Context

This paper highlights a project that from its beginning let young women direct the project in terms of product development and design, leading to a solution for menstrual hygiene that is being constructed in schools throughout the Eastern Highlands Province in Papua New Guinea.

The problem being addressed relates to young women and girls dropping out of school because of the stigma and humiliation associated with monthly menstruation. It was therefore hoped that an appropriate response could be developed to address this trend. Unlike many water and sanitation programs, this project focused on the basic needs expressed by the end users. Items as simple as bucket showers and clothes-washing lines were identified by these young women as their real priorities. By continuing to actively involve these young women in “Knowledge Sharing Workshops”, they not only developed their own solutions, but were given access to a workshop and technical staff to make the first prototypes of their ideas.

This ‘real involvement’ from the first stages of the project has led to a practical technical solution that is now in great demand because it was designed by the end-users to meet their own needs.

Mary’s first menstruation

It’s another misty morning in the village, with the feel of rain in the mountain air. But for one 13-year old girl, the weather doesn’t matter. Today, she will be able to leave her house where she has been confined for almost one week. Confinement in the family’s bush-material house did not come easy to Mary. As a keen student she missed being at school for a week, and she knows that at this time of the year her absence could mean missing her exams and having to repeat next year.

But Mary reflects on the last week, and feels that she was lucky that her parents and family supported her during the time of her first menstruation. She decided to write the following short story in one of her school exercise books:

I was at school and became very afraid when I realised I was having my first menstruation. The blood was coming and I had no way of controlling it. I informed the teacher, Mrs Apo (I was so lucky that it was a female teacher as I could not talk about such things to a man), and she was kind and told me not to worry and sent me home with my cousin Rebecca who lives in the same village as me.

When we arrived at the village, I quietly informed my mother. On hearing the news, she sent for my father who was at work in the coffee garden, and when he arrived home, a room was prepared in our house for me to stay in. As our home is not very big, the room was very small, in fact just big enough for my mattress.

During the next week or so, I did not wash (as washing during this time is against our tradition), but just stayed in that room and waited for the day my family would make a feast and I could leave the home as a woman. During the evenings, some of the elderly women of the village and my mother talked to me and advised me on how I should conduct myself (as I am now a young woman) and how to take care of myself when having my monthly period.

On the last day, I was taken out of the small room in my house and was washed and dressed in traditional clothes ready for the feast (mumu) that my immediate family and relatives had prepared. While the men took care of the feast (customarily it is the men only who prepared the mumu) the women escorted me out of the house to where the feast takes place.

At the feast, my relatives talked to me about how to behave in the community, as now I was no longer a child but a young woman. One important part of this was that they told me I was their pride, because they can now receive a bride price payment when I get married.

Acknowledgements

The participants of the workshop described in this paper made the development of this product possible. This program would not have been possible without the support of WaterAid Australia. They have not only provided the funding to assist the development of this product, but played the role of a real partner and this relationship has grown from strength to strength. But most importantly the Directors of ATprojects would like to thank all our Papua New Guinean staff for working long hours to ensure that this and our other programs make a difference.
Another burden on the family budget

Papua New Guinea is the richest Pacific island nation and now with the huge liquefied natural gas project being developed by Exxon Mobil, billions of Kina will be flooding into the country. However, the reality for Mary’s parents is rather different.

Mary’s mother spent the evening of the feast thinking about how the family was going to find the extra money that will now be needed to purchase the sanitary towels Mary will need. In terms of earning a living, Mary’s parents have two main sources of income, growing coffee and selling garden produce at the Goroka market. In one year, the coffee brings in about (Kina) K600 and the garden produces another K800.

Having only K1400 per year (roughly Australian $540), the family mainly lives on garden food, but twice a week Mary’s mother buys a tin of fish or meat to give the family some protein; a yearly cost of K395.20.

Every morning the family drinks a cup of tea together and eats their breakfast of sweet potato. Everyone has sugar with the tea, but there is rarely milk. This morning drink costs the family K312.00 per year. The only other store goods Mary’s mother can afford is a small bottle of cooking oil once every two weeks and a packet of salt once a month, costing another K94.40 per year.

Mary’s mother is very proud of her daughters, and makes sure that before going to the school the girls wash with soap and their clothes are washed clean. Soap costs the family K46.80 per year.

Mary’s mother earns an income for the family selling produce at the Goroka market. The annual cost of the bimonthly round-trip fare is K96.00, with an additional K12.00 for the gate fee at the market. While in Goroka, she visits the secondhand clothing stores, and in one year, spends roughly K100.00 on clothing the family.

Mary’s father is also very proud of his two girls, and as a member of the local primary school board he is always first to pay their school fees, a combined annual cost of K310.00. Mary’s father believes in the importance of good hygiene, and has built his family a bush-material toilet. He feels that using toilet paper is an important improvement in his family’s lifestyle, but at one roll per week, this luxury costs the family an additional K44.20 a year.

At a total of K1365.60 per year, Mary’s family is left with just K34.40 for small luxuries, like replacing broken garden tools or purchasing sanitary towels for the mother. Where is the K72.00 a year for Mary’s sanitary towels going to come from?

Mary’s parents talked about how they were going to save the money for Mary’s sanitary towels. It was decided that both Mary and her mother would have to use rags, or a ‘traditional’ sanitary towel that grows in the forest near their village. The ‘traditional’ sanitary towel comes from a member of the local fern family called “notuni” in the local language and its soft leaves are used (see picture opposite).

Not as lucky as Mary

Many young school girls have their first menstruation while sitting in a classroom, where the young girl feels a wet sensation and wonders what’s happening.

She may, if she is lucky, excuse herself from the class and go to the toilet to find she’s bleeding, and may think she’s dying. After trying to clean herself with whatever materials are available (often the pages of old exercise books) she runs home, without informing the school, to try to find someone who she could talk to about the “problem”.

There are many reasons why these young girls do not know what is happening; it could be the young female students are living with a relative who never considered informing the girls about menstruation. But whatever the case, this first menstruation experience is often traumatic and potentially very embarrassing for the young girls. They have to find somebody who is willing to talk about the situation, which can be quite difficult. There is also the problem of other students in the class making fun of the girls because there are no facilities available for them to wash, and they may start to smell after a short time. Girls also become embarrassed when their fellow female classmates make fun of them because of their lack of understanding of what is taking place.

Most schools do not provide awareness education about menstruation or provide basic washing facilities. One reason for this is that school boards are often dominated by older men who consider menstruation to be a subject that, by tradition, they do not discuss. Attempts to get boards to discuss the issue are met with comments such as “display samting blong ol men” (“this is a woman’s issue, nothing to do with men”).

It is also difficult for the teaching staff to deal with the issue as, while there are many female teachers, they are not always allocated to the upper grade classes where girls experience their first menstruation. It should also be mentioned that any form of sex education taught by male teachers is often judged negatively by parents who may also be suspicious of the teacher making sexual advances to their girls.

Generally, there is a lack of understanding about menstruation among men. One such example was the case during which menstruation was being discussed by community development workers. It became clear that the men were very uncomfortable discussing this issue, yet seemingly did not fully appreciate its importance in terms of stopping girls from completing their education.

The way this issue was addressed with the groups of men was to ask them to lower their heads over a table and cover their eyes while their female colleagues explained in great detail the menstruation cycle and how they deal with it. Many of the males were not only embarrassed, but visibly shaken, as perhaps for the first time in their lives, they listened to a group of women talk about menstruation.
One result was that when asked to prioritise a number of school projects, the males rated very highly the construction of female showers and simple incinerators to dispose of sanitary towels.

Another issue that is not discussed is the disposal of used sanitary towels (either modern or traditional). Even if it is talked about, the general feeling is that females have some special place where they dispose of these items. In reality this is not the case, as illustrated by an experience in one of our rural schools.

During a school visit to a rural primary school, the staff of ATprojects (an NGO based in the Eastern Highlands Province of Papua New Guinea) went to inspect some old pit latrines with the headmaster of the school. The toilets were in very poor condition and there was no evidence of where girls were disposing of their used sanitary towels. The headmaster was questioned about this. It appeared that the headmaster never visited the school toilets, and he did not know where the girls were disposing of their sanitary towels. When we started to cut down the long grass at the back of the toilets, we found that the girls were throwing their sanitary towels into this long grass, and within minutes, the towels were being consumed by the local pig population of the nearby village.

It is worth noting that researchers at the Papua New Guinea Institute of Medical Research have, on several occasions, referred to our pig population as mobile sanitation systems, as the pigs eat our excreta, which again highlights the contradiction between some traditions and reality.

**Knowledge Sharing Workshops**

For some time now, ATprojects has used an innovative approach in developing products. This process starts by focusing on what potential end-users (in this case, young female students) see as products or services that they feel are important. This approach is different from the participatory approach used in many community development processes whereby a project or product is designed and costed, after which the end-users are asked to comment on the project or product’s suitability.

The Knowledge Sharing Workshop approach provides an environment where end-users are given the tools, not only to develop their own ideas in terms of the projects and products, but importantly, are also provided with assistance to develop prototypes. This process has proven to be successful in developing a whole range of products that are used in rural villages and urban settlements to assist in the care of people with AIDS.

One key element of these workshops is that ATprojects always uses independent facilitators to run the workshops. In this way we limit any possible bias that may result from ATprojects staff facilitating the workshops that feature products or designs which the staff themselves have developed. The issue of girls missing school because of their menstrual periods was initially raised in a Knowledge Sharing Workshop that focused on school infrastructure maintenance. In this workshop a number of head teachers requested that ATprojects look into this issue, particularly with the view of providing some kind of washing facility.

ATprojects decided that two things would be crucial to the success of any workshop that was going to look at female menstruation. Firstly, we would need a facilitator who not only had a health background, but also had experience in community development – in particular female health issues. Here we were fortunate to secure the services of Ms. Ruth Taylor, a long-time Papua New Guinean lecturer at the Goroka Nursing College. Ruth has a particular interest in developing community health services, and we considered that she would be seen as a motherly figure by the young female students attending the workshop.

Secondly, we had to ensure that the girl students who would attend the workshop would be outspoken in their views and not afraid to discuss this traditionally taboo subject. Because of the nature of the workshop, it was very important to not only get permission from the school to release these students, but perhaps more importantly from the students’ parents. Contact was made with ten schools. In each school, one of the female teachers was briefed on what we wanted to achieve during the workshop and was also asked if she would feel comfortable attending the workshop herself. Once we had all the approvals from the schools to release the teachers and students and the letters were signed by the parents agreeing to their daughters’ attendance at the workshop, a date was set and preparations undertaken.

In the workshop, it quickly became apparent that there was a split among the participants with the female teachers taking a traditional approach, meaning that they did not directly talk about menstruation, but seemed to dance around the issue. The girl students, on the other hand, took a different approach and this situation came to a head when the female students asked the facilitator where the ATprojects male staff members were. While the teachers considered menstruation to be an issue only to be discussed among women, the students felt, given their experience at schools which are usually run...
Mrs Seventy's solution

Shortly after the Knowledge Sharing Workshop and before ATprojects had time to complete its design for a simple washing facility, one very enterprising participant, a teacher by the name of Mrs. Seventy, decided that she would take matters into her own hands to find a solution at her school.

She persuaded the board of Asaro Primary School to invest approximately K1500.00 to convert an old existing toilet block into a girls' washing facility. With assistance from ATprojects and its partners, this building was successfully converted.

This building is constructed out of locally available materials and uses water from a previously installed ATprojects water supply. It serves over 90 senior female students at the school; an excellent example of how once the issue is raised in the open, solutions can be found.

One of these three teachers had donated her own secondhand sewing machine to the upper grade girl students who were making simple clothes to sell and the money raised was used to buy sanitary towels. In fact this sewing venture was so successful that the girls raised enough funds to purchase a second sewing machine.

But this positive experience was exceptional. During the workshop the girls told a number of shocking stories about their first experiences with menstruation and the ongoing problems they faced in their efforts to continue to attend school. One young student told the workshop how she was totally unaware of menstruation because her mother is young and uneducated and doesn’t discuss this type of issue with her. She said that at her first menstruation, she not only thought she was dying but couldn’t understand why everyone in the class, including the male teacher, was making fun of her. She told this story with tears in her eyes, emotionally affected by this experience.

During the course of the workshop there were many occasions where the facilitator, the teachers and ATprojects staff had tears in their eyes after listening to the experiences of the girls. But what was also evident was the strength of these students in their efforts to deal with menstruation with little support from their schools.

Towards the middle of the workshop, the participants started to develop designs for what they considered to be an appropriate solution to assist in menstrual hygiene. In these workshops the solutions developed by participants often differ from those designed by our technical staff. In this case, the staff had given some thought to a simple shower. However, the girls found this to be hilarious and pointed out that they didn’t need to wash their entire bodies each time they had bleeding between their legs. The shower idea was abandoned in favour of a simpler washing facility that could be designed to allow the girls to sit down while they washed, using much less water and reducing the cost of the washing facility.

Another misconception was that our technical staff thought that a simple clothes line should be placed inside the washing facility. However, once again the girls did not see the need for privacy but preferred the more sanitary solution of hanging their clothes out in the sun, as this is something that happens in every rural household.

The solution

Using the outcomes of the workshop, ATprojects has been able to design a simple, low-cost washing facility that is based on the current Atloo toilet building design (low-cost VIP toilets being built by ATprojects in rural schools). This design has a cast concrete slab with an inside stand pipe and a floor designed to drain any water out of the building and into a simple pit or drain.

The building is primarily constructed from low cost locally available materials such as woven grass matting (pitpit blinds) and timber supplied from local saw millers. The design however does incorporate three sheets of waterproof shower liner that is commercially available from local hardware stores and this protects the local materials from rotting due to contact with water and also increases the level of privacy by providing a barrier between woven grass matting and the inside of the washing facility.

The workshop was a success; with the help of the participants, we were able to design a new product that hopefully will meet end-users’ expectations, but perhaps more importantly, the workshop has started a dialogue that has been needed for some time.

Following the workshop, we asked one of the students and her teacher (the one who donated her own secondhand sewing machine) if they would take part in a radio program that would be broadcast by the local radio station. They both agreed and a 25-minute program was planned. However, during the recording, the announcer was so taken by the girl’s story that the program ran to 55 minutes and was re-broadcast a number of times over the next month or so!