323.1 93IS

Water, Sanitation, Hygiene and Health Studies Project
Northern Areas and Chitral
Gilgit

ISSUE PAPER 3: THE POUR FLUSH LATRINE FOR GUESTS ONLY?

A socio-cultural perspective on the pour flush latrine in Chitral

LIBRARY
INTERNATIONAL REFERENCE CENTRE
FOR COMMUNITY WATER SUPPLY AND
SANITATION (IRC)

by;

Jeanet van de Korput
&
Michael Langendijk

31th December 1993

323.1-93IS-11961

TABLE OF CONTENTS

LIBRARY INTERNATIONAL REFERENCE
...NITY WATER SUPPLY
... The Hague
... 141/142
LO: LN 11961
323.1 93 IS

FIGURES

INTRODUCTION

In a rapid appraisal of the sanitation situation in Chitral the WSH&HS project found that after the use of open fields, the pour flush latrine (PF-latrine) is the most common sanitation system (See position paper No.1). The PF-latrine has been -successfully- introduced by several agencies during the last ten years. In almost all villages at least some PF-latrines have been constructed.

On a limited scale also various types of pit latrines were identified. The pit latrine as a sanitation option will be discussed in a separate report. This report on the PF-latrine is based on study in 23 villages of upper and lower Chitral between August and November 1993. Its focus lies on socio-cultural and socio-economical factors related to the PF-latrine but also technical aspects of the PF-latrine are incorporated in the work.

In the first chapter the methodology of the study is briefly described. Chapter 2 presents general information about the introduction of the PF-latrine, the location, who constructed it and the costs. In chapter 3 the attitude of the people towards the PF-latrine is given. The use-pattern of latrines, located at different sites, is discussed in chapter 4. Chapter 5 presents the problems that are related to the PF-latrine. Finally in chapter 6 the conclusions and recommendations are given.

1. METHODOLOGY

The data on which this report is based, were gathered during two visits; in August/September (13/8 - 8/9) and in November (8/11 - 26/11) 1993. During these visits three to four persons of the WSH&HS-project worked in different villages in Torkoh, Mulkoh, Mastuj, Lotkoh and Drosh tehsil of the Chitral district of the North West Frontier Province. In the first visits a rapid appraisal of the water and sanitation situation was carried out by the social scientists (see position papers nos. 1 and 2). The second visit was an indepth study of sanitation.

The objectives of the PF-latrine study were:

- to assess the current use pattern of the PF-latrine;
- to identify possible problems of the PF-latrine and the reasons for limited use by household members;
- to develop ideas to overcome problems and therefore increase the effective use of the latrine.

During the November visit the team split up in two groups and worked in different areas. The female anthropologist with the field engineer focused on interviews with women whereas the male anthropologist with his assistant concentrated on men.

The study covers the ideas and perceptions of both owners of a PF-latrine and people who do not have this facility (non-owners). A separate KAP-questionnaire was developed for each group. After pretesting the questions in several villages, some modifications were needed. The use of questionnaires provided both quantitative as qualitative data. During and after filling them, open ended questions were asked and discussion provided more indepth information on sanitation related topics. In total 87 interviews were carried out by the two teams (54 men and 33 women). Out of these respondents 55 had a PF-latrine in their house, and 32 were using a conventional sanitation system like the open fields. The total number of latrines included in the research is 76, as some households have installed more than one PF-latrine.

During interviewing most of the people perceived the questions about sanitation as a very normal aspect of their daily life. Particularly people who felt problems about sanitation themselves were most open and willing to talk about the subject. This was for example the case in villages with a water shortage problem and in congested areas.

During the structured questionnaires people often give socially desirable answers. Observation was therefore an important research method. Frequently we found by observation that people had answered in a different way from what they practice.

2. THE INTRODUCTION OF THE PF-LATRINE

2.1 Agencies introducing the PF-latrine

For the last ten years PF-latrines have been promoted in Chitral district[1]. The main implementing agencies were the Aga Khan Housing Board, UNICEF, the Public Health Engineering Department and DORSCH Consult.

i) AGA KHAN HOUSING BOARD

The most prominent introducing agency has been the Aga Khan Housing Board. From 1983 to 1990 the AKHB introduced more than 2200 PF-latrines in Chitral as part of the Living Conditions Improvement Programme (LCIP).

In the process of introducing the PF-latrines the construction design, made in Karachi, was adapted to local circumstances. At first the so-called Thai pan was used (UNICEF design); a commode that has a water seal or p-trap cast into it. Because of the integral water seal the commode was fairly large and it easily broke during transport. AKHB than decided to use another type of commode with a separate p-trap. Other local modifications were changes in the angle of the drain pipe, the shape of the pit and the use of local materials in instead of RCC slabs.

AKHB started the programme with construction of about a hundred demonstration models of the PF-latrine in schools, Jamaat Khanas and Mosques. Local masons were trained to do the construction. In a second stage commodes and drain pipes were sold at cost price to individual villagers, mainly through AKRSP VOs.

The AKHB programme has been relatively successful. This is expressed by the number of latrines that were sold and by the programmes effect on the attitude of villagers towards sanitation. In the villages people often refer to AKHB and say that after their programme people started to desire PF-latrines.

Several lessons can be learned from the AKHB experience. The introduction was male focused and despite request from the field staff no female motivator was appointed to also involve women. Participation of women might have influenced the actual use of the PF-latrine which is actually rather low. Related to this is

---

[1]. The PF-latrine that was introduced is a squatting model, the so-called 'Indian commode'. The model with a seat (W.C.) is uncommon and only found in hotels in Chitral town.

the fact that AKHB could not pay follow up visits and monitor whether latrines are (properly) used. Furthermore the commode supply was not sustained after the end of the programme and it took local shopkeepers some years to take over the supply.

Another problem was the low quality of some of the commodes. There was no proper quality control in the factory and according to AKHB staff 10% of the commodes might have had defaults. Nevertheless in villages all the AKHB commodes got a bad reputation. People complain that the commode easily cracked when hot water was used for defreezing ice in the p-trap. Nowadays people prefer to buy a strong and more expensive type of commode.

ii) UNICEF

In the period of 1983-1989 UNICEF also had a PF-latrine construction programme. According to the figures 950 PF-latrines were constructed in Chitral, Drosh, Ayun and Booni and another 200 were planned[2].UNICEF gave commodes, pipes and cement free of cost. Details about this programme could not be verified.

iii) GOVERNMENT SECTOR: PUBLIC HEALTH ENGINEERING DEPARTMENT AND DORSCH CONSULT

Under the annual development programme of the last three years contractors through the PHED constructed 750 PF-latrines in Drosh, Ayun and Chitral. Villagers received the commode and skilled labour for free and only had to dig a single soak pit.

Presently the PHED, in cooperation with DORSCH Consult, is constructing PF-latrines in Chitral town and road-side villages. Communal PF-latrines are built in the hospital and some are planned for the bazaar area. Private PF-latrines are, after some initial drawbacks, being constructed through ward committees.

iv) SHOPKEEPERS

Since the mid eighties special shops have opened that sell commodes and sanitation hardware; 10 in Chitral town; two in Drosh and four in Booni. A commode costs between Rs.150 and Rs.450, depending on size and quality.In Chitral shops offer complete packages (commode, p-trap, drain pipe, t-piece and vent-pipe) for Rs.450. Shops sell between 20 and 150 sets per year mostly in spring and summer. Outside Chitral most of the commodes are sold without a separate flush tank. In some small villages shopkeepers occasionally also sell commodes.

---

[2]. See annex 5 of the 1991; Master Plan for Sanitation, Water Supply and Sanitation Project for Chitral Town and Roadside villages, Government of North West Frontier Province/DORSCH Consult.

پانی کے ساتھ استعمال ہونے والی دو گڑھوں والی لیٹرین

استعمال شدہ گڑھے میں ٹھے دو سال کے بعد کھاد نکال کر کھیتوں میں ڈالی جاتی ہے

Figure 0. Pictures of the twin pit pour flush latrine as they are used by DROSCH Consult during health education sessions.

v) TYPES OF PF-LATRINES THAT HAVE BEEN INTRODUCED

AKHB introduced a simple commode, without a vent-pipe and with a single pit. The PHED used a similar commode, no vent-pipe and a single pit. They used a concrete pipe to connect the latrine to the pit.

The latrine promoted PHED/DORSCH is of a different design. It is a twin pit pour flush. PHED and DORSCH have introduced this system throughout the North West Frontier Province. The idea is that the pits are used alternately. After filling up, the contents have to dry for about a year, and then the contents of the pit have to be removed. There is, however, no tradition in Chitral of emptying and re-using human waste. Therefore it seems that the twin pit pour flush latrine may not be the most appropriate system for Chitral.

AKHB	2223	1983 - 1991
UNICEF	<950	1983 - 1991
PHED	700-50	1992 - 1993
PHED/DORSCH	900 1280	1991 - 1993 1th stage 1994 - 1995 2nd stage
SHOPKEEPERS	unknown	1985

Figure 1. Approximate coverage of sanitation projects

2.2 The trend towards having or wanting a PF-latrine

Before 1980 the PF-latrine was a complete novelty for most people in the rural areas of Chitral. Only the men who worked down country or in the army had seen the PF-latrine before. Several respondents said that after coming back from down country they had the wish to build this latrine in the household. Many village men, and to a lesser extent women, said that they learned about the PF-latrine in Chitral town. They saw the PF-latrine in Government buildings and public places or in the house of relatives in the city.

After 1983 the villagers also learned about the PF-latrine in their own village. The number of latrines in the villages increased. Particularly the Aga Khan Housing Board has played a major role in the introduction of the PF-latrine in rural areas. Villagers usually saw the PF-latrines in the school, Jamaat Khana, Mosque or in a relative's house. During the AKHB programme the PF-latrine was often discussed among villagers. Even in villages where no activities took place, people mentioned AKHB's efforts.

Women very often learned about the latrine locally; in houses of relatives, friends or in the health centre. Several women responded that they only learned about it when it was constructed in their own house. How people got to know about the PF-latrine is shown in Figure 2.

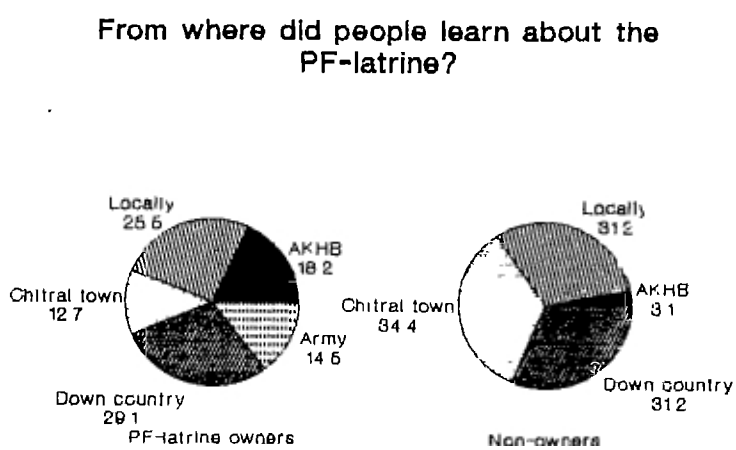

Figure 2. From where did people learn about the PF-latrine

Particularly in the beginning, not all the villagers were in favour of the idea of building a PF-latrine. An older man said:

> "We were surprised to hear about the PF-latrine. We couldn't imagine that a person would sit in one place, relieve himself and leave his excreta behind in a room".

When more and more latrines were constructed most of the people became convinced that the new system was good. The idea that it was good to construct a PF-latrine was rapidly adopted. An argument for accepting the latrine was explained by a villager as follows:

> "Everybody likes to have a PF-latrine, so it must be good".

Many people even built a second or a third latrine in different parts of their house. It was found that 34.5 % of the PF-owners have built more than one latrine. After 1985 the number of PF-latrines in the villages increased (see figure 3 in annex 3) and from then onward the trend towards having a PF-latrine set in.

Nowadays almost all the villagers know about the PF-latrine and the majority would like to build one (see also page 15). In most of the villages in the district PF-latrines have been constructed. Only in a few villages, mostly scattered and without a link road PF-latrines have not been installed[3].

2.3 The construction of the PF-latrine; Technical details

i) THE INVOLVEMENT OF MASONS

Before the construction of a latrine men usually ask advice from relatives and friends who installed one. Shopkeepers and masons are an important source of information about the technical aspects of the construction. Generally people in rural areas build a PF-latrine that is flushed by pouring water from a bucket or a jug called lota. A latrine is often called 'Lota system'.

As masons are relatively expensive most people try to do most of the work themselves. From the interviews it follows that generally at some stage a mason is involved with either giving advice, installing the commode or with completely constructing the latrine. A good mason will charge around Rs. 120 per day. The involvement of masons in the construction of the PF-latrines is reflected in figure 4.

---

[3]. The WSH&HS project is working on a water and sanitation inventory which includes every village in Chitral. More detailed information on sanitation coverage will be available after finilising this survey.

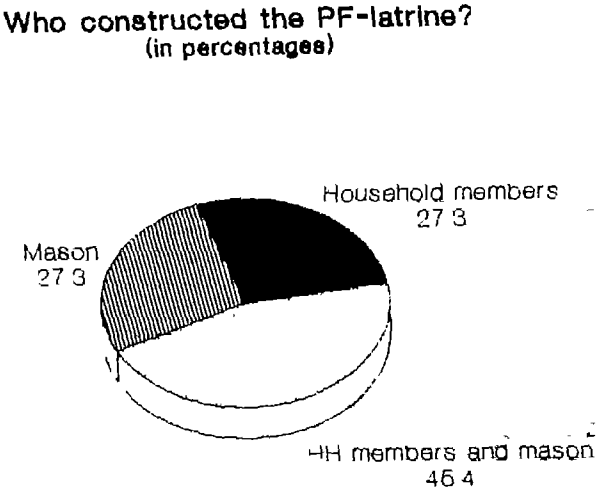

Figure 4. Who constructed the pour flush latrine

ii) DISPOSAL SYSTEM WITH A SINGLE SOAK PIT

After a site is chosen the men dig a hole for the soak pit of the latrine. The normal system is a brick-lined non-plastered single pit. Characteristically a single soak pit is built which often has a rectangular or oval shape (57% of the latrines). Almost all others are circular in section. People mentioned that the oval pits are easier and cheaper to cover because local wood and stone slabs can be used instead of a concrete slab. This system was promoted by AKHB because the need of a single pit is easy to understand and to construct and it is cheaper for it does not need cement.

In a sample of 76 latrines the length of the pit varied from four to ten feet and the width from three to six feet. An average pit is about 6x5 feet. The inside measures of this pit are considerably smaller (4x3) because the outside is lined with stones. The actual pit volume is therefore smaller than the excavated hole. The depth of the pits are between six and twelve feet deep.

iii) COMMODE INSTALLATION AND THE DRAIN PIPES

A person has to buy a commode and pipes in a shop in Chitral, Drosh or Booni and transport it to the village. This might cost up to Rs.100.

In most cases the people build a superstructure first and then install the PF-latrine inside, in only a few cases the commode is put first and a superstructure built around it later. Usually a mason makes a platform of 5-6 inch high with cement and stones in which he installs the commode and a so-called p-trap. Commonly cement is used to plaster the floor and the walls around the commode. We observed only few PF-latrines were mud was used. If people want to use the latrine as a bathroom a small outlet is made in the cemented floor at the bottom of the latrine platform.

A drain pipe is connected to the p-trap (also called water seal or syphon) which leads outside to the soak pit. Generally 3 or 4 inch PVC pipes are used. The cheapest pipe is about Rs.10/foot, the most expensive Rs.15/foot. Only in few cases RCC drain pipes are used, its price lies between Rs.18 and 25 per foot.

During interviews with shopkeepers in Booni we learned that in Upper Chitral two methods are used to connect the drain pipe to the soakpit. The most common method is a straight pipe that slopes from the p-trap into the pit. This is best because it will not easily get frozen. A second method makes use of a vertical pipe and two elbows, see figure 5. According to shopkeepers the latter will easily choke and freeze in winter. Where houses are considerably higher than the soakpit this system is used.

In Booni we also identified a PF-latrine without a syphon, i.e. a pipe directly slopes into the pit. Because there is no water seal it cannot get frozen and it needs little water. The latrine is used by guest of a hotel. We observed that it is not smelly in the latrine; the only smell came from the ventilation pipe.

iii) VENTILATION PIPE AND P-TRAP

In case people want a ventilation pipe (hawa pipe) two locations are possible. One way is to connect it to a so-called T-piece on the drain pipe (see for example figure 5.1). The other is to put the pipe on top of the soakpit. A ventilation pipe is normally of PVC with a diameter of 2 inch and costs at least Rs.7/foot. Generally the length is 6 to 8 foot. A limited number of metal pipes (made in Karachi) are available in official buildings.

People always construct the ventilation pipe in such a way that it is connected to the outside of the superstructure. Several times it was observed that ventilation pipes were constructed incorrectly; they did not ascend above the rim of the roofs. For

people a ventilation pipe outside was sufficient, not realizing that the pipe needs to be high enough to suck foul air.

The decision to install a ventilation pipe seems to be rather arbitrary. In many cases it seems that a ventilation pipe is not essential as latrines without a pipe normally do not smell. People buy it because they think it is a necessity. Yet with certain types of p-traps it seems that a ventilation pipe is required. According to Farman Murad, who introduced the AKHB PF-latrines, the water seal in some p-traps is not reliable. On reason is that water evaporates when the latrine is not regularly used. Another reason is that the water completely washes out of the p-trap if the water has too much speed. The result is that the p-trap becomes dry and the foul air can come up from the soak pit. The thai commode, with the water seal inside the commode did not have this problem but when AKHB changed the commode design they started to sell ventilation pipes.

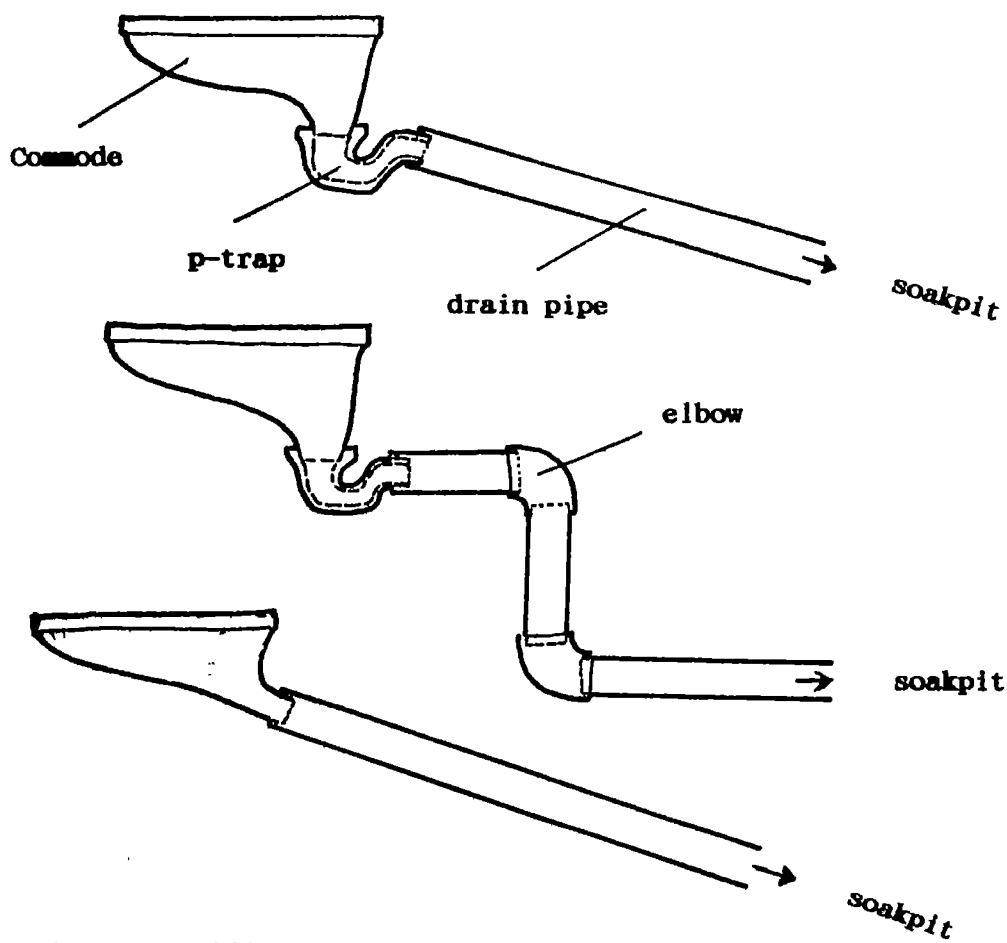

Figure 5. Different types of drain pipes

iv) SUPERSTRUCTURE

The construction of the **superstructure** depends on the financial situation of the owner. As we will see in the next section the PF-latrines are often constructed simultaneously with a guest room and are also used as bathrooms. Generally the PF-latrine is constructed with a modern superstructure using cement and bricks with plastered walls and a wooden or tin roof. Mostly a small window is made in the side wall as a ventilator. The latrine is closed with a wooden door. In cases the latrine is a separate building, the superstructure is usually made of cheaper materials; mud bricks are often used for construction. In this case it is not commonly used as a bathroom.

2.4 The location of the PF-latrine

Generally the male household members decide where to construct the PF-latrine. There are three common places to build a latrine (see figure 6). The choice of the PF-latrine location is in the first place related to the availability of space and social norms; mainly purdah. Provision of a water point close to the latrine is a secondary criteria. Nonetheless where water and financial resources are available people will try to make a tap connection inside or near the PF-latrine building.

i) IN OR NEAR THE GUEST ROOM(S)

As traditional houses in Chitral and the Northern Areas have only one room, people like to build a separate guest room. The room is built adjacent to, or at some distance from the house if space is available. A compound wall is built between the old and the new building in order to provide purdah for the household members. The guest room is a building with one or two rooms that are used to receive guests. It can also be used as a bedroom for the family members.

Adjacent to most of these guest rooms PF-latrine cum bathroom is build[4]. Almost 60% of the latrines we have observed are built in this location (see also 3.1).

---

[4]. In some cases the PF-latrine was installed in an existing bathroom. In most houses PF-latrine and bathroom were constructed simultaneous. In this report only the term PF-latrine will be used, although in guest rooms it is often used as a bathroom too.

ii) SEPARATE BUILDING IN THE COMPOUND

About 25% of the latrines are constructed as a separate small building. People who choose this location said that they feared the smell of the PF-latrine. Some other people mentioned that by building the latrine separately it can be used by both guests and household members. This latrine is generally not used as a bathroom.

iii) ATTACHED TO THE HOUSE

The minority of the people (15.7%) have built the PF-latrine attached to the house. Usually it is a building with one or two walls adjacent to the house. The reasons for choosing this location are easy access and convenience. Family members can easily go there and do not need to go outside in the cold and snow during winter. It was mentioned that the attached latrines do not easily freeze during winter because some of the warmth of the house radiates into the latrine. Sometimes these PF-latrines are also used as a bathroom.

An important point is that households with an attached latrine often have two or three other latrines., The first latrine is built near the guest room and is kept for guests, the second latrine is near the house and used by household members.

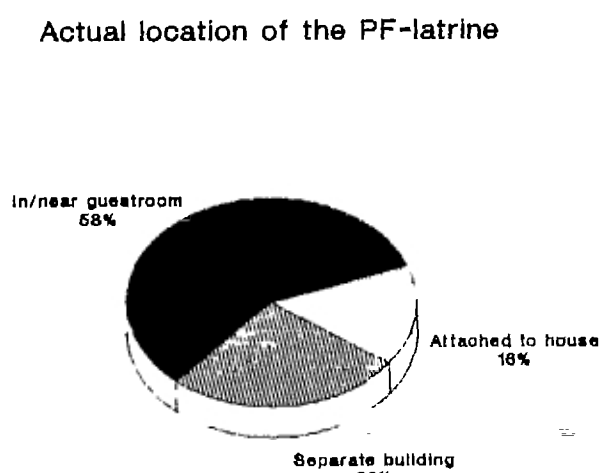

Figure 6. Actual location of the PF-latrine

2.5 The selection of the PF-latrine location: male and female perspectives

Figure 7 shows some interesting variations in the ideas of men and women (both non-owners) about the site for their future latrine. The majority of the men would like to build a separate latrine (53%) or one in the guest room (32%). In contrast the women have the opinion that the most suitable place would be attached to the house (61%), and definitely not in the guest room (only 8%). For women a latrine attached to the house is the most accessible location and this will very likely increase their utilization of the latrine. However, in general these female concerns are not considered in the site selection.

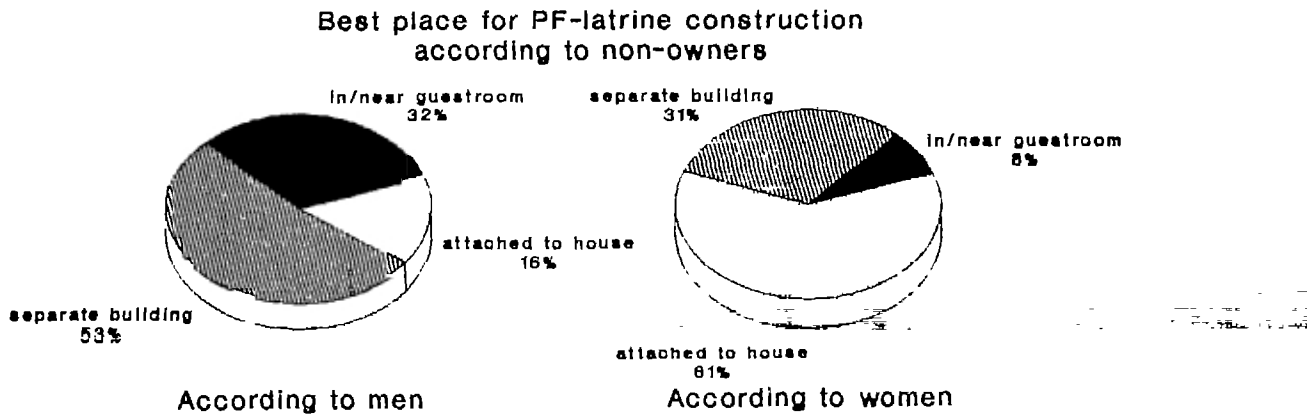

Figure 7. Preference of non-owners (male and female) about the location of the PF-latrine

2.6 Costs of the PF-latrine and its relation with income

It is not easy to assess the exact costs of the PF-latrine. As the PF-latrine is often constructed as a part of a guest room, people could often not give a separate figure. On average the owners said the cost were between Rs.2.000 and 3.000.

People who do not have a PF-latrine but would like one were also asked about their estimate of the construction costs. It is remarkable that these respondents usually estimated the costs of the latrine higher than the owners. The costs were estimated between Rs.3-4000 and some even between Rs.7-10.000.

It seems that the aspiring owners anticipate that the costs of the latrine will be high. This corresponds with the general perception of villagers that the PF-latrine is an expensive facility. People often said:

> "The PF-latrines are for the 'paisa-valah' (money people). We don't have money, how can we build it?".

To some extent the villagers opinion is understandable. In the first place the figures indeed indicate a clear income difference between people with and without a PF-latrine. Figure 8 graphically shows that relatively many owners have a high income, while many non-owners are in the lower income range.

Secondly the construction costs of a PF-latrine can be considerable if it is built as the ideal type; a PF-latrine near or in the guest room that can be used as a bathroom with cemented floor and walls, a good door and roof etcetera.

On the other hand however, non-owners seem to overestimate the costs of the PF-latrine. The actual costs of a simple latrine can be much lower if local materials are used (mud bricks) and if it's constructed as a separate or attached building. The costs can then be reduced to the commode, pipes and a bag of cement (<Rs.1000). But as the construction of guest rooms with a latrine is given preference the PF-latrine construction becomes costly and only in reach of people with enough cash-income.

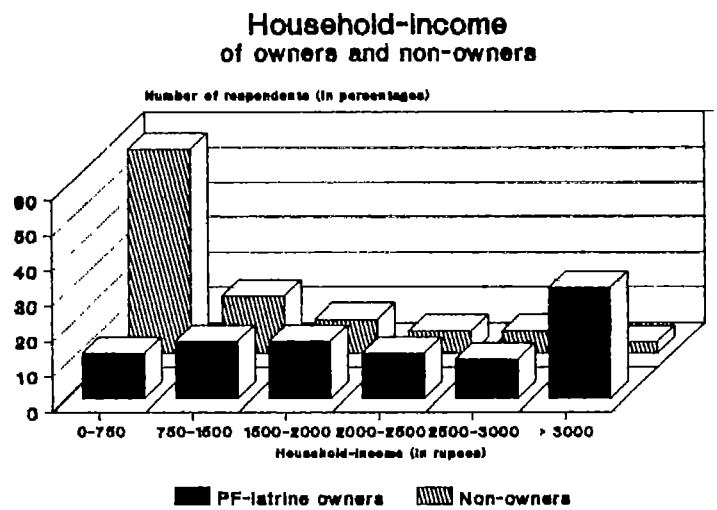

Figure 8. Household income of owners and non-owners

3. THE ATTITUDE OF VILLAGERS TOWARDS THE PF-LATRINE

3.1 The PF-latrine related to status

In the study it was found that PF-latrines are still seen as a relatively new, luxury item from the cities. For some it is therefore perceived as a non-essential thing which is not intended for them. For others this urban connotation is one of the reasons why they want to have a latrine in their home. Generally the PF-latrine is associated with cleanliness, development and progress.

As has been pointed out in section 2.6 many non-owners see the PF-latrine as an item for the people with money. Therefore the latrine is a sign of wealth and prosperity, particularly to those who cannot afford one. People in villages are aware of who owns a latrine and they can easily point out the households were one has been built. For these reasons the PF-latrine adds to the status of the owner and this can be an incentive for some people to build one.

In villages were many people have already built a latrine, it works the other way round. Those people who do not have a PF-latrine loose some of their status. Particularly people with a cash income are expected to have a latrine. In this situation the construction might be motivated by social pressure.

3.2 The PF-latrine, for guests only?

When people were asked for whom they built the PF-latrine more than 60% of the PF-latrine owners responded they did so primarily for guests (see figure 9). This corresponds with what was shown in section 2.4, where we have seen that the majority of the villagers have built the latrine in the guest room. The status of the PF-latrine is very much related with the status of having a guest room. Several informants explained that the PF-latrine is an absolute must for guests.

> "When guests come they don't know this area, so where can they go? It is a must to have a flush for them."

Other villagers said that they feel embarrassed if somebody comes to visit them and asks for a latrine which they cannot offer. A man in Shotkhar told us:

> "When a guest came from Peshawar I felt so ashamed not to have a latrine that I started to construct one. A year after that visit the latrine was ready".

As we can seen in figure 3 in Annex 3 more than 30% of the owners have more than one latrine. Whereas the first latrine is built in the guest room the second latrine is either attached or separate building near the house. This shows that preference is given to the sanitation needs of the guests. Only in the second place proper and easily accessible sanitation is arranged for the household members. This is also illustrated by the fact that in houses with one latrine only 15% are built attached to the house. (See also chapter 2.4 and 4).

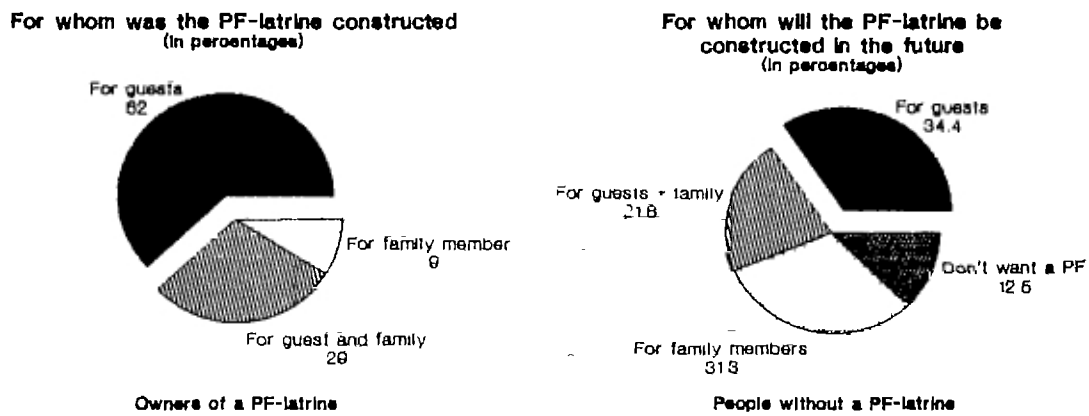

Figure 9. For whom the latrine is intended

3.3 Attitude of aspiring owners towards building the PF-latrine

i) INTENTION TO BUILD THE LATRINE FOR FAMILY MEMBERS

A large majority of the non-owners would like to build a PF-latrine, only 12.5% of the respondents said they are not interested to build one[5]. It is interesting in figure 9 that more than 30% of the non-owners have the intention to build the latrine only for their household members. Less than 10% of the owners in contrast, answer they have built their latrine for family members only. Therefore the attitude of non-owners is more focused to the household than the actual practice of the owners. Nevertheless the attitude of the non-owners might easily change once they have built the latrine (see 5.1).

---

[5]. Therefore in this text the term non-owner refers to aspiring or would be owners.

ii) EXPECTATION TOWARDS THE GOVERNMENT

People without a PF-latrine expressed that lack of financial resources withholds them from building a latrine. During indepth interviewing a possible second reason was found. Many villagers see water supply, and to some also extent sanitation, as a government responsibility. In small towns like Chitral, Booni, Ayun and Drosh, the government or other agencies have supported the latrine construction in the past, often with a lot of free input. People who were not involved, particularly those who are living in the surrounding of these small towns have build up an expectation that the government might do something for them in the future. These people therefore just wait with building a PF-latrine until it is given to them free of cost.

The free gifts of certain projects probably also influences the willingness to contribute (in cash or kind) to a future implementation project. In the small KAP-questionnaire people were asked what they would contribute to a latrine project. It was very clear that if an implementation project was working in their village people expect all materials for free. Some respondents were not even ready to provide local materials such as stones and wood. Generally the people were willing to provide the labour to dig the soak pit and construct the superstructure. However for some older or single couples this was even difficult.

3.4 Positive comments about the PF-latrine

In the structured questionnaire both the owners and the non-owners were asked to mention three good characteristics of the PF-latrine. The respondents gave a wide range of answers[6]. However three categories of answers were by far most common; purdah, convenience and cleanliness. The category 'good against disease' scored only fourth. It was found that the answers of owners and non-owners were not very different.

* PURDAH[7]

The majority (35% and 33%) of male and female owners mentioned purdah as a good quality of the PF-latrine. It is extremely shameful to be seen by other people while going to and sitting in

---

[6]. Not all the respondents gave three answers. Therefore the figures presented are calculated percentages of the 129 answers of owners and of the 77 answers given by non-owners. The percentages are given between brackets the first number refers to owners, the second to response of non-owners.

[7]. Both in Sunni and Ismaili communities in Chitral purdah is relatively strict compared to some parts of the Northern Areas.

the fields. Due to the increased number of households it is becoming more and more difficult to keep purdah. Purdah was also mentioned in relation to guests. The guests should not go to the open fields where they can be seen by others.

* CONVENIENCE

Of the owners and non-owners respectively 28% and 16% stressed the comfort of the PF-latrine. The villagers related convenience to the fact that household members do not have to go outside in the cold, rain or snow. People specially mentioned that it is easy for sick and old people, and for use during the night. None of the respondents mentioned any other details about the comfort (or discomfort) of using the PF-latrine.

* CLEANLINESS

By 'cleanliness' the villagers meant that there is less indiscriminate disposal of excreta in the village. There are no faeces and smell because it is properly disposed of in the latrine. Cleanliness was not mentioned in relation to diseases. It was said that in the PF-latrine you do not have to look for a clean place like you have to do outside, the defaecation place is always empty. Cleanliness was mentioned by 17% and 23% of the respondents respectively.

* PROTECTION FROM DISEASES

Only in 10% of the answers people mentioned protection from disease. These people said that by not going in the fields the people protect themselves from disease. The reason why they can get diseases and how they protect themselves is difficult to express for the villagers. Most of the people just mentioned that less disease will come. However a few women could explain the link between faeces on the fields, contaminated water and diseases.

During the interviews and discussions many other comments were made that provide insight in the attitude of the villagers towards the PF-latrine. Some of these remarks might usefully be considered in health education and motivation sessions and in any future implementation proposals.

- Clean animals; it was said that by using the PF-latrine the animals cannot eat human faeces and that their meat and milk will be clean.
- Use of water; some people said that the PF-latrine is good because there is water inside. It is therefore easy to perform 'wazzu'.
- No need of stones; a common practice is to use stones for anal cleansing. Some people said it is good that in a

PF-latrine one can use water or toilet paper[8]. It was also said that people don't need to look for stones and therefore need not worry that somebody else has already used the stone before.

8. We indeed observed that toilet paper was available in many villages, albeit this was most of the time in the latrines intended for guests.

4. USE PATTERN AND THE MANAGEMENT OF THE PF-LATRINE

4.1 Reliability of information about latrine use

In the first rapid assessment of the sanitation situation in Chitral the WSH&HS project found that many people do not regularly use their PF-latrine. During the indepth study therefore, one set of questions was asked about the use patterns of the household members. People were asked whether children, women and men were 'always', 'sometimes' or 'never' using the latrine. For the latter two answers it was also asked why they were not.

Getting reliable answers to these questions was not very easy. In most cases people responded freely but sometimes the question was embarrassing for the respondent and the assistants alike. The response to the question might have been influenced by the fact that the answer is socially desirable. This is the case for the answers 'we always, or sometimes use the latrine'. It is clear that some villagers gave this answer while they actually did not use their latrine. In reality the calculated percentages of these answers will be lower. On the other hand the reliability of the answer 'we never use the latrine' will be very high because it is an undesirable answer to give. The calculated percentage for this answer will therefore be higher in reality.

To check the information given in the interview, the team members asked if they could visit the PF-latrine. Observations confirmed the assumption that people 'upgrade' their answer about the frequency of use of the latrine. In many cases it was observed that PF-latrines were not regularly utilized. Indicators for non-use were: absence of a container to store water, no lota or jug, no water available for washing or flushing or a dry p-trap. It also happened that the PF-latrines were used as store rooms for heaters, vegetables, bedding or wood. Therefore, simply counting the number of PF-latrines cannot be used as a reliable indicator to assess the actual number of users.

During the indepth study it became clear that the utilization of the PF-latrine was related to its location. Generally the PF-latrine is not used by the family members when it is located in or near the guest room; it is used more regularly when it is situated attached or separate from the house.

4.2 Use patterns when the latrine is near or in the guest room

i) FIGURES ABOUT THE LATRINE IN THE GUEST ROOM

In section 2.4 it was pointed out that 60% of the PF-latrines are installed in or near guest rooms and that the latrine can also be used as a bathroom. It is very striking that a very high percentage (79%) of the people who have their PF-latrine in this location admit that they never use it themselves. They only want to keep it for guests.

ii) THE GUEST ROOM IS PART OF THE MALE DOMAIN

The guest room is foremost a part of the house that is used by the men. The room is separated from the old house to avoid guests seeing the courtyard of the house. This courtyard can be considered as a female area, while the guest room is more part of the male domain. The guest room is for most of the time only used by the men to receive guests.

The male members of the household often decide whether other members can use the latrine and bathroom or not. As the guest room is perceived as a male area the women often do not like, or are not even allowed to use it.

The men feel the responsibility for the guest room and the latrine but the work of cleaning and maintaining is done by other household members. When for example guests arrive or water is finished, a child or one of the women is ordered to get a bucket of water. Cleaning is done by women usually after men order them to do so.

iii) USE OF THE GUEST ROOM LATRINE BY THE HOUSEHOLD MEMBERS

Of the few household members that use the guest room latrine, it is not surprising that men are more regular users than women. Still the majority of the men say they also use, and actually prefer, to use the open fields, even if a latrine is available.

Children are often not allowed to use the latrine. The fathers believe that they don't know how to use the latrine properly.

> "They make the latrines dirty and damage the latrine by throwing stones in it. They also might use pieces of wood or maize stalks that will cause problems".

It was mentioned that children often go outside near the houses or inside the compound. Children faeces were often observed near the houses.

The women are often also not permitted to use the latrine. The men and sometimes the women themselves want to keep the latrine clean and ready for guests. Another factor which holds them back from using the PF-latrine is purdah. The women themselves said it would be very shameful for them to use the latrine and guests could see them coming out of the latrine.

4.3 Use patterns of separate and attached PF-latrines

i) FIGURES ABOUT THE PF-LATRINE IN OTHER LOCATIONS

In the case of the latrine constructed as a separate building almost 50% of the respondents say that they always and 37% sometimes use it. 15% of the people admit that they never use the PF-latrine.

In the case of the latrine which is built attached to the house 34% of the respondents say they always use it and 34% say they sometimes use it. 32% disclosed that the household members never use it.

Again it has to be realised that the percentages of users are probably lower. The 50% and 34% figures for 'always' users are 'maximum' figures. In reality this number will be lower. Likewise the number of 'sometimes' and 'never'-users will be higher. It should also be kept in mind that 'sometimes' is an inexplicit category. At first the team worked with a fourth category; 'regularly' but during pretesting of the questionnaire it turned out to be confusing for people and was therefore dropped.
Figure 9 on the next page shows the percentage of household members that use the latrine related to its location.

ii) THE PF-LATRINE IN OTHER LOCATIONS AND THEIR USE BY WOMEN:

Most people with one latrine prefer to build it in the guest room. But if they choose to build a separate or attached latrine it is often near or in the compound of the house. Also in houses with more than one latrine, the second latrine is constructed in this location. The latrine near the house is not only more accessible for all members of the households it is also considered more a part of the female domain. It is therefore easier for women and children to use the latrine.

Some women said that they use the PF-latrine more often than the men because they are at home the whole day and the men are not. Women accept more responsibility for these latrines without being instructed by their men. Water is often more readily available

because other domestic water has also to be fetched. However in some households with a separate latrine it is still the men who authorize who can use the latrine. In several cases the team members found that separate latrines were locked and the keys were with a male household member who was not at home.

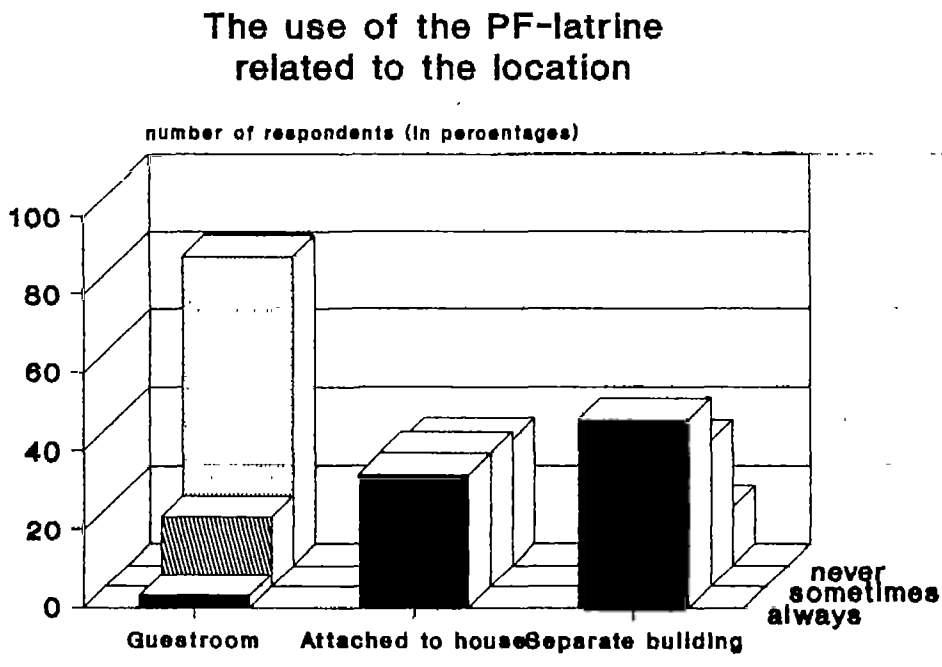

Figure 10 The use of the PF-latrine related to its location

iii) UTILISATION OF THE PF-LATRINE BY CHILDREN:

In some households, children are permitted to use the PF-latrine. The age when they start using the latrine varies. Some mothers explained that they teach their children to use the latrine when they are around 3-4 years old. But other people mentioned that the children start using it when they are 9-10 years old. In one house it was observed that next to the usual PF-latrine, a smaller latrine had been built for children.

iv) UTILISATION OF THE PF-LATRINE BY OLD PEOPLE:

Although the PF-latrine is said to be convenient for old people, some older men and women didn't like using the latrine. They still didn't like the idea of relieving themselves in a small room in or near the house. In contrast some other old men said:

"We have got old enough to use them now"

5. PROBLEMS WITH THE PF-LATRINE

5.1 The discrepancy between knowledge, attitudes and practices.

Many people know about the PF-latrine and are convinced that the PF-latrine is a good system. People have a very positive attitude towards the latrine as they think it is good for purdah. The villagers are also aware that the PF-latrine is good for cleanliness and convenience (see chapter 3.3). In many cases people claim they are regularly using the latrine. Also non-owners value the system highly and said that they would like to have a PF-latrine.

This positive attitude, however, is not reflected in the actual use of the latrine. In many cases, latrines were observed not to be in use. After probing and observation it was found that many latrines are not used at all or only very occasionally. A large percentage of the latrine owners want to reserve the latrine for guests. It seems there is a discrepancy between the positive attitude towards the PF-latrine and the actual practice of using it. This is sometimes called the KAP-gap; even if people have the knowledge and the attitude it does not necessarily mean they practice accordingly.

In order to understand this discrepancy it may be noted that the intention to practice something, here the use of the latrine, will not be influenced by knowledge and attitude alone. Social factors such as values and norms shared by the community can also influence a persons intention. A social norm for example is the fact that the latrine has to be clean and free in case guests might come. Women often said: "When the guests will see us coming out of the latrine what will they think"? The idea that other people will see them using the latrine is considered as inappropriate and not hospitable. Other social perception that inhibits latrine utilisation are the facts that the latrine is for guests, 'money people' or only for the men in the house.

Beside the intention to have a certain behaviour it must also be practically possible to perform an intended behavior. This is influenced by physical circumstances and economical conditions. Problems with freezing and water shortage for example makes it impossible for the people to use the PF-latrine all the time.

In Chitral the discrepancy between knowledge, attitude and practice is obvious. Although people have a positive attitude either their social norms, values and perception, physical factors, economical conditions or a combination of these factors may hold them back from using the PF-latrine frequently.

5.2 Why do the people use their latrine on a limited scale

As is made clear throughout this report villagers do not 'always' use their PF-latrine, in other words they often do not use their latrine themselves. The reasons people gave for using it on a limited scale varied, but mainly concerned the costs, the unfamiliarity with the relatively new system and the natural circumstances. The inhibiting factors, perceptions and constraints about the PF-latrine are discussed below.

* IT IS A COSTLY ITEM TO CONSTRUCT

As is said before in chapter 2, the PF-latrine is seen as an item for the people with money. For people who don't have a regular cash-income it's difficult to afford the construction of a PF-latrine. Therefore the latrine is a valuable item which is looked after with care. The male members lock the latrine or don't permit children and women to use it.

* USE OF TOILET PAPER IS EXPENSIVE

Instead of stones or mud lumps people use water and/or toilet paper as cleansing material in the PF-latrine. It was found in the survey that the costs of toilet paper is considered as a factor for not always using the latrine.

* HOUSEHOLD MEMBERS ARE NOT SUPPOSED TO USE IT

The majority of the people have constructed the PF-latrine for guests and don't use the latrine themselves. Most of the latrines are therefore constructed in or near the guest rooms. These latrines are part of the male domain and are not easily accessible for women and children.

* DEFAECATION IN ONE PLACE IS NOT PART OF TRADITION

People are mostly used to defaecate in the open fields. To relief in one place was, and to some extent still is, considered as odd. Several old people said that they find it strange to go to a small room, relief themselves and leave it there (chapter 4.2)

* FEAR OF FILLING UP

Usually PF-latrines in Chitral have one soak pit (chapter 2.2). Although people in Chitral have a concept that the pit contents are eaten by insects and worms some people fear that the pit will fill up. People said that to lengthen the time that they can use the latrine not all the household members were using it. Particularly in big households (>10 members) it often happens that children and women are discouraged from using the latrine.

* SMELL

The reason people gave for constructing the latrine separate from the house was the fear of smell. It was believed that frequent use of the PF-latrine will aggravate the smell. Hardly any of the users faced any smell problem at the moment though.

* KEEPING THE PF-LATRINE CLEAN

Several female members mentioned a bad thing of the latrine is that they have to keep it clean otherwise it will smell. Not in every latrine a cleaning brush was available. Considering that many PF-latrines are not used regularly the problem of staining the latrine will not be very prominent. In one case where a cleaning problem was identified the woman in the house was a bit confused. She had heard that soap can be harmful for the soakpit.

> "How can we keep the latrine clean if I cannot use soap water?"

* FREEZING PROBLEM

In most of the villages people mentioned that they have problems with freezing in winter. The water in the syphon gets frozen and blocks the latrine or damages the commode. Therefore many people mentioned that they won't use the latrine in winter. Several local ideas were mentioned to overcome freezing.

- Use of a cover: Several times people said that it is a good idea to use a piece of wood, plastic or cloth to cover the commode. In this way the latrine will not get frozen so easily.

- Use plastic in the roof: If a piece of plastic is suspended below put in the roof the temperature will not get so low inside the superstructure.

- The latrine should be built adjacent to the house, then it will not freeze. One idea was to lead the chimney of the bulkhari, the local wood heaters, through the latrine superstructure.

- Use hot water to melt the ice in the latrine. According to men it is not a big problem to heat up water. In winter households try to have a fire burning all day. Some people added that you should use hot water in the night and then cover it.

- Use of a cup of kerosene. A person said that if you put one cup of kerosene per week the syphon does not get frozen.

* PROBLEMS WITH WATER

In areas with a water shortage problem the people mentioned that they didn't use the latrine in times of severe shortage. The women complained that they have to carry heavy pots of drinking water for long distances. They experience this task as painful for their necks, shoulders and backs. Therefore the women gave water collection for the PF-latrine a very low priority. The male members do not recognize this problem of water shortage. They do not think it is so strenuous probably because it is not their task to collect the water.

Other problems related to the PF-latrine:

* BROKEN COMMODES

During transport the commodes sometimes crack or get damaged. But most latrines get damaged when in winter hot water is poured into them. Pieces of the ceramic and sometimes the complete commode can break. Particularly with the cheaper commodes this happens and people therefore prefer to buy good quality and thus more expensive commodes.

* BROKEN VENT-PIPES

In 10% of the PF-latrines we have seen that the vent-pipes are broken. Since they have been constructed on the backside of the latrine, the pipes are tempting playthings for children. To what extent the broken pipes increase the smell is unknown.

* FLUSHING PROBLEM

Only a few people mentioned that their latrine was not flushing properly. More common was the complaint that the latrine needed two lota's of water (2-3 liters) for adequate flushing after each use. One local suggestion was to pour the water from the lota from a height of at least three feet. The water has more speed when it reaches the p-trap and then it will flush more easily.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusion

- There is a strong trend towards having a PF-latrine in Chitral. Many people know the PF-latrine and they perceive it as the ideal sanitation system. Everybody would like to have a latrine and according to villagers it is largely a matter of financial resources whether they install one or not. The latrine is a sign of welfare and progress and therefore increases the status of the household.

- 60% of the PF-latrines are constructed in or near guest rooms. In this location the PF-latrine incorporates a bathroom which makes the construction costs relatively high. It is considered as polite and hospitable if a PF-latrine is available for guests. The latrine is generally not used by the household members. Usually women and children are not
→ allowed to use the latrine or bathroom. Men often prefer to go to the field to defaecate. A PF-latrine for the household members is considered of secondary importance. Villagers first want to build the 'ideal type' and rather costly PF-latrine/bathroom for guests.

- A bit over a third of the latrines are constructed as a separate building in the compound or directly attached to the house. PF-latrines located here are more commonly used by the family members. Often these latrines are constructed after the completion of the guest room latrine. Cheaper materials are used in construction and no bathroom facilities are incorporated. Therefore costs are generally lower than the guest room latrine.

- Besides social constraints for not using the PF-latrine (purdah, priority for guests) a number of other important constraints are present that inhibits regular use;
  - physical constraints (water shortage, freezing);
  - managerial constraints (water transport, cleaning)
  - economic constraints (construction costs, broken commode and ventilation pipes, use of toilet paper);
  - and local perceptions (fear that the soak pit will fill up, smell, no habit or training to use latrine).

- During the construction usually a mason is involved. Usual design included a commode, a p-trap, drain pipe and a ventilation pipe. The usual disposal system used with the PF-latrine is a single soakpit. Septic tanks are not common. The cost of the PF-latrine ranges between Rs 2-3000. Non-owners estimate the costs of a PF-latrine higher.

6.2 Recommendations

1. SIMPLE TYPES OF PF-LATRINES SHOULD BE PROMOTED

In a future implementation programme it is suggested to promote different types of PF-latrines. Also simple and cheaper PF-latrine designs should be promoted, for example by suggesting cheaper materials for superstructures.

-> Villagers should be given a number of options from which they can choose the one that suits their socio-economic circumstances. It should be made clear to villagers that it is not compulsory to build an 'ideal type' latrine with stone walls, a wooden roof and plastered walls but that also cheaper alternatives can be equally appropriate.
(See also issue paper 2 on pit latrines for a number of simple and cheap sanitation options).

2. TESTS ON TECHNICAL ASPECTS OF THE PF-LATRINE

Considering a number of physical, economic an managerial constraints it is suggested to do a number of -integrated- tests on technical aspects of the PF-latrine. This research effort should include monitoring and tests of ventilation pipes and smell, p-traps and flushing and commode convenience.

-> Procure the following test material:
- all the different commode designs that are available in the local market
- different p-traps
- different ventilation pipes

3. VENT-PIPES: ARE THEY REALLY NEEDED?

Many ventilation pipes are too short, broken or not installed. Yet very few people complained about smell. The question arises: is it really necessary to install a vent-pipe in a PF-latrine?
In the summer of 1994 smell, fly and mosquito problems should be monitored. Study possible improvements of the ventilation pipe (using a stone construction) or devices that stop smell such as a lid or cover on the commode, ventilation of the superstructure and possibly natural flagrance enhancers.

-> do more literature study on ventilation pipes
- develop a research plan for testing different materials for ventilation pipes, possible improvements and the use of other devices.

4. SUGGESTED LOCATION OF VENT-PIPES:

If it is confirmed that ventilation pipes are effective in smell control it is suggested to install the pipes in a protected way. In over 10% of the PF-latrines the ventilation pipes are broken by playing children or due to the weather. The literature indicates that the effect of temperature (sunlight) on the effect of upward air is neglectible[9]. Therefore it is suggested that the ventilation pipes are constructed inside the superstructure.

-> Test the possibilities to construct the pipe inside; for example how the pipe can pass through the roof.
- Make technical drawings

5. EXPERIMENTS WITH DIFFERENT COMMODES (COMFORT, CLEANING AND THE AMOUNT OF WATER REQUIRED FOR FLUSHING):

The different available designs of the commode and p-traps should be studied. Comfort (convenience for different users such as adults and children), cleaning and flushing should be tested. After various tests the project should be able to indicate which commode and what p-trap can be 'approved by the WSH&HS project'. The experience of AKHB for example indicates that a commode with an integral water seal is appropriate in the mountainous environment because they easily damage during transport.

-> Decide about the usefulness of a 'WSHHS project approval' certificate;
- Compare the different designs (4 or 5) for 'squatting performance' (foot stands, size of commode);
- Compare the 'cleaning performance' by looking how easy it is to remove stains;
- Compare 'flushing performance'. Study the amount of water that is required for satisfactory flushing. Look for ways of minimizing water use. As it is indicated that some p-traps dry out or water flows out after flushing (which will cause smell, see page 9) also experiments with different types of p-traps are suggested and possibly with the direct flush; a commode without a p-trap (see page 8).

- Research suggestion:
Put the different commodes on a platform and install a p-trap. Flush an item (piece of wood) with a set amount of water (1 liter) from a certain height. Repeat the test for a set number of times (100). The number of successful attempts to flush the piece of wood will be noted on a pre-designed form. After the experiment it becomes clear

---

[9]. See for example Ventilated Improved Pit Latrines: Vent Pipe Guidelines, TAG Technical Note NO.6 (1981) by B.A.Ryan and Duncan Mara.

which design is most easy for flushing and how much water is needed for satisfactory flushing. The tests can be repeated with different p-traps and change its angle.

6. EXPERIMENTS TO OVERCOME THE FREEZING PROBLEM

Freezing is a big problem in winter and many people cannot use their latrine for several months. To get an idea of the minimum temperatures it is suggested to place thermometers in latrines in three or four high-altitude villages. The local people should place the thermometers inside the superstructure and monitor the minimum and maximum temperatures once a day.

To avoid or delay freezing of the water seal in the water seal of the p-trap, some experiments with covers and kerosene are suggested:

-> Covers can be made of different materials such as wood, cloth or polystyrene and each should be assessed in the effectiveness. The covers need to look modern, attractive and hygienic.
- set up an experiment with different types of covers and the use of kerosene. (In January 1994 experiments started by the WSH&HS project office in Skardu);

A suggestion that is worth investigating is the fact that the concrete around the commode is said to draw the cold. It might be a good idea to use insulation, as for example sawdust, newspaper, straw at the time the latrine is installed. The construction of superstructure should consider thermal properties of the materials used e.g. mud block walls, earth roof and insulated floor might be better than concrete construction and GI-roof. Also it may help to locate the PF-latrines in such a way that sun helps to warm them in daytime and that they are not cooled by prevailing cold winds.

-> Do literature study on the use of insulation
- set up an experiment in the winter of 1994 to look at: the effect of different types of insulation around the commode, p-trap and drain pipe; and assess effect of sun direction and building materials;
- Investigate the characteristics of a fibre-glass commode (developed by the PAK Fibre Glass Industries); assess whether it is less susceptible to damage caused by freezing. (Sub-engineer in Chitral is trying to get information from Karachi).

7. INVOLVEMENT OF MASONS

In every village there are usually many less experienced masons and at least a few well respected masons. In the implementation schemes of the PF-latrines these experienced masons should be involved. They can provide technical information to the implementing agency. They also can be important change agents through whom modifications in construction can be introduced to communities.

8. TARGET GROUPS: WOMEN IN CONGESTED VILLAGES.

Men and women have different opinions about the location of the PF-latrine of the house. In the decision their concerns are seldom taken into account. This discrimination that favours men is hardly justifiable when we consider the following facts:
- Women are most of the time at home, while men are not
- Women have to observe purdah and often they cannot relieve themselves during the daytime

If the latrine is perceived as something for the whole household and if it is built in an accessible place the effective use of the system will very likely increase.

In congested villages the population feels the need for proper sanitation most strongly. Due to population pressure there is a lack of open defaecation places and a growing problem with dirt and smell. Activities of an implementation project in these kind of villages will be most relevant and successful.

-> In implementation programmes it will be essential to involve women in decisions about location of PF-latrine. It is recommended to introduce or implement the PF-latrines through women directly, for example through AKRSP or UNICEF womens' groups. If women are actively involved they might feel that the latrine is also for them and not exclusively a part of the male domain.

9. TARGET GROUPS AND THEIR EXPECTATION FOR FREE INPUT

Up to now a considerable number of people have taken the initiative to build PF-latrines themselves. Nevertheless many other people will not construct a PF-latrines in the near future. Beside economic constraints there is, particularly in some semi-urban areas, another reason for people not to construct a PF-latrine. In several villages in Chitral the population has the expectation that latrines should and will be provided by the Government or a NGO.

-> A future implementation programme should not give any free input but concentrate on motivation, technical advice and perhaps help with easy access to inputs (for example by subsidizing transport). People must be motivated to start improving their own situation in the community. PF-latrines that are handed out for free will not lead to a profound change as these latrines will be very likely reserved for guest.

10. HEALTH EDUCATION

Before any implementation programme can start, health education sessions focused on men, women and children should be held.

-> Use participatory methods in which the villagers will be made aware of the potential heath benefits of latrines.
- Health education should include demonstration of how to use the PF-latrine. Explanation about squatting, using water, flushing.
- Develop a participatory health education session, including materials, methodology and manual.

ANNEX 1. QUESTIONNAIRE: FOR FLUSH LATRINE OWNERS

Village name : Date :
Name respondent :
Total number of pour flushes in the village:

---

1. Who built the first PF-latrine in the village? When?
   Name: [19..]

2. In the time that Mr....(answer Q.1)... built his latrine, what did you think about it or what did the people say?

3. How many latrines are in your house ? [..]
   When did you install the (first) PF-latrine? [19..]
   (second PF-latrine? [19..]

4. How did you know about the PF-latrine at that time?
   (who first told you, where did you get the idea to build it?)

5. Did you build the (first) PF-latrine for guests or for yourself?
   guests [ ]
   ourselves [ ]
   both [ ]

6. If more than one latrine, why did the household build them?
   1.
   2.

7. Who constructed the latrine(s)?
   [ ] the household members
   [ ] a mason
   [ ] the household members with the help of the mason
   [ ] a contractor
   [ ] ....

8. How many rupees did you spend on building the latrine(s)?

9. Do the family members use the PF-latrine?
   Yes [ ]
   No [ ] continue with question 13

10. How often (always, sometimes and never) do children, women and men use the latrine?

	ALWAYS	SOMETIMES	NEVER
CHILDREN			
WOMEN			
MEN			

11. Why do children, women and men use it ..... ?

12. From what age are children using the PF-latrine?

13. Can you tell me three good things about your PF-latrine?
    1.
    2.
    3.

14. Can you tell me three bad thing or problems with your PF-latrine?
    1.
    2.
    3.

15. If not yet mentioned ask about the following problems:

    - freezing problem?

    - water shortage problem?

    - problem with flushing?

    - smell problem?

16. What can you do to solve problems with the PF-latrine? (ideas, suggestions and improvements)
    1.
    2.
    3.

17. What is the approximate monthly cash income of your household?

0-750 751-1500 1501-2000 2000-2500 2500-3000 above 3000

Ask if you can see the latrine:

- Where is the latrine located?
- What is the type of pit + size? ft. wide and ft. deep

- Is there a ventpipe present? yes / no
- When do the users flush? (Every time, few times a day)
- How much water do they need for flushing?

! Make observations about the latrine
Does it look clean? Y / N
Is there any smell? Y / N
Other observations:

ANNEX 2. QUESTIONNAIRE: PEOPLE WITHOUT POUR FLUSH

Village name : Date :
Name respondent :

---

1. Do you know about the PF-latrine?
   No [ ]--> Explain and then go to next question
   Yes [ ]--> Who told you? Where did you see?
   1.
   2.

2. Why do you think other people have built a PF-latrine?
   1.
   2.
   3.

4. Would you like to build a PF-latrine?
   No [ ] go to question 6
   Yes [ ] go to next question

5. Do you want to build a PF-latrine for guests or for yourself?
   guests [ ]
   ourselves [ ]
   both [ ]

6. Why do you not construct a PF-latrine?
   1.
   2.

7. Can you tell me three good things about a PF-latrine?
   1.
   2.
   3.

8. Can you tell me three bad things about a PF-latrine?
   1.
   2.
   3.

9. What is the best place for constructing a PF-latrine?
   (in, attached or separate to the house/guest room) and why?

10. If a latrine project was working in this area how much can you contribute?
    [ ] labour work
    [ ] mason charges
    [ ] commode and pipes
    [ ] local materials (sand and stones)
    [ ] cement

11. How much do you think that a complete latrine will cost?

12. What is the approximate monthly cash income of your household? Put a circle.

0-750 751-1500 1501-2000 2000-2500 2500-3000 above 3000

ANNEX 3

PF-LATRINE AQUISITION CURVE