

## *Chapter 7: Implementation*

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**FIGURE 7.1: FIELD WORKER BUSY WITH AN INDIVIDUAL DIALOGUE SESSION**

## 7.1 BACKGROUND

*Ingrained ideas and behaviour patterns cannot be changed all at once* (Burkey, 2000:69).

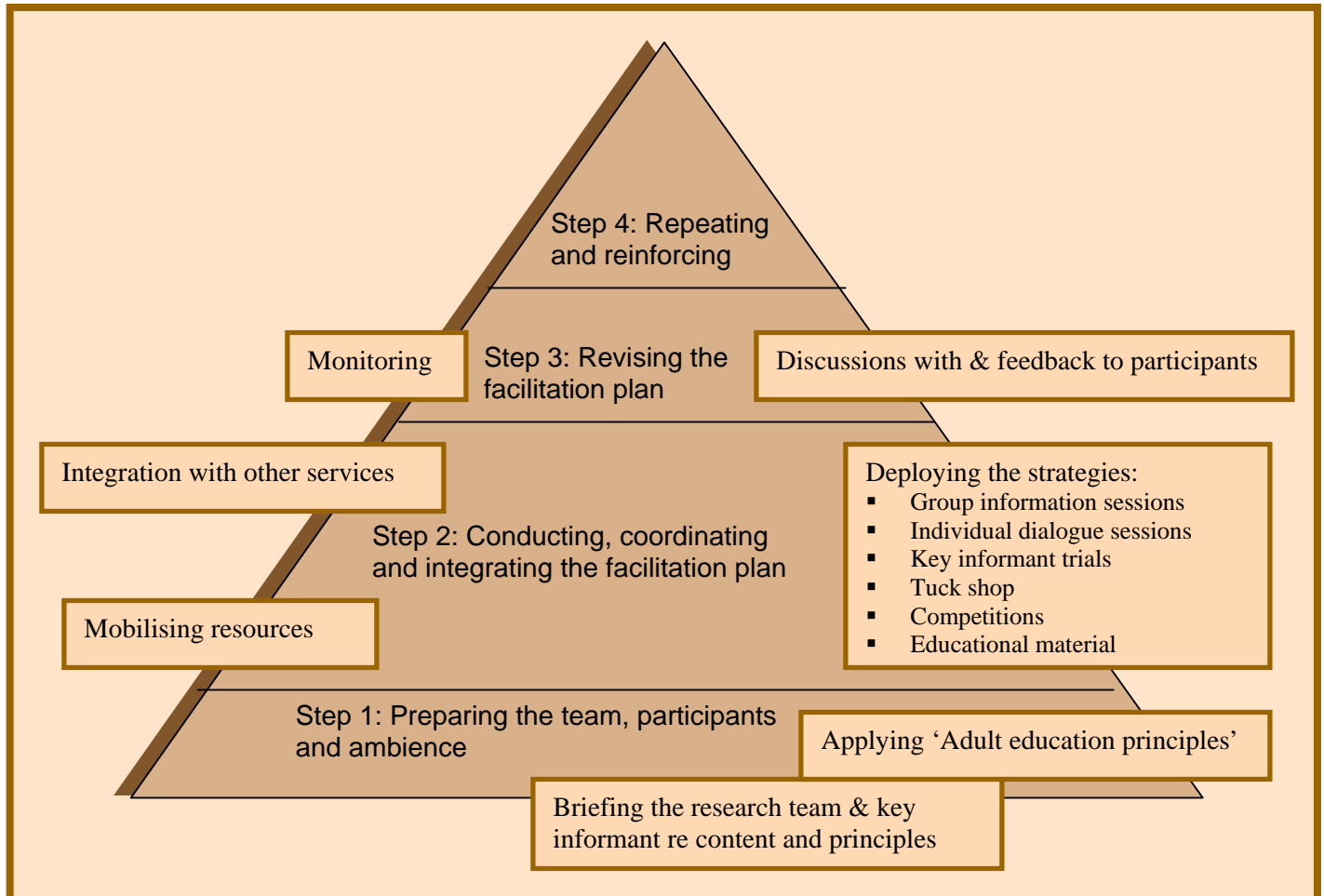
This statement certainly also applies to hygiene and sanitation practices. Behavioural change takes time and change is a gradual process. The ideas and behaviour of both the participants and the researcher will most probably change over time. McKenzie and Smeltzer (2001:85) wrote that if those in the target population are going to adopt and maintain a health-enhancing behaviour to alleviate a health problem or concern, they must first be aware of the health concern. Second, they must expand their knowledge and understanding of the concern. Third, they must attain and maintain an attitude that enables them to deal with the concern. And fourth, they need to possess the necessary skills to engage in the health-enhancing behaviour.

These four aspects were incorporated in the outcomes, when objectives for the implementation phase were set. The objectives for the implementation phase (as outlined during the research design in Chapter 3) were:

- Preparing the team, participants and ambience to enhance learning (including briefing of the research team and the recruited key informant in terms of content, messages to be conveyed and adult education principles to be applied)
- Conducting, coordinating and integrating the facilitation plan and action strategies (including the mobilising of resources, application of strategies and the integration of the program with different other services in the area like social services, school feeding, health care, growth monitoring, agricultural extension, water safety, public works)
- Revising the facilitation plan according to the outcomes of monitoring activities and giving feedback to participants
- Repeating and reinforcing the messages until a satisfactory effect has been reached.

The outcome of the preparation for transfer of learning was to make the research team and the key informant *aware* of the hygiene and sanitation situation on the farm and how it would be addressed. Increased *knowledge and understanding* of hygiene and sanitation was the outcome of step 2. The participants should also have a positive *attitude* towards behavioural change and the necessary *skills* to change their hygiene and sanitation practices after the facilitation plan was revised and adapted (step 3).

The implementation phase with its various activities and outcomes are summarised in Figure 7.2. Implementation was done in four consecutive steps, as depicted within the triangle. The various activities are presented in the rectangular blocks.



**FIGURE 7.2: SUMMARY OF IMPLEMENTATION ACTIVITIES**

These four steps will now be discussed in further detail.

## 7.2 PREPARING THE TEAM, PARTICIPANTS AND THE AMBIENCE

This step included the preparing of the research team and the recruited key informant in terms of content and messages to be conveyed. The content and messages were already planned (see the facilitation plan, 6.6.2). Personally I felt that this was not sufficient. I firmly believe that interventions will be more successful if we focus more on the way that content and messages are communicated. A set of educational principles was needed that could be applied to interventions.

Because the target group was all adult females, this set of principles was derived from theories on adult education (De Beer & Swanepoel, 1996:11-17; Gravett, 2001:35-50; Green, 2002; Merriam & Caffarella, 1999:302). A constructed set of principles (Green, 2002) was adopted in order to enhance communication and learning. These principles are categorised into those applying to the **adult learner**, the **learning situation** and the **learning process**.

In terms of the **learner** (referred to as the participant in this study), the following aspects were secluded: *experience, needs, motivation, proficiency* and *concern*. *Experience* underlies all learning. Prominence was placed on techniques that tap into the experience of the participants, such as group discussions and problem solving activities. Experience can also have a negative effect on learning by hindering the accepting of new ideas and behaviours. Being sensitive towards the participant's current situation was therefore of utmost importance. We were especially sensitive when the various hygiene and sanitation messages were transferred. We have also assisted participants in becoming aware of the *need* to know, understand and apply these new practices. Certain needs were identified (see Chapter 5). These were translated into felt needs with the help of the key informant during group discussions.

Coupled with the principle of needs is the participant's motivation. Although the participants were treated with external motivators such as incentives and meals, more potent motivators were to assist them in creating a desire to improve their current hygiene practices and sanitary conditions by focusing on health and dignity aspects. Regarding the *proficiency* principle, I firmly agree with Knox (1986:15) that all adults have the 'capability to perform satisfactory if given the opportunity'. Implementing the strategies of competitions and support of the local tuck shop created opportunities. A 'teachable moment' occurred with the birth of a baby, which was used to demonstrate the importance of hygiene and sanitation and the link to children's optimal growth. The last principle that relates to the adult learner is the *concern* that they might have about their ability to learn sufficiently. These concerns were underpinned by adjusting the physical setting to make the participants feel special, by maintaining a slow rate, providing frequent comfort breaks and by generally being sensitive.

The particular *ambience* as part of the **learning situation** was adjusted by making the participants feel at ease, accepting them and giving them freedom of speech. I also treated them with respect and gave support when necessary. Other aspects of the learning situation are social roles and learning styles, which did not particularly receive any special interest in this study.

The **learning process** involves activities like *construction of meaning, interaction, participation, liberation, self-directedness* and certain *responses*. Activities such as games were included to stimulate *cognitive activity*. During the group discussions, *interaction* and *participation* were encouraged. I tried to listen to and understand the opinions of the participants and fostered a spirit of critical reflection, contributing to the *liberation* and empowerment aspects of the learning process. *Self-directedness* is not a natural characteristic of adult learners. It can rather be seen as a process of voluntarily engaging in a learning experience (Cranton, 1992:55). In this sense, self-directedness was achieved, because participants only engaged in the planned activities on a voluntarily basis. *Responses* that would result in learning were encouraged, such as to let the participants be reflexive (practice problem-solving) and to let them take part in experiential learning (to go home and try out the new practices learned).

### 7.3 CONDUCTING, COORDINATING AND INTEGRATING

*Interventions can only be effective when fully integrated into a broader program with well-defined strategies for communication* (Andrien, 1994).

#### 7.3.1 Mobilising resources

The actions of implementing, coordinating and integrating called for the mobilising of resources. The resources that were used are presented in Table 6.1. This action refers to all the arrangements that needed to be employed. For each expedition to the research site (Oranje farm), I had to make the following standard arrangements:

- Setting a time that suited all the members of the research team
- Organising for the necessary funds to be allocated and made available
- Getting permission from the farm owner
- Preparing documents and visual aids needed for the information sessions
- Arranging accommodation, transport and food for the research team
- Buying incentives, prizes and tokens of appreciation.

When arriving at the farm, the most important resource to activate was the participants. The field worker was assigned this particular task, mainly because she could speak the local language. She

has a very sparkling personality and usually succeeded in the task of getting the participants together or setting-up appointments. Local venues were used for gatherings.

At the end of each visit, a token of appreciation, relevant to that particular part of the intervention and to the local cultural context, was offered. These included fresh vegetables, cleaning agents and disinfectants or toys for the children. The participants were also treated to a meal, tea or cold drinks and biscuits. These actions were incorporated as an attempt to encourage the participants and to keep them motivated and enthusiastic. It also reinforced the team spirit and the shared ownership of the intervention.

### **7.3.2 Deploying the strategies**

Several strategies at a time are more effective than one alone, said Curtis *et al* (2000:29), therefore six strategies were eminent, which formed the core of the facilitation plan. These strategies are discussed in further detail.

#### **7.3.2.1 Group information sessions**

Information-giving and listening activities were balanced with discussion and internal processing. Time and space were allowed for participants to *process* the received information by giving them frequent breaks and physical activities to prevent them from getting overwhelmed. The *pace* was balanced in order to avoid passivity and boredom but be sensitive to fatigue. Much has been said about *participation* in this study. Although a very important issue, participation was never forced. Some people do learn more from watching and listening. *Norms and boundaries* were set regarding the direction of discussions. *Good sense and judgment* were used in the relationship with the participants. A strong sense of authenticity carried over respect and fostered communication and learning (Dirkx & Prenger, 1997:46).

The participants were invited to several information sessions on various occasions. These gatherings were held either in the school classroom or in a close-by conference room. The first session was in the form of a mini-lecture, however, it was done in a very informal way, encouraging participation and feedback from the group. Information regarding the existence and spreading of germs were introduced. A slide-show was prepared as visual aid. None of these people has ever seen a slide-show and it was therefore experienced very positive and informative. A game was introduced to visualise the spreading of germs. A ball covered with glue and glitter was passed around. The glitter represented germs. As the ball was passed, glitter stayed on their

hands. They could visualise the spreading of germs in that way as well as the difficulty of washing it off. Glitter usually does not wash off easily!

An activity sheet on domestic hygiene (Addendum E) was also used as an instructive tool. This tool showed a drawing of a person preparing food in a kitchen. Certain bad hygiene and sanitation practices and conditions were illustrated, which were:

- Presence of a cat in the kitchen
- Person smoking while preparing food
- Open tin
- Presence of a mouse in the kitchen
- Overloaded dustbin with flies
- Raw chicken thawing on a cupboard
- Food boiling over on the stove
- Drippings on the floor
- Mixing fish and raw vegetables
- Dirty kitchen cloths and clothes.

The activity was to find ten 'mistakes' in this drawing, relevant to hygiene and sanitation practices. After encircling the mistakes, self-assessment followed, which flowed into a discussion. Throughout the process they were encouraged to verify their findings, make comments, and differ from and teach one another. Each mistake was discussed. The discussion that followed showed that most participants had a good idea of what sanitation practices in a kitchen should be. The activity sheets were collected and the items (mistakes) ranked in terms of frequency of correct reporting (see Box 8.4). Assessment of the activity sheets showed that eleven of the participants (91%) scored 50% and more on the activity sheet; five participants (42%) scored 80% and more; three participants (25%) scored 100%. During the discussion, more attention was paid to the lower reported mistakes. It became apparent that the dirty kitchen cloth and clothes were not that clearly illustrated on the drawing, which could explain the low reporting. They were ignorant about the reasons why fish and raw vegetables should not be prepared on the same surface and with the same utensils. The drippings of food on the floor did not bother them, because they reported intentions of cleaning it up after food had been prepared.

### 7.3.2.2 Individual dialogue sessions

In the context of this study, dialogue sessions referred to individual visits on the household level, discussing the implementation of the messages in an unstructured, informal way. Dialogue is a key notion in collective research techniques and PAR in general, given that participation is perceived in terms of a 'continuous dialogue' (Babbie & Mouton, 2001:327). Through this dialogue sessions, participants were assisted to develop new knowledge by learning from their own reality and specifically by learning to critically analyse their own particular situations and problems regarding hygiene and sanitation. These dialogue sessions were chosen as a strategy because dialogue can ensure that participant and researcher will search together for possible solutions to nutritional problems (Babbie & Mouton, 2001:328). It also reinforced the messages aimed at changing the behaviour of the group (Andrien, 1994).

The dialogue sessions were held on a separate occasion together with the field worker (see Figure 7.1). Emphasis was given to the outcomes of the previous information session, regarding the activity sheet that was interpreted and completed. We focused on those 'mistakes' that were reported least (> 75%), which were: raw chicken thawing on a cupboard, food overcooking on the stove, drippings on the floor, mixing fish and raw vegetables and dirty kitchen cloths and clothes.

### 7.3.2.3 Key informant trials

Although this method is the core of a consultative research approach, it is said to be also applicable within PAR (Dicken *et al*, 1997:1.3). This strategy involved a series of visits to the households to encourage the improvement of current hygiene and sanitation practices and conditions. The key informant (Figure 7.3) implemented these trips. These trips were therefore also referred to as key informant trials. The basic process of a fact-finding trip is outlined as follows:

- An initial home visit to gather in-depth information on identified practices and behaviours
- Analysis of practices to identify experienced problems
- Identifying a short list of recommended behaviour changes that would help to address the specific problems and that would be feasible for the participant. (An assessment and counselling guide was used to identify appropriate recommendations)
- A follow-up visit with the participant to present several options for improving the specific practices under investigation. The key informant also had to negotiate the choice of one or more options that the participant was willing to try during the following month



- Another follow-up visit to find out whether the participant tried the new practice(s), what happened when she did, whether she was willing to continue the practice, and why or why not.

I held several meetings with her to discuss this particular strategy as well as the content part of the trial. She was asked to promote the core messages (as designed in Chapter 6 and incorporated in the personalised poster). She was illiterate, so I had to rely on dialogue, visual images and her memory as training techniques. She visited the participatory members weekly for one consecutive month and asked them to try out the new target practices and improve current conditions. We held several follow-up sessions throughout the 18-month intervention period to discuss the progress of the participants. Feedback from the key informant was used to reinforce the messages and evaluate the process and outcomes (see Chapter 8). It was also incorporated into the constructed model (see Chapter 10).



**FIGURE 7.3: KEY INFORMANT IN FRONT OF HER HOUSE**

#### 7.3.2.4 Tuck shop



A number of affordable cleaning agents were donated to contribute to the existing tuck shop in the community. These items were chosen to encourage good behavioural practices. The tuck shop owner was instructed to sell these items on a non-profit basis. The rationale was that these items should be more readily available to participants and that they could obtain these items at a lowered price (less than 20% as those available from town). Although the shop owner was also illiterate, she was briefed regarding basic business management, for example to keep stock of these items, how to calculate selling prizes and where and how to purchase new stock. She also had a daughter-in-law who had completed her secondary school education, who assisted her in the daily management of this tuck-shop.

**FIGURE 7.4: TUCK SHOP IN THE HOUSE OF THE KEY INFORMANT**

#### 7.3.2.5 Competitions

*Transfer skills by doing, not just talking* (Jenkins, 1998:111).

On three occasions, the pre-school children living in the community were asked to clean up the environment. The child who presented the largest bag filled with rubbish (plastic bags, paper and product packages) received a monetary prize. The children were all very eager to participate. An adult male resident, voluntarily showed them how to burn this rubbish. A competition for the cleanest household was also launched. The scoring guide used during the needs assessment phase was used as assessment form for the competition. The guide was constructed according to good behavioural practices as stated in the literature (see Table 6.2). Each member of the research team assessed the participating households according to the set criteria. Scores were compiled. A maximum of 10 marks could be scored within each category, revealing excellent hygienic practices. More than eight marks were considered to be very good, and between five and seven as good. A score of three or four was indicative of poor hygienic practices, and less than three as very poor.

The team conferred and chose participants to receive first, second and third prize. These prizes included items to encourage the newly adopted, recommended, hygiene and sanitation practices.

### 7.3.2.6 Educational support material

*Make educational messages simple and accessible* (Jenkins, 1998:110).

It is always necessary to use support material, whatever the scope of the intervention, as it serves to reinforce face-to-face communication. The difficulty, however, lied in obtaining an optimum balance between quality and price. The ability of educational materials to promote desired behaviour changes depends on its understandability and appropriateness to the audience. Simple, but concise, inexpensive educational materials that were attractive to both the community members and the researcher was used. The field worker participated in developing these teaching aids, to ensure that it was culturally acceptable. Staff from the Department of Telematic Learning and Education Innovation at the University of Pretoria did the graphic outlay, design and printing (see Addendum B). The material was personalised by attaching a photo of each participant to her own poster.

The focus of the posters was to change key behaviours. Unsanitary practices and conditions (as observed and measured) were translated into understandable messages, which were imprinted on the posters. Being aware of the messages is, however, not the same as understanding and practicing them. As Almedon *et al* (1997) stated: "*hygiene promotion messages and activities are not received by people in a vacuum. Rather they are assessed, accepted, modified, or rejected by people within the context of their existing health concerns and beliefs....*". The participants were therefore encouraged to implement the messages. Some of the community members even agreed to be photographed while they were doing it. While taking pictures, the research team further motivated the participants to sustain these healthy behaviours. We also emphasised the reasons for practicing these behaviours and tried to ensure that the means for doing so were available and affordable. Supplying the necessary building material assisted some members, who did not have the money to construct a toilet, but only after they had done the labour part of it. Another example is that cleaning agents were made available at the tuck shop at a cheaper price.

Each of these seven core summative educational messages is discussed next.

### Message 1: Teach children to use toilets

Latrine ownership on its own is not enough to prevent disease, but had to be associated with safe stool disposal behaviour (Curtis *et al*, 2000:24). This message is also part of UNICEF's 'Facts of Life' stating that all faeces should be disposed safely; using a toilet or latrine is the best way (Appleton & Van Wijk, 2003:19; UNICEF, 2002:95).



In many communities, young children do not use latrines, either because they are afraid or reluctant to use it (Billig *et al*, 1999:16). In this community the young children (<5 years) were using the open veld with no adult supervision whatsoever. No facilities (not even pots) were available to them and neither did they use any cleaning materials.

**FIGURE 7.5: CHILDREN VERY PROUD OF THEIR OWN TOILET**

The key informant initiated the construction of a toilet specifically for the use of small children, as seen in Figure 7.5. This toilet was convenient enough for small children to use by themselves. A photograph of the children using the toilet was not taken for obvious personal reasons, but they did express happiness and relief that they did not need to go to the open veld to defecate anymore. All community members with small children were encouraged to assist their children in using this toilet and to teach children to associate the practice with privacy and also dignity.

### Message 2: Use soap to wash hands

The promotion of soap to wash hand is an intervention that appears to be both effective and feasible (Appleton & Van Wijk, 2003:19; Billig *et al*, 1999:7; Curtis *et al*, 2000:26, UNICEF, 2002:95). However, it is not reasonable to expect the use of soap to wash hands on every conceivable occasion (Curtis *et al*, 2000:25). The cost of soap limits hand washing by the family in many settings. Water availability is likely to have an impact on the frequency of hand washing as well. Accessible, plentiful supplies of water facilitate and encourage better hygiene in general and more hand-washing in particular.

Abundant water is not available on Oranje farm and therefore the emphasis was on washing hands particularly after defecation, before cooking and before feeding young children.

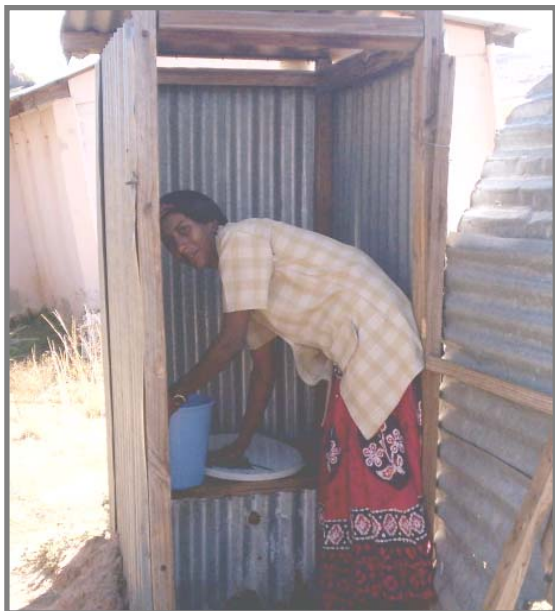


Soap is available in the local shops and is relatively cheap. Alternatives for soap (e.g. ash) were therefore not emphasised. Results from the sanitation knowledge test also indicated that they were not aware that any alternative to soap could be effectively used. No attention was given to the specific hand washing technique (e.g. to rub hands together at least three times).

**FIGURE 7.6: PARTICIPANT IMPLEMENTING MESSAGE 2 (use soap to wash hands)**

### Message 3: Keep toilets clean

Modest improvements in sanitation like clean pit latrines can have substantial effects on health, especially in rural areas with low levels of education (Billig *et al*, 1999:6, 15).



Clean pit latrines in this study meant that there should not be any faeces on the floor, seats or walls, few flies, absence of spider webs, presence of cleaning material (any kind of paper or grass). The message also included that the toilet must show signs of regular use and that it must be functioning (having a door for privacy and a roof for protection from the elements).

Two of the household in the community did not have any toilet facilities. Building material was sponsored and donated after the labour part had been done (digging of the holes).

**FIGURE 7.7: PARTICIPANT IMPLEMENTING MESSAGE 3 (keep toilets clean)**



### Message 4: Wash kitchen cloths every day



This message was included because of the observed filthy kitchen cloths in most households. It was also backed by the study of Larson and Duarte (2001:123) who found that sponges and dishcloths are particularly prone to support high microbial populations. They also stated that high levels of microbial contamination are usually present in the ambient home environment, but which does not necessarily mean that there is an associated risk of clinical infection.

**FIGURE 7.8: PARTICIPANT IMPLEMENTING MESSAGE 4 (wash kitchen cloths every day)**

### Message 5: After washing the kitchen cloths, hang them out in the sun to dry



**FIGURE 7.9: PARTICIPANT IMPLEMENTING MESSAGE 5 (after washing the kitchen cloths, hang them out in the sun to dry)**

### Message 6: Cover drinking water

It is common in hygiene promotion programmes to promote the boiling or disinfection of water for drinking. But boiling water is expensive and there is little evidence that such practices are useful (Curtis *et al*, 2000:27). Abundant water (quantity) has more impact than pure water (quality). The

benefits of better water delivery are numerous. Increasing the quantity of water allows for better personal and domestic hygiene practices, like hand washing, food washing and household cleaning. Raising the quality of drinking water reduces the ingestion of pathogens (Billig *et al*, 1999:6).



Water contamination at the source may represent a greater hazard than contamination in the home. This is because new pathogens coming from outside the home may have more impact on health than pathogens that are already circulating among family members. UNICEF also incorporated this message into the published 'Facts of Life' stating that water containers should be kept covered to keep the water clean (Appleton & Van Wijk, 2003:20; UNICEF, 2002:95).

#### **FIGURE 7.10: PARTICIPANT IMPLEMENTING MESSAGE 6 (cover drinking water)**

Water quality in the home can be improved by using only a protected water source for drinking purposes, by keeping water storage vessels clean, covered and out of reach of young children and domestic animals, by boiling water where practical, or by putting water in clear plastic containers and exposing them to sunshine for several hours (Almedon, *et al*, 1997).

#### **Message 7: Burn rubbish**



*"Safe disposal of all household refuse helps prevent illness"* (Appleton & Van Wijk, 2003:20; UNICEF, 2002:95). No communal or organised municipal disposing system is in place – therefore this message was considered crucial for environmental health. The children play in the area, which could imply a health risk if rubbish is not burnt or disposed efficiently. The message was combined with efforts to cleanup the area (as in competitions), to separate biodegradable items (peels, leftover food) for use as compost or animal feed.

#### **FIGURE 7.11: PARTICIPANT IMPLEMENTING MESSAGE 7 (burn rubbish)**

### 7.3.3 Integrating with other services

The intervention was integrated with food-based strategies, which were mainly focused on home vegetable gardening (see Figure 7.12). The aim of this strategy was to increase the production and consumption of vegetables and thereby to improve dietary diversity. The focus was on dark, orange-fleshed sweet potato, because it is one of the few crops that are an excellent source of both energy and important nutritive substances. Furthermore, this crop has several advantages. It produces a high yield in terms of calories per unit area per time unit. Sweet potato has low demand on soil nutrients and is not labour intensive (Hagenimana & Low, 2000:414).

Still adding to the advantages is that it is a hardy crop, being more drought-tolerant than most other vegetable crops. The storage roots may be stored in the ground. The tops may also be consumed as a green vegetable. Improved cultivars have been developed at the Agricultural Research Council (ARC)-Roodeplaat Vegetable and Ornamental Plant Institute and the best suitable cultivars for the specific area were chosen (Niederwieser, 2004).

The ARC team implemented this part of the intervention. Soil samples were first taken and an



assessment was made on the current status of the home gardens. An area of land was available at the local school (close to the community), which served as the demonstration garden and nursery. The demonstration garden was prepared. Fertiliser was bought from the nearest town and worked into the soil. A 5 000 litre water tank was donated to the community for watering the demonstration garden. Filling it with water was negotiated with the farm owner. He provided a water tanker and the water to be pumped into the tank at the demonstration garden site. The farm manager organised it and one of the farm workers (also a member of the community) was responsible for carrying out the task.

**FIGURE 7.12: DEMONSTRATION GARDEN OF ORANGE FLESH SWEET POTATOES**



A vegetable garden team was selected and an unemployed male, living closest to the demonstration garden took responsibility as leader of the team for taking care of the demonstration garden. The community member's gardens were visited, seeds and fertiliser were handed out and they were motivated to prepare the gardens and plant the seeds. The community members were provided with sweet potato seedlings as well as seeds for other vitamin A rich-crops (spinach, carrots, butternut). A meal was provided consisting of vitamin A-rich foods sources (mango juice, spinach relish with tomato as accompaniment to stiff maize porridge, the traditional staple food item, together with a popular protein dish, namely stewed chicken).

Training sessions were also a very important part of the implementation phase. In effect - implementation could not commence before training of community members had not been completed. Trainers from the ARC performed these training sessions, following a well-constructed training plan. The training was task orientated and provided the community members with the necessary skills and knowledge needed to perform the task of planting and maintaining the gardens. Aspects that were dealt with at the training sessions included preparation of the soil, irrigation systems, and fencing of the gardens. The local agricultural extension officer was invited and took part in the training sessions. A nursery of sweet potatoes was established on the school grounds. The local agricultural extension officer did follow-up visits. After reports of hail damage, the ARC provided seeds again.

A strong nutrition education component is critical in order to achieve improved dietary diversity (Allen & Gillespie, 2001:116). The research team constructed a framework for an informal discussion on the importance of vegetables in the daily diet. The inclusion of vitamin A-rich sources (like those included in the home vegetable gardens) was emphasised.

Other strategies planned were home preservation techniques. These techniques were simple low-cost techniques and already part of the traditional food practices like sun drying of indigenous vegetables and bottling of fruit. It was further extrapolated to include the products from the vegetable gardens, especially the orange-flesh sweet potatoes. It is foreseen that a student will develop certain products suitable for this community, which can also be used as income-generating activities.

Some more outflows of this intervention should be the addressing of the other identified needs. The addressing of perceived food insecurity, insufficient dietary diversity, and insufficient food-coping strategies was assigned to other post-graduate students. Staff from the local health services was informed about the intervention on Oranje farm. They did not take any further interest in our invitation to participate.

## 7.4 REVISING

### 7.4.1 Monitoring activities

*Interventions should be regularly monitored in order to maintain the energy, momentum and action created by the inquiry (Andrien, 1994).*

This statement was used to substantiate regular visits, which improved the possibility of a more sustainable intervention. The monitoring activities also fed into the evaluation phase to be discussed in chapter 8. Monitoring usually assist with decision-making aimed at:

- improving the intervention
- the impact on the intended beneficiaries (participants)
- ensuring accountability to all stakeholders (Ewang, 1998:164).

Two key areas are mentioned about which a monitoring system should give feedback, namely performance and process. To monitor performance means to assess the use of resources and the production of outputs. Monitoring of process, on the other hand, assesses the efficiency and effectiveness of implementation (Ewang, 1998:164). The distinction between monitoring and evaluation is sometimes less evident, especially if evaluation is seen as a regular procedure undertaken throughout the life cycle of an intervention, as was the case in this study.

Monitoring activities were therefore based on improving the intervention process and to ensure efficient addressing of the specified need (hygiene and sanitation).

### 7.4.2 Discussion with and feedback to participants

A single intervention, no matter how well designed and executed, can seldom result in a cure for long-term problems experienced by a community. Developing culturally-appropriate health educational materials and processes is important for improving health in a community, but health education alone cannot cure social injustice or health disparities (Arcury, 2000:47). In planning for

the implementation of the intervention, some of the challenges that might arise were anticipated. Effective ways to address these challenges were also developed.

There will always be some problems to encounter. The whole spectrum of animosities, friendships and interest articulation that usually exists among people, was present in this group as well. Another inherent weakness of groups is that the introverts, the inarticulate and the insignificant are prone to keep quiet while the natural leaders, the elite and the extroverts dominate (Swanepoel & De Beer, 1997:103). Groups should not be too large as the problems pertaining to them become more manifest as they increase in size. Groups should not exceed six people. The researcher also had to apply group dynamic techniques to get the group to participate in conversations.

Burkey (2002:70) further stated that there is a risk of backsliding and even disintegration, if a certain momentum is not maintained. Unless a group moves on to a new problem after having made an advance, negative forces such as individualistic ambitions may inhibit a forward-moving process. Further development may stagnate unless they go on to attack the next problem, which may be usurious. As the strategies were implemented, the facilitation plan was continuously revised and adapted. If behaviours did not improve sufficiently, other learning activities were incorporated or the same strategies were prolonged. The tuck shop owner, for instance needed more training and support. Another individual session was held with her to do that. Feedback from the key informant also guided us to make more home visits and do more personal counselling.

The particular messages on the posters were also tested and revised. They were also translated into Sotho for better understanding by the participants and other members of the community. The field worker and key informant played an active role in defining the messages, making the messages culturally and socio-economically relevant. A checklist was also consulted which has been drawn from the *'Principles of better sanitation programmes'* and *'Features of better sanitation programmes'* (WSSCC Working Group on Promotion of Sanitation in Simpson-Hébert & Wood, 1998) (see Addendum F). This list sets best practices to be followed that could help improve the quality of sanitation programmes and can be used to advance and sustain sanitation improvements.

## 7.5 REPEATING AND REINFORCING

The timing, duration, and breath of an intervention modify its effect. Generally, the longer an intervention, the more frequent the interpersonal contact, the greater its benefits (Allen & Gillespie, 2001:123). This study was done over a two-year period. The intervention part as such, was continued for an interrupted time of 12 months. The facilitation plan was implemented at three different sessions (December 2003, March 2004 and August 2004).

## 7.6 CONCLUSION AND RECOMMENDATIONS

I can say with confidence that the objectives that were set for the implementation phase were sufficiently attained. The members of the research team and the recruited key informant were prepared for transfer of the intervention activities to take place. They were briefed regarding the messages to be conveyed as well as adult education principles to apply. This preparation can be summarised in the statement of Knox (1986:38) that “*effective teaching depends on being responsive to the learners in the program, not to adults in general*”. Resources were successfully mobilised to implement the facilitation plan in order to reach the aim of improving the hygiene and sanitation practices and conditions in the community. This facilitation plan was constantly revised and adapted as the intervention went along. It was also further integrated with agricultural extension in the form of home vegetable gardens.

People's participation in development activities should be seen not only as a means to an end, but an end in itself. Once a successful participatory development process is initiated, it should become a continuous process with no visible end to it. The only thing that should end is the intervention of the researchers who should withdraw as soon as the people themselves can maintain the development process on the basis of their own initiatives (Burkey, 2002:70).

Evaluation is a necessary component of the design and implementation of programs. Evaluative research in this study was done within the naturalistic paradigm for generating knowledge. Participatory aspects, however, were also eminent. Further aspects of evaluative research will become apparent when the evaluative phase of the intervention is dealt with in Chapter 8.