
School Sanitation and Hygiene Education Symposium The Way Forward : Construction is not Enough!

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SETTING STANDARDS - CHILDREN AS AMBASSADORS FOR CHANGE

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Most of the schools in the Eastern Highlands Province of Papua New Guinea are in a state of general decay. With School Boards having little access to options for development. Also Boards have very little access to resources that would assist them to provide the safe drinking water and toilets needed to maintain a safe and healthy school environment.

In late 1999 ATprojects started a project to look at assisting rural schools to develop much needed classrooms using locally available materials. As part of this project the ATprojects architectural staff visited 16 rural schools and on their return recommended that ATprojects also looked at designing an appropriate toilet for these schools.

Most of the current toilet facilities are not only a health risk, but also the students that use these facilities believe that these toilets are the “norm”. And this will have a real negative impact on their understanding of general health and sanitation standards.

Addressing this problem had been a time consuming exercise, but using the range of health and architectural skills at ATprojects, we have been able to develop what we believe to be an appropriate solution to this project and have over the past four years been working with schools to build the “ATloo’s”

The “ATloo Project” aims to create lasting improvements in the health and hygiene behaviour of teachers and children in the 216 community and primary schools in the Eastern Highlands Province with approximately 60,000 beneficiaries (teachers and students).

The “ATloo” building process involves the school children as this develops a sense of ownership and the project has now been able to built ATloo’s in a number of rural schools. The current project is carried out in partnership with Water For Survival/Oxfam New Zealand.

The ATloo is designed to use local materials that are supplied by the school communities. The three main parts of the ATloo (the floor, building & roof) are bolted together so that once the pit is full, the ATloo can be easily moved to a new site, other features of particular interest are;

- It is comfortable to use.
- Because of its conical shape, the pedestal does not get fouled or need cleaning inside.
- The smooth concrete finish of the fiberglass moulds makes the cubicle easy to clean.

- The sitting design means the cubicle is unlikely to become fouled with excrement.
- It does not smell.
- There are no flies.
- It is an attractive design which the community and the schools are proud of, and proud to maintain.
- The timber and matting can easily be replaced.
- Apart from cement, reinforcing steel, bolts, nails, hinges and varnish, it is all made from readily available local materials. Even the vent pipe, normally in plastic, can be made from locally available bamboo!

ATprojects targets school children since young children are the most vulnerable to mortality associated with hygiene related illnesses. Furthermore, establishing sound personal hygiene habits at a young age sets a pattern for adult life and introduces children as ambassador for change within the wider community.

ATprojects ensures that communities are provided with information, project design, management and basic technical support and develops understanding of the importance of operation and maintenance of the school assets after construction. In addition the project equips communities to build their own facilities based on the example provided.

Setting the scene

In the late 1940's most of the rural people in the Eastern Highlands Province were still living as they had done for thousands of years, the outside world and its technology had made little impact on these communities. People lived a life that could best be depicted as stone age.

Life was basic, and until the Australian Colonial Administration start introducing pit toilets, people use the "bush" to excrement. And while there were strict rules about where people could go to the toilet (away of gardens and sources of drinking water for example), in general it was a case of finding a discreet place when the need arose.

As the Australia Colonial Administration began to develop its coverage of the Highlands by way of a system of Kiaps (Patrol Officers), it was able to introduce a range of government services including based health programs. And one such program was the introduction of basic pit latrines.

Communities were in fact "ordered" to build pit latrines and communities that did not comply were often punished by way of fines (or worst). This program was authoritarian and domineering, but in its defense almost every community had clean usable pit latrines.

This program continued up until Papua New Guinea gained independence in 1975, when the Australian Kiaps leave. Their positions were taken over by Papua New Guinean Officers who were generally not equipped to continue the work left behind by the expatriate predecessors. And in a very short time rural communities abandoned their pit latrines and returned to using the bush.

While some attempts to reintroduce pit latrines (in particular VIP latrines) has taken place since independence, these programs were often under funded and relatively short term. The result is that in

almost all the villages in the Highlands there is a lack of toilets and more often than not children grow up without proper toilets thinking that using the bush is the norm.

The situation is also reflected in rural (and sometime urban) schools where it is common place for the toilets to be in a general state of decay and often filthy and a major health risk to children. It is interesting to note that the schools teaching staff (some of the most educated people in these rural communities) use toilets that are just as filthy as the students toilets.

And the fact that these toilets are often built along way from the school classrooms, mean that in many cases the toilets are “out of sight and out of mind”

Working to improve the situation

ATprojects Inc. (a local NGO) was formed in 1998 and is based in Goroka, Eastern Highlands Province. It works with both district and provincial governments, churches, rural communities and other NGOs in the Eastern Highlands Province.

It’s aim is to enable rural people to use appropriate technologies which give them more control over their lives and which contribute to the sustainable development of their communities. ATprojects provides a number of project development services and is one of the few organisations in PNG offering practical technical support at a district level.

In late 1999 ATprojects started a project to look at assisting rural schools to develop much needed classrooms using locally available materials. As part of this project the ATprojects architectural staff visited 16 rural schools and on their return recommended that ATprojects also looks at designing an appropriate toilet for these schools.

This recommendation was also based on the fact that Papua New Guinea ranks among the bottom 10 nations worldwide for access to clean, safe water and toilet facilities and many communities have little knowledge of hygiene and its implications for public health.

The two pictures on the below shows a “girls toilet” at Ufeto Primary School, a rural school in the Eastern Highlands Province.

This toilet is representative of a lot of toilets in schools in the province, it is open on three sides and is often visited by local village pigs!



While most toilets have dirt floor this particular toilet has a standard Department of Health concrete slab. These slabs were introduced by a donor funded project and mirror the design for the standard “squat” toilet.



Apart for the fact that these slabs do not provide a base for the toilet building to be anchored to.

The main problem is that once a child misses the hole and soils the slab, other children will not use the hole. And like the slab in the picture they will just use the rest of the slab to excrement.

This problem is worst in boys toilets as most boys stand to urinate and more often that not miss the hole. And this also encourages other children to use the rest of the slab to excrement.

Given the board range of skills and development experience of ATprojects staff, the process of designing a suitable toilet was in many way innovative, in as much as our architectural staff were able to work along side our health and community development staff and this process allowed for building, health and cultural issues to be taken into consideration.



The two pictures above show the use of local materials in the design of the ATloo. The building process of the ATloo's involves the school children as this develops a sense of

ownership. ATprojects staff spent up to 4 weeks at each school and integrate the toilet building process into the normal school time table, this reinforced the idea that good toilets are part of every day school life.

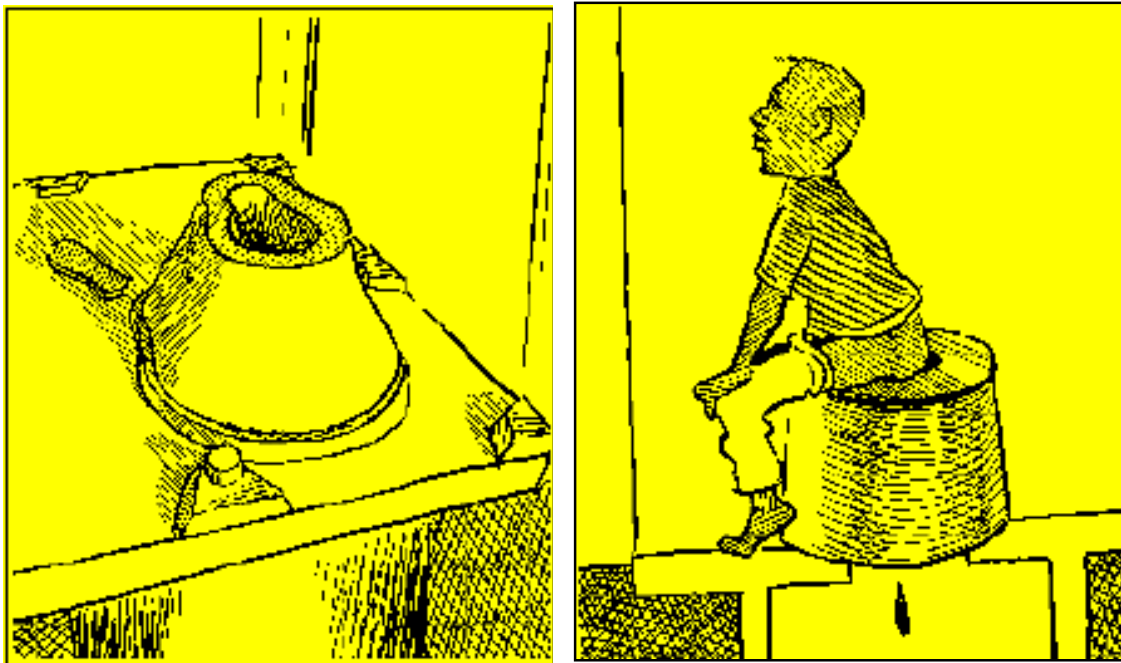
The project has now been able to built ATloo's in a number of rural schools, and the theme of ownership is again used in terms of the school boards responsibility to provide local materials used in the construction of the ATloo's.

Children as ambassadors for change

As mentioned above school children develop a sense of ownership in the project because the solution to part of the sanitation problem at the school is solved by themselves the building of new toilets.

But this is only part of the project. Before any work is carried out a general health and hygiene base line survey is carried out. The survey which is aimed at grades 4 and 6/7/8, and provides a picture of what is happening in the community (and in the children home) in regards to a range of health and hygiene issues.

Once the project is underway printed material uses PNG Grassroots type cartoons are distributed to the school children to reinforce the practical lessons learnt (see example below).



The project aims to return to the schools 6 months after the new ATloos have been built and conduct the survey again and compare the students responses, in terms of a 'before & after' review.

The project does not stop here in terms of a participatory approach. At the end of the toilet construction stage, a day long workshop is held with the schools board and at these workshops both teachers and board members are informed of their responsibilities in term of health and hygiene requirements of the school.

Here again PNG Grassroots type cartoons are used as many of the school board members have little of no formal western education.

It is important to note that both teachers and head-teacher receive no formal training in the daily management of their school in terms of the health and hygiene requirements and most staff are unaware of the education act that relate to this issues. And not surprisingly these issue are generally pushed to one size as being too difficult to address.

This participatory process is time consuming, and it terms of funds relatively expensive, but the outcomes are very positive. We are seeing school children being allocated toilets by class and gender and in almost all cases these new ATloos are being looked after and cleaned. It is only were insufficient numbers have been build were we see some cleaning problems arise.

There is no doubt that the project is slowly having an effect on the standard of toilets facilities in schools and their use by students. At the same time the project is helping the school community and the Division of Education to focus on the need for better toilets in schools.

Perhaps the more important question regarding the impact of this project on the wider community is yet to be answered. But if change is to take place, the project is providing an important example to the future ambassadors of change.