

This item was submitted to Loughborough's Research Repository by the author. Items in Figshare are protected by copyright, with all rights reserved, unless otherwise indicated.

Self-help incremental sanitary approach

PLEASE CITE THE PUBLISHED VERSION

PUBLISHER

© WEDC, Loughborough University

VERSION

VoR (Version of Record)

PUBLISHER STATEMENT

This work is made available according to the conditions of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) licence. Full details of this licence are available at: https://creativecommons.org/licenses/by-nc-nd/4.0/

LICENCE

CC BY-NC-ND 4.0

REPOSITORY RECORD

Lahiri, Santanu. 2019. "Self-help Incremental Sanitary Approach". figshare. https://hdl.handle.net/2134/29377.





REACHING THE UNREACHED: CHALLENGES FOR THE 21st CENTURY

Self-help incremental sanitary approach

Santanu Lahiri, India



THE COMMUNITY MANAGED sanitation approach is often discussed in the context of effective implementation of the rural sanitation programme for various developing countries. The investments for this programme generally deal with promotion of excreta disposal system and local level training. Although the coverage shows promising results in this approach, its sustainability is often questionable. Moreover, resource mobilisation is surfacing as a major constraint. For Reaching the Unreached in the rural sanitation sector, the self-help incremental sanitation approach appears to be more realistic, appropriate and effective, and accepted by both the various implementing agencies and the concerned communities.

The self-help incremental sanitation approach deals with development of appropriate technology options, resource mobilisation and institutional support mechanisms. This approach helps to sustain the programme and places less pressure on the local and national government for capital investment. This paper tries to explain the self-help incremental sanitation approach on the basis of the ongoing UNDP PHI/93/010 Project in the Philippines which may also be applicable in other developing countries.

The Philippines is an archipelago of over 7100 islands dispersed over 300,000 square kms. with a population of 67.6 Million (as of 1995), and endowed by nature with abundant water resources. It has a water supply coverage of 63 per cent (as of 1995) and sanitation of 73 per cent (as of 1995), which means approximately 25 million people of the archipelago still lack adequate safe water and 18 million people do not have access to sanitation systems.

Furthermore, despite the moderate coverage of water supply and sanitation (WATSAN), the WATSAN related diseases increased with the increase of WATSAN coverage. Diarrhoea is the second leading cause of illness and fourth leading cause of infant mortality and both typhoid and cholera are endemic in the Philippines. The main cause for this is non-sustainability of facilities, improper technology selection and lack of proper health, hygiene and water quality surveillance practices (Lahiri,1996).

In this context, the UNDP launched the Institution - Building for Decentralised Implementation of Community Managed Water Supply and Sanitation Project, briefly known as UNDP PHI/93/010 Project as a part of its overall support programme for the delivery of basic services to the very poor communities in the Philippines under the Fifth Country Programme, executed by the UNDP/World Bank RWSG-EAP and implemented by the Philippines Government. The Project provides sup-

port to the national government's thrust towards decentralisation of delivery of basic services and shifting roles of LGUs from "recipient" to actually being the "manager" of the service delivery.

The project aims to establish an organisational process for planning, designing, implementation, monitoring and control of WATSAN rural services with the help of appropriate community managed organisations and private sector participation in development of long term sustainability through pilot demonstration sub-projects.

The demonstration areas are spread over 178 pilot villages in 7 provinces of the country. The 7 provinces differ widely in their social and physical aspects and thus, the common learnings will be useful for a wide range of socio-cultural situations in different projects even for other developing countries, especially for the South-Asia and East-Asia & Pacific regions (UNDP, 1994).

Existing rural sanitation approach

As in other developing countries, the existing Rural Sanitation Programme in the Philippines includes either the supply of "plastic bowls (the pour-flush pan with waterseal)" to target groups or "manufacturing of concrete bowls with local counterparting". These imply the limitation of available appropriate technologies and inadequate funding (The Code, 1996). The baseline survey showed that in many ethnic communities there are pour-flush systems which failed mainly because the ethnic groups concerned do not use water after ablution or they use dry cleansing materials.

The non-water dependent latrines seem to be the more applicable technology for these areas, but such technologies are not being disseminated extensively by central and field health personnel. On the other hand, the initial supply of plastic bowls created a demand for them in some places but inadequate resources failed to supply the same for each and every household. The Programme's supply of plastic bowls was basically limited in number, and was meant only to promote the water-sealed system.

Technology options

The Project Team thus developed different sanitation options keeping four basic criteria in mind, viz, availability of local resources (man, money and materials), cultural acceptance, user-friendliness (easy to sustain) and technical effectiveness (Franceys, 1991). So now, the beneficiaries of UNDP PHI/93/010 Project can select their sanitation conditions in their respective areas.

The non-water dependent latrine options are: Lid Latrine, Antipolo Latrine, Ventilated Improved Single Pit Latrine, Ventilated Improved Double Pit Latrine and Ventilated Improved Lid Latrine. The water dependent toilet options are: Single Pit Pour-Flush Bowl Toilet, Double Pit Pour-Flush Bowl Toilet, Single Pit Conventional Bowl Toilet, Double Pit Conventional Bowl Toilet and Septic Tank Toilet (Lahiri, 1996).

Similarly, different options have also been developed for liquid waste and solid waste management system for rural areas. Sanitation Information Kits have been developed and produced to transfer these technologies to local implementors. The Kits will enable them to explain the basic features, advantages, disadvantages, costs, design, construction, operation and maintenance of each option along with the importance of proper health and hygiene education.

Self-help incremental approach

The Self-help Incremental Sanitation Approach basically has four components:

- a) Development of appropriate cost-effective technologies.
- Transfer of the technology options to the lowest grassroot level, such as local masons, village health workers, community workers etc.
- Present those options to individual households and explain to them the advantages and disadvantages of each, and
- d) Assist individual households during construction, operation and maintenance of the disposal system.

In this concept a wide range of options has to be created in such a way that the options would match the needs of different communities with a varied socio-economic and cultural status. Thus, the availability of local materials has to be investigated thoroughly prior to development of different options. In the Philippines, Antipolo type latrine or lid latrine costs approximately US \$25 including superstructure, the materials for which are available abundantly in the nearby area.

For example, in 62 pilot village areas for UNDP PHI Project there are 5,521 open pit type latrines which are unsanitary and constructed by the individual households on their own initiative. Now to upgrade them into pourflush toilets, 5,521 plastic/concrete bowls are required along with the improvement of the water supply system.

But in the self-help incremental sanitation approach those 5,521 latrines can easily be upgraded into sanitary Antipolo or Lid Latrine by just providing a simple wooden cover, the cost of which is negligible. Gradually, when adequate water becomes available or when the sociocultural and economical conditions warrant the shift to these technologies, these latrines can be improved to water dependent toilets. On the other hand, the plastic/concrete bowl can be supplied/manufactured only in those areas where the need and demand is high.

Secondly, in the case of "one type technology promotion approach" either through dole-out basis or self-help basis, both create an expectation amongst the community that the programme implementors will provide some funds during actual construction since implementors are promoting a specific disposal system.

In contrast when the community is selecting its own disposal system in accordance with the prevailing sociocultural, economical and water use pattern through stepby-step upgradation approach, the self-help approach is transparent to them from the initialisation of the project.

Thirdly, this approach reinforced health education awareness due to more contact time provided between beneficiaries and the health/community workers for explaining the advantages, disadvantages and costs of each option. Lastly, in the self-help approach more emphasis is laid on "demand" rather than "need". Until a "felt-need" or "demand" is created among the community, merely providing them a latrine is not a solution for a sustainable sanitation approach.

Institutional aspects

The self-help incremental sanitation programme may require minimal hardware support from the LGUs but the software (institutional) support is very essential to build-up the capacities of the grass-root level implementors so that they can understand and apply the different technology options to their constituents. Presently, one Rural Sanitary Inspector is responsible for almost 20,000 to 30,000 population, depending on the size of the village covered (Lesaca, 1982). It is impossible for him/her to assist each household during their construction of sanitation systems. Keeping this in view, the Project's rural sanitation strategy will involve the mobilisation of village level health workers and local masons who live in the villages and who will be trained to promote this sanitation programme. With the help of community organisers, the village level health workers will mobilise and assist the individual households/communities during the planning and implementation of the self-help incremental sanitation approach.

Conclusions

Generally, the sanitation component is neglected when planning is being done in rural community-managed WATSAN projects. In the context of sanitation aspects, the activities are mainly concentrated on the supply of plastic bowls or moulds and manufacturing of concrete bowls along with a few training courses. This approach can be applicable where the sanitation programme is supply driven.

In the case of self-help incremental sanitation approach, more emphasis is needed to develop institutional support mechanisms at provincial, municipal and village level by developing a Sanitation Core Group. Training needs, transfer of technology options, development of IEC materials need to be developed keeping communities in mind. Training programmes could be organised as per need and

demand. As far as fund requirement for the sanitation programme for rural areas is concerned, instead of providing funds for hardware aspects it is more rational to provide funds for developing institutional support mechanisms and capacity-building for provincial and municipal staff, so that the sector benefits from long term effects. Even in the hardware aspects more emphasis is needed to concentrate on the self-help approach than on providing subsidies.

References

Franceys, Richard; Pickford, John; Reed, Bob (1991): A Guide to the Development of On-site Sanitation. Geneva, World Health Organization.

- ² Lahiri Santanu, *Self-Help Incremental Sanitation Approach* and *UNDP PHI WATSAN Project*, ITN Newsletter, May Issue, 1996, Philippines.
- ³ Lesaca, Reynaldo M. (1982), Field Manual For Sanitary Inspector, Division of Environmental Sanitation, Bureau of Health Services, Philippines.
- ⁴ *The Code on Sanitation, The Philippines, Presidential Decree No. 856 (1976),* Department of Health, Manila, Philippines.
- UNDP Project Proposal for "Institution Building for Decentralised Implementation of Community-Managed Water Supply and Sanitation Project," funded by UNDP and executed by UNDP/World Bank RWSG-EAP, 1994.