ which shows that there is no statistically significant association in between getting subsidies and in constructing a latrine *within a cluster*. The associations are weak as is shown by the Phi, Cramer’s V and Pearson’s R which are closer to ‘0’ than to ‘1’ in all but one cluster. In three clusters the results are negative.
- At VDC-level, for “getting subsidies and using the toilet”, the null hypothesis is accepted as the result $\chi^2 = 1.539$, $p = 0.215$ shows that there is no statistically significant association in between getting subsidies and using the latrine ($p > 0.005$). Also the association is non-existent as shown by the Phi, Cramer’s V and Pearson’s R which at 0.045 are clearly closer to ‘0’ than to ‘1’. At cluster-level in six cases the results are even negative.

DOES CLUSTER OR CASTE/ETHNIC GROUP MATTER?

- For “getting subsidies and constructing a toilet” by ethnic/caste group, the null hypothesis is accepted in all other cases than Disadvantaged Tarai group. In this case $p=0.000$ shows that there is a statistically significant association in between getting subsidies and constructing the latrine. In all the other ethnic/caste groups $p>0.005$. The association as shown by the Phi, Cramer’s V and Pearson’s R is 0.301 at significance level $p<0.001$ for the Disadvantaged Tarai group and 0.445 with $p=0.13$ for the Adibasi/Janajati, while for the other groups the figures are closer to ‘0’ than to ‘1’.
- For “getting subsidies and using the toilet” by ethnic/caste group, the null hypothesis is accepted in all other cases than Disadvantaged Tarai group. In this case $p=0.001$ ($p<0.005$) showing that there is a statistically significant association in between getting subsidies and using the latrine. Yet, also in this case the association is weak as shown by the Phi, Cramer’s V and Pearson’s R which at 0.225 are still closer to ‘0’ than to ‘1’.



WHAT ARE WE CONCLUDING AND RECOMMENDING?

This study confirms the existing understanding that subsidies for toilet construction do not result in toilet construction, completion and use. It also draws attention to the fact that even if there is a toilet, its use is not to be taken for granted, and more to, its use by all family members. Cluster-wise dynamics count, but also ethnic/caste group.

The community of Baluhawa should recognize that household toilet construction, use, regular cleaning and maintenance are their own responsibility and lead to a better quality of life.

Any Total Sanitation efforts need to pay continued attention to the completion and use of the toilets before diverting the attention to too many other (Total Sanitation related) targets.

WHAT IS THE PROBLEM WITH SUBSIDIZING HOUSEHOLD TOILETS?

In the Government of Nepal National Sanitation and Hygiene Master Plan (2011), it is stated that *“The policy also clearly mentions that there should be no subsidy for household level toilets except for the ultra-poor. However, the implementation of the policy remained weak and most of the projects supported by the donors did not comply with the budgetary provisions for sanitation promotion. The subsidy also varied from one agency to another. Even government supported projects have varied subsidy modalities from one project to another. And high subsidy for constructing households toilet has the adverse effect on sanitation promotion”* (p.6).

As a result, many toilets are never completed or used, and those who could construct a toilet from their own resources, do not do it but rather, expect subsidies whether or not they are even needed.



Photo: There are many options for constructing a toilet that is safe and hygienic to use with dignity.

REFERENCES & SUPPORTING DOCUMENTS

Rautanen, Sanna-Leena, Dishwa, Kalpana, and Poudel, Bipin. (2016) Rapid Assessment on 764 Households' Sanitation Subsidies in Baluhawa VDC, Kapilvastu district. Rural Water Supply and Sanitation Project in Western Nepal Phase II (RWSSP-WN) (2015). Baseline Report for RWSSP-WN Phase II. Project Support Unit, FCG International, 45 p. Available upon request from RWSSP-WN II.

Rural Water Supply and Sanitation Project in Western Nepal Phase II (RWSSP-WN) (2016). Sanitation Study Report Part I. RWSSP-WN Phase II Project Support Unit, FCG International, 45 p. Available from www.rwsspwn.org.np

RESULTS INDICATORS FOR RWSSP-WN II



This study relates to the RWSSP-WN II Purpose-level indicators 3 and 4, and Result area 1:

Purpose-level indicator 3: No one practices open defecation (all districts declared ODF)

Purpose-level indicator 4: All ODF districts have developed post-ODF strategy and ensured access to post-ODF support to their VDCs

Result 1 (Component 1): Access to sanitation and hygiene for all achieved and sustained in the project working districts.

- Indicator Result 1.1 # of VDCs declared ODF
- Indicator Result 1.3 # of Wards declared for having achieved total sanitation (wards within which each household complies with at least four out of five main TBC criteria as listed in the National Sanitation and Hygiene Master Plan)

Rural Water Supply and Sanitation Project in Western Nepal Phase II is a bilateral development cooperation project funded by the governments of Nepal and Finland, and implemented through local governments and users' groups under the Department of Local Infrastructure Development and Agricultural Roads (DoLIDAR), Ministry of Federal Affairs and Local Development. RWSSP-WN II works in 14 districts in Western and Mid-Western development regions in Nepal.

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