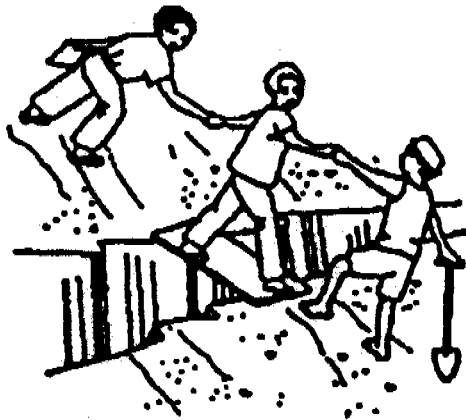


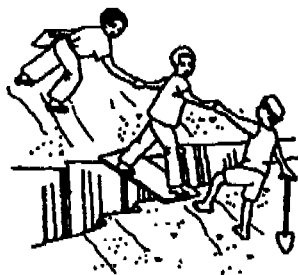
LETTERS
FROM THE DIRECTOR, CENTER
FOR COMMUNITY AND
SANTIA (1981)

BRIDGING THE COMMUNICATION GAP



Andrew Berry

BRIDGING THE COMMUNICATION GAP



by

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To Alison, Samuel and Joshua

ABSTRACT

This project report reviews communication in the water supply and sanitation sector as an essential key to ensuring that the unserved obtain suitable facilities. Both literature reviews and small scale surveys of sector professionals from developing countries have been undertaken. The report begins with a discussion of communication theory and the vital stages to ensure that messages communicate effectively. Social marketing is proposed as a suitable approach to integrating the water and sanitation hardware elements of programmes with software components such as hygiene education. Health promotion literature from industrialised nations is scrutinized to evaluate the effectiveness of the mass media compared with person to person communication. Communication is assessed at three levels: policy maker, sector professional and user community. The promotion of the sector to key policy makers is discussed with examples of possible approaches to convince them of the importance of sector services. For professionals to develop a new "*communication orientation*" is seen as key to the promotion of the sector. Examples of effective communication with user communities are examined to reflect crucial features of successful programmes. Finally the proposals of the Water Supply and Sanitation Collaborative Council to improve communication in the sector and beyond are analysed.

EXECUTIVE SUMMARY

The aim of this project is to investigate the importance and impact of effective communication at all levels in ensuring that the unserved obtain sustainable safe water supplies and appropriate sanitation measures. It considers some barriers to effective communication in realising these aims and assesses what can be done to overcome them. The methods of investigation used are small scale surveys of sector professionals and extensive literature reviews.

The International Water Supply and Sanitation Decade (1981-1990) achieved great successes in increasing levels of service coverage. However the Decade has been more successful in increasing the number of water supplies than in improving sanitation. The proportion of the developing world's population reported to have adequate sanitation facilities has increased by only 4% in rural areas to a mere 18%, and by 10% in urban areas to 66%. Even these figures are probably an exaggeration. For this reason the report is biased towards sanitation.

Often facilities have been constructed without full consultation so that the recipients have not been motivated and active in projects. Communication aspects of programmes have often been inadequate. At the policy maker level key decision makers have not been made fully aware and convinced of the importance of the water supply and sanitation sector (the sector). There is therefore a communication gap which must be bridged if sustainable service coverage is to increase to meet the needs of the unserved.

Other sectors have proved the value of investment in communication strategies. 85% of the world's children are now said to be immunised against common diseases, perhaps preventing 1.3 million deaths a year, due to effective mobilisation campaigns (UNICEF/WHO 1990).

Effective Communication

UNICEF (undated p1) have defined communication in the following way:

"Communication is the process of exchange of ideas, opinion and information through speech, writing, images or other symbols. It can be one way (as when the mass media is used, without arrangements for feedback), or interactive and participatory (as in face to face, or group discussion). One way communication is useful primarily for information dissemination and agenda-setting, while interactive and participatory communication offers the only means for any real possibility of accomplishing behavioural change"

The model of communication theory described by Hubley (1988 p23) proposes that there are six stages in effective hygiene education.

1. Reaching the sense organs of the intended target group
2. Holding the target audience's attention
3. Understanding the message
4. Learning then takes place if the message is believed and accepted
5. A change in behaviour is then necessary before the final stage
6. An improvement in health follows if the promoted practices have been carefully chosen on the basis of the benefit to health that they will effect

Failure to communicate can take place at any of these stages. Pre-testing will reduce the likelihood of failure, by evaluating the effectiveness of a message, leading to amendment as appropriate prior to final dissemination.

The aim of most programmes is to make people healthier but improving water supplies and building pit latrines do not by themselves have a significant impact. The educational aspects of projects are often overlooked, but it is essential that improved hygiene practices are effectively promoted if projects are to have the desired impact on health.

Social Marketing

Social marketing offers a comprehensive approach to integrating improvements in water supply and sanitation with the behavioural change necessary to make these technologies effective in improving public health. It is relatively new to the sector and employs techniques adapted from commercial marketing. Kotler (1982 p409) has written the following definition:

"Social marketing is the design, implementation and control of programmes seeking to increase the acceptability of a social idea, cause or practice in a target group(s). It utilises market segmentation, consumer research, concept development, communication, facilitation, incentives and exchange theory to maximise target group response."

A "consumer orientation" is invaluable in sector work because it means that sector professionals make every effort to know and empathise with the beliefs, motivations and aspirations of "consumers" i.e. the user communities. To be more effective sector professionals must absorb some of the ideas of the customer thereby not only producing the goods for the intended purchaser but also changing their ideas according to the customer's viewpoint. This concept of exchange theory is what makes social marketing different from other disciplines. So often in the past the sector has not matched it's communications to the

perceptions, beliefs and needs of the target audience. Hygiene education in sector work has been dominated by the medical model which assumes that the professional has a monopoly on knowledge. Exchange means that communities should have a say in the content of messages through audience research.

An example of the successful application of the social marketing approach is the HEALTHCOM or Communication and Marketing for Child Survival Project. An evaluation of the last ten years of the programme in 20 nations has proved the value of this health communication methodology (Seidel 1992).

Yacoob and Porter (1988) have defined six stages to the marketing process as follows:

1. Analysis considers the market, user communities and the institutional structures who will undertake or oversee the marketing

2. Planning develops a statement of purpose together with clear measurable objectives. The population should be "*segmented*" into "*target markets*". The "*marketing mix*" (product, price, place and promotion) can now be devised with the best combination of variables to satisfy the customer. The product is carefully "*positioned*" to overcome resistance points (hurdles of custom, religion or psychology) which should have been identified in target audience research. Positioning fits products to human needs and effectively communicates their benefits.

3. Testing and refining the marketing mix assesses the acceptability and believability of the message.

4. Implementation marks the launch of the campaign.

5. Assessing in market effectiveness acts as an on-going evaluation of community reaction and communication effectiveness in achieving the stated objectives.

6. Making mid-course adjustments can take place at any stage including entering research data into stage 1.

The mass media is social marketing's primary tool. It offers the seductive but illusory prospect of instant influence. Mass media programmes can reach a large proportion of the population, provided that population has access to the media, and are relatively inexpensive per head. However, only moderate behavioral changes can be brought about by this medium. If the mass media is used in conjunction with interpersonal (otherwise known as face to face) education then more significant behavioural change may follow. There is a consensus in the literature that mass media campaigns are useful for the following objectives:

1. Demonstrating simple skills
2. Disseminating a new technology or providing basic information
3. Influencing one-off behavioural actions e.g. leading to immunisation

4. Increasing awareness

One barrier to the use of social marketing is the low level of awareness of this discipline. Marketing technical assistance will be required to enable programmes to make full use of this technique. Another hurdle is the question of institutional responsibility for social marketing, as often one agency is responsible for the installation of facilities and another one for promoting behavioural change. Social marketing has been criticised as being ethically suspect. There has also been some criticism of the promotion of a single solution to complex health problems which ignore the conditions giving rise to ill health. Lifestyle practices are deeply embedded in the surrounding economic, social and political environment and can be difficult to alter.

Behavioural analysis

To communicate effectively with people to convince them to alter their practices it is necessary to first have a good understanding of the reasons why people behave as they do. The impact of efforts directed at improving health has often been disappointing; communities fail to adopt the practices promoted by health educators. One standard response is to consider people's behaviour as irrational but this attitude is illogical as it fails to identify with the viewpoint of the target group.

The World Health Organisation (1988 p6) considers that there are four main backgrounds to people's behaviour as follows:

1. Thoughts and feelings which are shaped by knowledge, beliefs, attitudes and values.
2. People with significant influence include relations, community leaders and friends. Opinion leaders are those with the most significant influence.
3. Resources such as money, time, labour, skills, materials clearly influence the ability of people to alter their behaviour. These resources are also known as enabling factors.
4. Culture includes the above influences and forms the normal way of life of the community.

Hygiene education attempts to alter behaviour patterns. The first stage to planning a hygiene education programme is to define the existing and the proposed behaviours. This will help to indicate the feasibility of influencing behavioural change as ancient customs will be harder to change than new ones for example.

The report considers communication at three different levels:- policy maker, sector professional and user community.

Communication at policy maker level

It is a truism to state that Government policies have a highly significant impact on activities within the sector. The key policy makers influencing development priorities by their policy decisions are politicians, leading civil servants and legislators. Other secondary policy makers are opinion leaders including those setting media agendas thereby influencing what the public, politicians and public servants think about. Sector plans serve the vital function of helping to develop a clear strategy for sector work. A study of twenty African countries (WASH 1989) indicated that four of these nations had no prepared sector plans and another three stated that their plans were still "*in preparation*" at the end of the IDWSS Decade. Water and sanitation activities within a nation cannot be coordinated or directed if there is no overall plan.

There is little in the literature about influencing government policy regarding the sector. This is probably because governments and therefore external support agencies too have been sensitive to the suggestion of outside interference in government affairs. Top sector professionals may be able to exert an influence on policy, but they will need to be aware of how to persuade key decision makers if they are to be effective.

Sector ambassadors can act as persuasive advocates in promoting the sector. Former U.S. President Jimmy Carter has successfully boosted the campaign for the eradication of guinea worm, by arranging to discuss the issue with government leaders in affected countries (Hopkins 1992). In several countries communication has been effective at local, national and global levels, following on from his advocacy. UN agencies such as UNICEF can have an impact on government policy by demonstrating and advocating approaches, and by facilitating the involvement of the private sector. Pilot projects serve to demonstrate the effectiveness of approaches so that they can be advocated with governments as national strategies. This was successful in Lesotho in the promotion of VIP latrines. Sector monitoring provides the facility to raise awareness by analysing annual progress at country and global levels. The aim is to help governments to assess present service provision more accurately to convince them to extend coverage to poorer communities and promote sustainable services. National crises such as cholera outbreaks can be instrumental in focussing national resolve. Malaysia for example, has been successful in promoting the sector by highlighting the effectiveness of improved services in controlling cholera.

Further research could evaluate the effectiveness of every conceivable method of trying to convince key decision maker to support the sector. It is imperative that they are informed and convinced of the health and resulting economic benefits of improved water and sanitation facilities.

Sector Professionals

If improved communication is to make a major impact on sector performance then the key is for sector professionals to develop a new "*communication orientation*". The consequence of this is that all sector activities will need to be viewed from this perspective. Only if sector professionals change will key policy makers be persuaded to give the sector the resources it needs and user communities be persuaded to "buy" or even demand sector services. It is sector professionals who must take full responsibility for promoting the sector so that the unserved can obtain services.

Professional associations could help to develop sector professionals by improving their communication skills through training courses and publications. However in a sample of thirteen developing countries only two were found to have associations specifically to serve sector professionals. In the immediate future water supply and sanitation professional institutions cannot be utilised as a primary route to promote the "*communication orientation*" as these associations do not appear to exist to serve the sector in the majority of developing countries at present. The External Support Agencies may be able to perform this function as an interim measure.

There is a need to draw professionals together from different disciplines within the sector. Networking is one method of doing this by providing an informal forum for the discussion of common difficulties.

A survey undertaken by the author indicated that sector professionals need to be encouraged to see the importance of good communication and promotion of the sector to the public. Their consensus of opinion once probed, was that communication is an essential component of the sector professional's role and that it is important for training courses to devote sufficient time to this subject. The survey indicated that in general these professionals were aware of the potential impact of interpersonal communication although there was a tendency to over estimate the power of the mass media. Two respondents were of the view that success in itself promotes the sector. While this may be true to some extent, professionals must be more ready than before to make the most of the successes by fully publicising them. An inability to present a case forcefully was identified, so in future it is recommended that, as this skill is so important, the training of professionals fully develops this ability.

Communication with user communities

It is now widely recognised that public health is only significantly improved following the provision of services when people's behaviour. A nationwide survey in India (Mukerjee 1990) revealed three important gaps in understanding between sector professionals and the

people. These concerned the use of water, how unsafe water affects health and willingness to pay towards the cost of improved services.

The clear lesson from this and other research is that programmes must be matched to the knowledge, attitudes and practices (KAPs) of user communities to ensure effective outcomes. Communication, education and information (IEC) should be a central guiding force within programmes. The methods used to attempt to modify the KAPs of user communities must be carefully researched and pretested to ensure that they work effectively. Communication development must in future focus on the process rather than the products. The sector will require greater assistance from communication specialists in future; engineers must enthusiastically cooperate with other professionals if the sector is to operate more effectively.

Traditionally campaigns to encourage the acquisition of latrines have emphasised health benefits but with little success. The topic of human excreta disposal is highly sensitive in many cultures and experience has shown that it is a difficult area in which to attempt behavioural change. The potential health improvement does not form a compelling enough reason to adopt sanitation improvements, as for many people the link between sanitation and health is not clear. It is more likely that people can be persuaded to buy latrines for privacy, status, convenience or comfort reasons, or even due to group pressure. People in rural Lesotho were so effectively "sold" the advantages of Ventilated Improved Latrines that they were willing to pay a month's wages to buy one. The participatory methods of home visits, small group discussions and community meetings related to latrines, particularly with women, were successfully used to change attitudes and behaviours. VIPs are too expensive for many, however, so an appropriate alternative may be to upgrade an existing latrine or promote lower cost latrines.

Effective education and communication have proved essential in the development of water resources. Careful investigations of the communications challenge must be undertaken and messages which are easy to understand must be directed at the appropriate target groups. Women as the key users and carriers of water must be given a central place in promotions.

The IEC Outline for Strategies

"Towards Effective Communication" (Lhalungpa 1992) provides "An outline for strategies" for intensified communication action in developing countries and at the global level. It emphasises the key importance of communication and promotion in and beyond the sector to accelerate provision of the needed facilities. It also recognises that changes in attitude and behaviour can only be brought about on the basis of effective communication efforts.

It is essential that communication in sector work is improved so that more can be achieved. A wide variety of studies have shown the crucial importance of effective communication. The Outline for Strategies provides a plan to incorporate communication considerations into all sector work. It proposes the creation of a global workforce to undertake communications/promotions strategies and to support countries in the development of their strategies. While there has been some criticism of the proposals the overall concept is a good one. A survey of sector professionals from developing countries revealed broad support for the proposals. Improving IEC is likely to lead to better implementation of programmes and sustainability according to these professionals. Responses were mixed concerning the likelihood of influencing key policy makers.

To conclude it is clear that there is great potential for the communication gap to be bridged. This is essential if the unserved are to obtain safe water supplies and sanitation facilities. The greatest thrust to improve sector performance must be through sector professionals so that effective communication is recognised as a necessity in everything that the sector does.

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CHAPTER 1

INTRODUCTION

1.1 The Communication Gap

The aim of this project report is to investigate the importance and impact of effective communication at all levels in ensuring that the unserved obtain sustainable safe water supplies and appropriate sanitation measures. One goal is to assess what the barriers are to effective communication and what can be done to overcome them.

Despite the successes of the International Drinking Water Supply and Sanitation Decade (IDWSSD) a large proportion of the world's population are without access to safe water and sanitation. Estimates of the exact number vary. Gorre-Dale et al (1992) states that estimates of the number of people lacking these basic facilities vary between 1-1.5 billion people out of a total population of over 5 billion. According to Bastemeyer and Lee (1992) one billion additional people in developing countries were served with an improved drinking water supply during the water decade but in 1992 the total number still needing a safe water supply is 1.2 billion. Even where the statistics indicate that people are served this often does not state the number per facility, in some cases 300-500 people may be served per standpost (McGarry 1991). In addition a figure for the number of installations does not necessarily mean that they are functioning or utilised. Another difficulty arises over what should be defined as a "safe water supply", although a detailed discussion of this topic is beyond the scope of this project.

One of the major achievements of the IDWSSD (1981-1990) was that global attention was at times focussed on the sector leading to increased sector services and better approaches. However, according to the IRC (1990) a "*systematic and continuing approach to creating public awareness, particularly outside of the sector (including political levels, the media and the public)... was generally felt to be lacking.*" Ensuring that the unserved will have safe water and sanitation in the future depends on finding the right approach to promoting the sector.

It is generally agreed that the IDWSSD (1981-1990) has been successful in increasing the number of functioning water supplies, although the task is far from complete. With respect to sanitation Wegelin-Schuriinga (1992) states that the percentage of the developing world's rural population with adequate sanitation facilities has grown little, i.e. from 14% in 1980 to an estimated 18% in 1990. Progress with urban sanitation has also been slow with an improvement from 56% to 66% over the same period. For this reason the reader will

notice a slight bias towards sanitation as opposed to water supply within this report. One of the lessons of the IDWSSD has been that even high coverage levels for sanitation facilities does not ensure their proper use and maintenance. Often facilities have been constructed without full consultation whilst the recipients have not been motivated and active in organising for water supply or latrine construction or improvement. One of the four guiding principles of the New Delhi statement emphasises the need for "*Institutional reforms promoting an integrated approach and including changes in procedures, attitudes and behaviour, and the full participation of women at all levels in sector institutions*". Often the communication aspects taking into account cultural and social considerations have been missing from sector work. Furthermore political leaders have not been made fully aware of the importance of the sector.

This report examines this communication gap and what can be done to bridge it. Communication is investigated as an essential component of all sector work. Other sectors have proved the value of investment in communication strategies. 50% of the world's children are now said to be immunised, perhaps preventing 1.3 million deaths a year (UNICEF/WHO 1990), due to effective mobilisation campaigns. The publication does not indicate which diseases have been immunised against. Later in this chapter the meaning of the term communication is explored and the stages that must be followed to ensure that communication is effective are outlined.

Chapter 2 discusses the application of social marketing to the water supply and sanitation sector (the sector). This relatively new approach considers potential users of facilities as customers to whom services may be "sold" through advertising and marketing. Obviously there are significant differences between commercial marketing and social marketing. Commercial marketers will be pleased with a shift of a few percentage points in product allegiance whereas to achieve a satisfactory health impact, sanitation facilities for example, must be obtained and used by the whole community. The chapter outlines the key concepts of social marketing and considers how these might help sector professionals communicate more effectively. One possible advantage investigated is that social marketing may provide the necessary approach to integrate improvements in water supply with the behaviour change required to make these technologies effective in improving public health. The mass media is social marketing's primary tool and is often assumed to be the perfect way to communicate in view of the reach it has. Chapter 2 continues by reviewing the literature on the effectiveness of the mass media to ascertain what role is most appropriate for this tool. The chapter ends with an analysis of behaviour to identify the factors which influence human actions.

Chapter 3 considers the importance and impact of government policies and national sector plans. It asks the question "*How can governments be influenced to give the sector the position it deserves?*" and suggests some possible methods such as the use of sector ambassadors and sector monitoring. The likelihood of success of these different methods is evaluated. The final section considers what messages the sector needs to communicate to key decision makers.

Chapter 4 examines the implementation of a "*new communication orientation*" at the crucial sector professional level and investigates the routes through which communication may be improved. Professional associations and professional "networking" are considered as two possible options. A small survey of 16 sector professionals from developing countries appraised the level of professional support they receive and assessed their response to a group project communication exercise in persuasion.

Chapter 5 considers various examples of communication between the sector and user communities to see what lessons can be learned. It also discusses the important question of what motivates people to adopt a new service such as a latrine.

Chapter 6 provides a critique and brief overview of the Water Supply and Sanitation Collaborative Council's Information, Education and Communication Core Group's IEC Outline for Strategies "*Towards Effective Communication*". In view of the low level of representation of sector professionals from developing countries on the IEC Core Group a small survey of such professionals was undertaken to ascertain their views of the proposed strategy.

Recognition of the importance of communication in the development process has grown since the 1960s. In 1980, the United Nations Information Committee (UNICEF/WHO 1990) called for the "*inclusion of an information communication component in every relevant development project in the UN system.*" Information, Education and Communication are now seen as necessary components of effective development programmes. The international health sector know that projects will at best produce only meagre results if target populations are not consulted, informed, educated and mobilised (UNICEF/WHO 1990).

Chapter 7 completes the project report with conclusions and recommendations.

The report does not provide information on communication support materials because texts such as Perrett (1983) or UNCHS (1986) already cover this subject in detail. Other texts such as Rana (1990) provide a methodology for developing illustrations which communicate with people who are not visually literate. Nor does it tackle the training of

community motivators which is outlined in texts such as White and Gordon (1987) and Werner and Bower (1984). Literature reviews such as Burgers et al (1988) and Boot (1991) give an extensive overview of current knowledge and experience of hygiene education in the context of the water and sanitation sector. Other subject areas which are referred to but not treated in any depth include training which will be essential to develop the "*communication orientation*" amongst sector professionals and community management which clearly will only work through effective communication with communities. Both subject areas are already covered by a wealth of literature.

1.2 Effective Communication

Communication has been defined in a wide variety of different ways. McLeod (1987 p194) defines communication as follows:

"the imparting or exchange of information, ideas or feelings"

Stuart (1988) argues that communication by definition must be two way, and MacDonald and Hearle (1984 p18) describe one way communication as "*incomplete*".

UNICEF's (undated p1) more comprehensive definition appears to be preferable for the purposes of this discussion as it fully describes both the concept of unidirectional and two way communication.

"Communication is the process of exchange of ideas, opinion and information through speech, writing, images or other symbols. It can be one way (as when the mass media is used, without arrangements for feedback), or interactive and participatory (as in face to face, or group discussion). One way communication is useful primarily for information dissemination and agenda-setting, while interactive and participatory communication offers the only means for any real possibility of accomplishing behavioural change."

In recent years there has been a welcome and perceptible shift in attitude among planners according to Chatterjee (1990) so that communication is becoming accepted as a process of exchange between people rather than a one-way top-down flow of information. This certainly appears to be true in India.

Hubley (1986b p2) suggests that it is helpful to separate and distinguish between the Source, Message, Channel and Receiver in considering which factors influence the success of a communication.

The Source is the person or organisation from which the communication comes. People are more likely to believe a communication from a source that they trust i.e. a credible source or one which has age, culture, education or experiences in common with the receiver. Therefore people with similar backgrounds communicate better with each other, particularly if the source empathises with the receiver. The Message is the content of the communication which may have the objective of changing knowledge, belief or understanding.

The Channel refers to the vehicle or method used which is usually interpersonal or mass media. Interpersonal or person to person channels are those involving face to face interaction between the source and receiver. Hygiene education with the aim of bringing about behavioral change is thought to be more effective if participatory learning methods involving group discussion and the sharing of experiences are used. This will be discussed in more detail in chapter 2. Hygiene education (after Boot 1991) for the purposes of this report is defined as:

"all activities aimed at encouraging behaviour and conditions which help to prevent water and sanitation-related diseases."

Mass media channels include radio, television, newspapers, books, leaflets and wall posters. Traditional media may have a very important role to play in the life of a community. Examples include drama, singing, dancing, community meetings, proverb telling and the telling of stories. Making use of any existing accepted media should always be considered before introducing new methods from outside the community.

Possible formats used to convey the information within the channel include words (both spoken and written), non-verbal communication and pictures. These formats may be used singly or in combination. Pictures are particularly useful for conveying visual information, to aid understanding and recall, and to arouse interest. A number of studies such as the work of Erni (1986) and Ramm (1986) have demonstrated how pictures and drawings have their own "*visual language*". The term "*visual literacy*" is therefore used for a person's familiarity with pictures.

The potential Receivers of a communication are also known as the target audience. When planning communications various characteristics of the audience must be taken into account such as educational level, visual and word literacy, knowledge, attitude, practices, the influence of opinion leaders, readiness to change and openness to new ideas (Hubley 1986a). The reach (Manoff 1985) of the media i.e. as dictated by listening and viewing habits, and the potential role of traditional media must also be taken into account. Communication planning must identify the task in terms of what aspects of the present behaviour must be

changed to effect improved health and which communication methods are appropriate to bring about the desired changes.

Hygiene education is the essential link in bringing about behavioural changes and thus in realizing system sustainability and achieving health benefits from water and sanitation improvements (WASH 1990). Behavioural changes are unlikely to take place in the absence of hygiene education because people will not necessarily know why it is better to use the new facility or how to use it properly.

Hubley's (1988 p23) model of communication theory states that to improve health through the modification of behaviour following the exchange of information six stages are necessary.

Stage One: Reaching the sense organs

It is obvious but true that to have any hope of making an impact a communication must reach the target group for which it was intended. Research is essential to determine the reach of various media.

Stage Two: Holding the target audiences attention

Once the audience has been reached their attention must be held by the communication so that they do not ignore it. Factors influencing the likelihood of attention being held are the colour and intensity of the communication, together with motivational factors such as novelty, interest of the audience and sex appeal.

Stage Three: Understanding the Message

When a person listens to a message he or she will simultaneously attempt to understand it. Two people hearing the same message may have completely different understandings as the perception of the meaning is subjective. Misunderstandings may be due to difficulties understanding the language or pictures used or because too much information is contained in the communication. Pre-testing is an essential part of message development.

Stage Four: Promoting Learning

Learning marks a progression from stage three as a community may understand a message but not believe or accept it.

Stage Five: Producing a Change in Behaviour

A communication may lead to changes in beliefs and attitudes but not actually in practices. Possible reasons for this resistance are discussed in Chapter 2.

Stage Six: Improvement in Health

A change in behaviour will only produce an improvement in health if the promoted practices have been carefully chosen on the basis of the benefit to health they will effect. Health educators have occasionally promoted practices which have no effect whatsoever on health such as rinsing the mouth with water after meals to prevent dental decay.

Failure to communicate effectively can take place at any of these six stages. Pre-testing as mentioned above can be used to evaluate the effectiveness of a message, leading to amendment as appropriate, prior to final dissemination.

CHAPTER 2

"SOCIAL MARKETING" AND BEHAVIOURAL ANALYSIS

2.1 The Need for "Social Marketing"

Improving water supplies and building pit latrines do not by themselves make people much healthier, although this would appear to be the aim of most programmes (Bourne 1984). Projects must incorporate the promotion of improved hygiene practices using effective communication techniques if they are to have the desired impact on health. This educational aspect of projects is often overlooked in the design, implementation and assessment of programmes (Enge 1990).

2.2 What is "Social Marketing"?

Businesses first investigate if there is a demand for a particular product or service before investing time and money in production and marketing. Companies are keen to undertake market research to ensure that the product is in the most useful and appealing form for the consumer.

This section examines the key concepts of "social marketing" and considers how these might help sector professionals communicate more effectively. It is a relatively new concept which offers a comprehensive approach to integrating improvements in water supply and sanitation with the behaviour change necessary to make these technologies effective in improving public health. 'Social marketing' is a concept adapted from commercial marketing although there are several differences. For example, commercial marketing does not involve sustained change in consumer behaviour, apart from changing brands. In contrast the products of social marketing require significant behavioural changes.

Ward's (1986) concise definition of social marketing is as follows:

"the application of commercial marketing techniques to social problems."

In contrast Kotler's (1982 p409) more detailed definition incorporates various aspects of marketing such as the role of exchange theory:

"Social marketing is the design, implementation and control of programmes seeking to increase the acceptability of a social idea, cause or practice in a target group(s). It utilizes market segmentation, consumer research, concept development, communication, facilitation, incentives, and exchange theory to maximise target group response."

2.3 Important Concepts in Social Marketing

The social marketing literature (e.g. Lefebvre and Flora 1988; Hasting and Haywood 1991; Kotler and Roberto 1989) emphasise a number of important concepts:

- Consumer orientation
- Exchange theory
- Market environmental influences
- Setting of objectives
- The marketing mix

2.3.1 Consumer Orientation

Consumer orientation is the fundamental factor in both marketing and social marketing. Water supply and sanitation sector professionals need to know and empathise with the beliefs, motivations, attitudes, aspirations and needs of the consumer to ensure that their communication is effective.

This approach to behaviour change is quoted by Yacoob and Porter (1988) as successful in oral rehydration therapy, family planning and immunization in the nations of the south and for smoking cessation, use of seatbelts and in the prevention of heart disease in industrialised nations. In Britain, however there has been debate over the success of the campaigns to reduce deaths from smoking and heart disease.

2.3.2 Exchange Theory

The fulfilment of wants by mutually beneficial and voluntary exchange is key to marketing (see Kotler's definition). Examples of mutual benefits are an improved quality of life for the consumer and the fulfilling of goals for the sector professional.

The implicit idea of exchange theory is that the suppliers absorb the values of the customers in some way thereby not only producing the goods for the intended customer but also changing their ideas according to the customers viewpoint. It is this concept which makes social marketing different from other disciplines; without it social marketing is not much more than an exercise in relabelling ideas originating elsewhere (Leathar and Hastings 1987).

The value for the sector is to learn as much as possible about the perceptions, beliefs and needs of the target audience and to ensure that communications match these characteristics. Hygiene education in the sector has been dominated by the medical model which assumes that the health professional has a monopoly on knowledge (Leathar and Hastings 1987). The concept of exchange undermines the perspective of dispensing knowledge to a passive audience; customers should have a say in the content of messages through audience research.

2.3.3 Market Environmental Influences

Political, cultural, economic and technological influences are beyond the sector professional's control. Message content must be influenced by research. For example a health promoter in the North may need to alter messages due to new information about cholesterol content in certain foods.

Political influences can be a very significant constraint. Budget controls usually determine the extent of a communications strategy according to the funding source. Influences of this type may be shaped by other factors e.g. the continual lobbying of politicians by interest groups such as the tobacco industry promoting the marketing of cigarettes.

2.3.4 Setting of Objectives

A helpful precursor to the setting of objectives is the formulation of an appropriate mission statement or statement of purpose. This will outline the organisation or project's aim but not how they will be achieved. Objectives can then be written which should be both measurable and achievable.

2.4 Case Studies

The HEALTHCOM or the Communication and Marketing for Child Survival Project has for a decade used audience research, a social marketing approach and appropriate communication channels to successfully bring about changes in health practices. HEALTHCOM has proved the value of this health communication methodology in more than twenty nations in Africa, the Americas and Asia. Evaluations have demonstrated that health communications have achieved significant results including increases in immunization coverage, use of oral rehydration therapy, consumption of vitamin A capsules, improvement in breastfeeding practices and other health-related behaviours (Seidel 1992). This decade of experience in communication is invaluable as the successful approaches should be replicable in the water supply and sanitation sector.

2.5 Marketing of the Sector: The Product Mix

For water supply systems the buyer will usually be an organisation, for latrines the principle customer will be at household level, whereas the market for hygiene education is at the individual level. These different products each require a different selling approach. For a programme to be successful the user must be satisfied and a successful marketing approach must bridge the gap between "buyer" and "seller" at each of these levels.

2.5.1 Fitting the Product to the Market: The Marketing Mix

Sector professionals will need to understand the integration of water, sanitation and hygiene education into a marketing framework if effective use is to be made of social marketing in programmes. The product then becomes a package to satisfy user needs. The emphasis has to be upon offering the right product, at the right price, in the right place, at the right time, presented in such a way as to satisfy the needs of the consumer (Cannon 1986). These four variables (product, price, place and promotion) are collectively known as the "*marketing mix*".

2.6 The Marketing Plan

Yacoob and Porter (1988) have defined six stages to the marketing process (see figure 2.6 overleaf) as follows:

1. Analysis
2. Planning
3. Developing, testing and refining plan elements
4. Implementation
5. Assessing in market effectiveness and
6. Making mid-course adjustments

Stage 1: Analysis

This considers the market, the user communities and the institutional structures who will undertake or oversee the marketing. The market analysis considers the existing market, the geographical spread of the potential customers and local resources which are relevant. Secondly the end user analysis investigates the age distribution, work, level of literacy and household size. It also assesses the cultural, psychological, religious and behavioural characteristics of target audiences. Thirdly the institutions involved are analysed to ascertain how many departments and sponsors are involved, what they are responsible for and what resources they have to commit to a marketing campaign. This analysis should then permit a clear goal to be decided in the form of a statement of purpose.

Stage 2: Planning

Feasible and clear plans should result from this phase once the end users have been involved in the process. The statement of purpose should allow the formation of clear measurable objectives (see section 2.2.4). Objectives should be prioritised to ensure that achievable targets are selected and a deferred schedule is produced for others (Manoff 1985). Next the population is "*segmented*" into "*target markets*" (Frain 1986). Appropriate marketing and communication strategies can then be developed for each.

The marketing mix can now be devised with the best combination of variables to satisfy the customer. The product is carefully "*positioned*"; for men the outstanding appeal of latrines for example may be status, whereas for women it may be convenience. The aim is to "*position products to fit human need and wants and effectively communicate their benefits*" (Kotler and Roberto 1989 p26). Positioning is important to overcome "*resistance points*" (hurdles of custom, religion or psychology) which should have been identified in the target audience research (Manoff 1985). The second P of the mix is place: the materials for

The Marketing Process

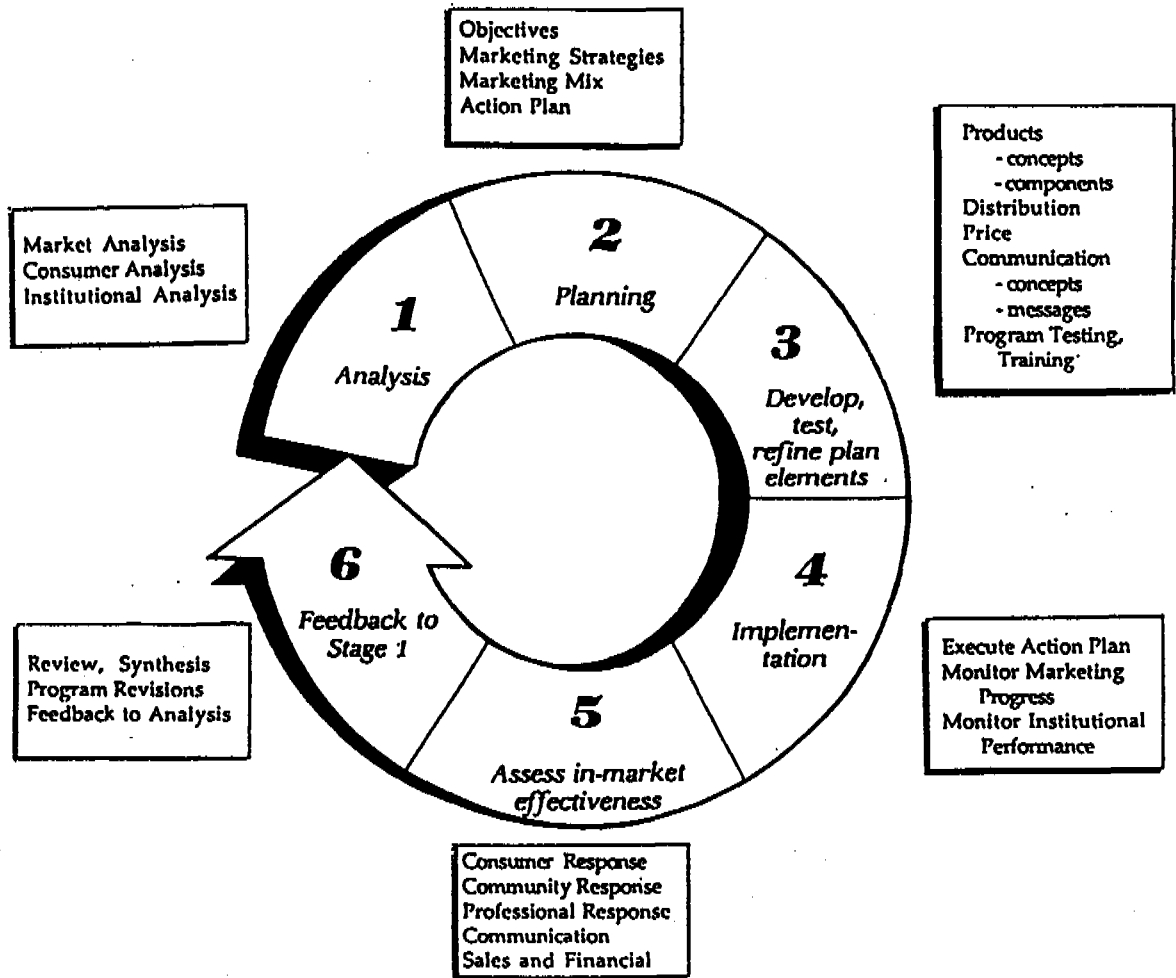


Figure 2.6

(After Yacoob and Porter 1988)

construction, operation and maintenance must be available. Users must pay most of the cost or price (the third P) of the chosen service as asserted by Briscoe and deFerranti (1988), which needs to be pitched at an appropriate level. Fourthly, promotion is the means by which the product is promoted to the consumer. The alternatives include advertising publicity, personal selling and sales promotion. Of these, advertising is probably the most commonly used because it is or appears to be the most cost effective. Each situation is different, however. In common with many other studies, in Thailand mass communication was found to have little effect (Simpson-Herbert 1987) and therefore face to face persuasion was necessary.

Stage 3: Pre-Testing and Refinement

At this stage the four components of the marketing mix are tested and the campaign approach refined. The marketing/media actions are designed and tested on small sample populations for acceptability, believability, comprehension and conviction. The components are revised and retested as necessary. One or several alternative product mixes may go through this process, until suitable messages and products are identified. It is at this stage that the bulk of project staff training is undertaken (Yacoob and Porter 1988).

Stage 4: Implementation

The full campaign is now launched together with monitoring of performance effectiveness against baseline data, which should have been collected earlier. A combination of advertising and interpersonal channels may be utilised to promote the project or programme. "*Tracking*" (i.e. monitoring) of distribution, communication and institutional performance are all undertaken at this stage (Kotler and Roberto 1989).

Stage 5: Assessing In-Market Effectiveness

This stage fits together with the monitoring above to act as an on-going evaluation of community reaction and communication effectiveness in achieving the stated objectives.

Stage 6: Corrections at Mid-Course

All research data is entered into Stage 1 of the iterative cycle. Mid-course corrections can take place at any stage.

2.7 The Mass Media: Social Marketing's Primary Tool

As the phrase suggests the two key features of mass media are their mass audience and the fact that there is no interpersonal communication between the originator of the message and the mass audience. It is the mass audience which is so enticing to the communicator: it offers the seductive but illusory prospect of instant influence (Tones et al 1990). There was a shift in the literature away from this attitude to the view that the mass media has no impact on behaviour. Today the consensus appears to be that in the right circumstances moderate behavioural changes can occur. The mass media is the most frequently used medium to communicate social marketing messages.

Evaluating the impact of the mass media on behavioural change is difficult. Much of the earlier research (Flay, DiTeco and Schlegel 1980) proved inconclusive. This section draws on the literature investigating the use of the mass media in health promotion principally in Europe and North America. It assumes that research findings concerning the use of the mass media for social marketing and health education in industrialised countries may be applied to developing countries. This assumption is questioned below however.

Mass media programmes appear to have a number of advantages over traditional public health strategies. Mass media programmes can reach a large proportion of the population, provided that the population has access to that media (Pierce et al 1986). Secondly, mass media interventions are a relatively inexpensive method of exposing the population to health information, since they reduce personnel costs by minimising face to face contact. In recent comparisons of alternative strategies for preventing heart disease mass media campaigns were found to be the most cost effective in eliciting behavioural change (Hall et al 1988).

For examples of carefully conducted research into the effectiveness of a number of health education campaigns see Farquhar et al (1985) and Egger et al (1983). Recently there has been considerable debate in health education and health promotion over the long-term appropriateness and effectiveness of interventions designed primarily to alter individual behaviour. The primary issue is the effectiveness of mass media campaigns in individual behaviour change, due to what is seen by many communications professionals as inherent limitations of media in addressing such issues (Pasick and Wallack 1989).

Redman et al (1990) in a review of the literature identified 24 published evaluations of the effectiveness of mass media campaigns in modifying cardiovascular risk behaviour or seat belt use among adults. In contrast with Hall et al (1988) this study provided little evidence to support the implementation of mass media programmes designed to alter health risk behaviour, at least in the form evaluated. As previously stated, thorough evaluations are

notoriously difficult to undertake, and many of the papers had to be excluded from the study as unfortunately they failed to meet basic methodological criteria.

Redman et al (1990) found that when media alone interventions have been evaluated they have not been found effective in changing behaviour. When the media have been used in an agenda-setting role combined with a community component some significant behavioural changes do appear to occur. Nevertheless there does not appear to be any evidence in these cases that the media component makes any contribution to the effectiveness of such combined programmes. However, it would be premature to reject the use of the media on the basis of this study as the researchers' techniques in designing and evaluating mass media programmes appear to require some improvement.

In contrast Tones et al (1990) have found consistent evidence of successful media interventions in developing countries. Also earlier studies noted successes, such as Jenkins (1983) in a review of seventeen projects significant impacts were noted, many of them behavioural. These included an improvement in breastfeeding from 25% to over 50% on the Yap Islands, Micronesia and an increase from 20% to 59% of the population having latrines in Tanzania. It is not clear whether there is a fundamental difference in the way that audiences are influenced in the South compared to the North. It is true that in western urbanised society health education messages in one sense promote the abandonment of pleasures and addictions which are far more extensively and effectively promoted by advertising. Another difference is that community networks may be utilised in the South to enhance the effectiveness of mass media.

There is a consensus in the literature that mass media campaigns are useful for the following objectives:

1. Demonstrating simple skills
2. Disseminating a new technology or providing basic information
3. Influencing one-off behavioural actions
4. Increasing awareness

The visual demonstration of a test of baby's hearing is an example of a simple skill. Providing information on new seatbelt legislation or a new vaccine would be examples of the second objective. Examples of one-off behavioural actions are the installation of a smoke detector or an immunisation vaccination, neither of which require permanent behavioural change and can therefore be achieved by an information campaign. 'Awareness building' is used to inform about the components of healthy eating, for example.

Figure 2.6 is adapted from Israel et al (1987) and presents a concise but simplistic view of the impact of social marketing media by suggesting that mass media and interpersonal education are certain to change behaviour. It is correct to say that this combination has been successfully used in some health projects (Torres and Burns 1988).

Figure 2.6

Mass Media and Interpersonal Education in Social Marketing

MASS MEDIA ALONE	1. Creates awareness 2. Increases product sales 3. Increases access to services
Mass media and interpersonal education (promoters and others)	Changes behaviour

More complex behaviours are addressed by four types of messages:

1. Agenda setting
2. Reinforcement, reminder, confirmation
3. Eliciting a request for information
4. Enlisting opinion leaders or friends as catalysts for change

The goal of these messages is to set up supports for change, reinforce the change or provide an intermediate step towards a change rather than immediately altering behaviour fundamentally. Health promoters are fully aware that political, organisational and community supports must work together to facilitate individual behavioural change.

Agenda setting

Agenda setting attempts to create issues in the media so that the public perceives them to be the salient issues of the day (Roberts and Maccoby 1985). A current issue in this country is the shift in concern about passive smoking and the corresponding introduction of smoking bans in public places. McGuire (1984) suggested that agenda setting must precede behavioural change and that the technology to effect that behavioural change needs to become increasingly available with time.

Reinforcement, reminder and confirmation

These media addressed objectives are aimed at maintaining desirable behaviours, recognising the need for support following a lifestyle change. Examples include encouraging new non-smokers or those who have sought treatment for alcoholism (Pasick and Wallack 1989).

Eliciting a request for information

The idea is that a straightforward radio or television announcement offers listeners the opportunity to make a telephone call requesting more information by post (Levy and Stokes 1987). A parallel to this was the approach used in promoting sanitation in Lesotho where the latrines were advertised with the offer of more information by calling into the promotions office (IBRD 1990).

Enlisting others as catalysts for change

An example of this is the "Friends Don't Let Friends Drive Drunk" campaign (Atkin et al 1986). The intention is that second parties provide the incentive for change. Campaigns of this type do not appear to have been satisfactorily evaluated so far. The individualistic nature of western culture in comparison with communities with stronger bonds indicates that this type of campaign has a greater chance of success in the South if operated on a community-wide basis.

2.8. Barriers to the use of Social Marketing and the Mass Media

Many health, and water and sanitation sector professionals view marketing as an undignified discipline that is not appropriate to their sectors (Novelli 1989). Clearly the lack of understanding of social marketing is a hurdle which must be overcome, perhaps by marketing the discipline itself. Marketing technical assistance will be required to enable programmes to make full use of social marketing.

Clear definition of institutional responsibility for water and sanitation projects is often lacking (Grover 1983). Often the agency responsible for the installation of facilities is not involved in promoting behavioural change as this is not within the organisation's expertise, and is therefore not the best body to take responsibility for social marketing. However if other bodies, such as the department of health or education, assume marketing responsibilities for water, sanitation and hygiene education then project co-ordination may prove difficult. The most appropriate institution to take responsibility for social marketing must be allocated this task.

Social marketing has been criticised as being manipulative and ethically suspect (Wallack 1990). This is not surprising in view of its close association with the advertising and marketing world. Education often has the goals of altering knowledge, attitudes and practices whereas marketing principally seeks behavioural change. Marketing approaches to education are potentially more effective in achieving behaviour change but at the cost of hindering other goals such as the development of positive self-esteem (Naidoo 1986). Wallack (1990) criticises social marketing for suggesting that power over health status evolves from gaining greater control over individual health behaviour. Manoff (1990) has a completely different perspective on social marketing and would describe Wallack's social marketing as social advertising. He argues that social marketing should use every possible intervention tactic to achieve its goals, even advocating new legislation to change the conventional behaviour within the social system. While Manoff's version of social marketing would appear to be the more widely accepted one, legislation in itself is unlikely to bring about significant social change except in oppressive regimes.

A large number of unconnected and possibly contradictory health messages produced by several organisations can cause confusion. Competition from anti-health messages can promote the very behaviours which pro-health messages seek to eliminate. The result is that the competing information undermines the believability of a campaign.

Health and hygiene improvements may not be a high priority for many people. This reduces the level of interest in health messages. Social marketing cannot offer a solution to every problem in the sector. There has been some criticism of the promotion of a single solution to complex health problems which ignore the conditions giving rise to disease. Also the healthy behaviours are often not reinforced with the dedication that is applied to competing commercial endeavours detrimental to health.

Most health problems are inextricably linked to the surrounding economic, social and political environment. Lifestyle practices deeply embedded in this environment tend to be complex in their origins and are difficult to alter. A set of interventions may be required to change behaviour over time. The classic example is smoking which is linked not only to individual addictive behaviour but also strongly to social acceptance, government regulation and economic policies.

Despite the barriers to success mentioned, social marketing has the potential to be very effective in promoting sector services. It offers a valuable approach to solving behavioural problems in the right circumstances in the water supply and sanitation sector.

2.9 Behavioural analysis

As previously discussed the impact of efforts directed at improving health practices has been disappointing. Esrey and Habicht (1986) in a review of the literature found seventy-three health impact studies but the majority produced disappointing results or no health benefit at all. However, Blum and Feacham (1983) found methodological shortcomings in every case in a review of fifty-three health impact studies. This section analyses the reasons why interventions fail or appear to fail by considering human behaviour and some of the theories of this discipline. The various components which lead to behavioural change are outlined. It is important to consider why people fail to adopt the practices advocated by health educators. One standard response is to consider people's behaviour as irrational (Lewes et al 1989). This attitude seems to be completely illogical and fails to identify with the viewpoint of the target group.

The application of social anthropology may be of use here as this discipline starts with the assumption that however strange a behaviour appears to an outsider it's reasonableness will emerge from an analysis of the social and cultural context in which it occurs (Frankel 1986). Value expectancy theory states that people will behave in a particular way if they themselves believe that an action will have a overall positive outcome for them (Hubley 1988). To some extent this is stating the obvious but is often forgotten when professionals are trying to convince people to alter behavioural patterns. It is easy to consider people from the professional's point of view rather than empathise with them. Target groups understandably may consider economic survival, social or religious factors to be more important than the sector's proposals for change.

Research in the United Kingdom indicates that most British people are well aware of the accepted risk factors for coronary heart disease (Blaxter 1990, and Nutbeam and Smith 1988). Nevertheless the population has in general not altered it's lifestyle in response to this knowledge (Frankel et al 1991). Similar complaints are heard about the responses to health education throughout the world (Hubley 1988). It is clear that the relationship between knowledge and behaviour is complex and requires further discussion.

The World Health Organisation (1988 p6) considers that there are four main background explanations for people's behaviour, as follows:

1. Thoughts and feelings
2. People with significant influence
3. Resources
4. Culture

Thoughts and feelings are shaped by knowledge, beliefs, attitudes and values. Knowledge comes from experience and through information provided by people, books and the media. Beliefs are principally derived from close relations. They are part of the way people live, indicating what is acceptable and what is not. Beliefs are often difficult to change as they may be held very strongly. For example many cultures believe that the quality of a water source is indicated by its clarity or that babies' faeces are harmless. Attitudes reflect likes and dislikes, indicating a person's judgement of a behaviour as good and worth carrying out or bad and unacceptable (Ajzen and Fishbein 1980). Finally, values are the beliefs and standards that are most important to the people in a community.

People with significant influence include parents, grandparents, village leaders, friends, work colleagues, teachers, health workers etc. These members of the community have influence according to how important their opinions are considered.

The availability of resources such as money, time, labour, services, skills, materials and facilities, clearly influence the ability of people to alter their behaviour. These resources are known as enabling factors.

Culture is a combination of the above influences, forming the normal way of life of a community. Cultures are not static but evolve through time. Behavioural changes do, in fact, take place all the time due to natural circumstances and sometimes through choice. Some people in a community will always resent these changes whereas others will be more ready to change.

Health and hygiene education attempt to alter behaviour patterns. Figure 2.9 illustrates a hygiene education picture designed to show the disadvantages of open field defaecation. Hubley (1986) has identified four groups of reasons why health education can fail, as follows:

1. Failures in the planning process to apply epidemiological and behavioural sciences to the selection of appropriate objectives
2. Communication failure in reaching the intended audience and promoting the understanding and acceptance of messages
3. Failures in the organisation of health education services etc.
4. Failure to evaluate properly and incorporate research findings into decision making

To successfully plan a hygiene education programme the first stage is to define the existing and proposed behaviours. This will help to indicate the feasibility of influencing behavioural change. Behaviour which has always been a part of the behavioural pattern of the people will be harder to change than new customs. A range of different theories have

been proposed to try to explain the different factors which influence behaviour. For a discussion of these different theories see Bunton et al (1991). Hubley (1988) has proposed a simplified approach to understanding behaviour based on models proposed by Green et al (1986) and Ajzen and Fishbein (1980). His BASNEF model is intended to cater for the situation in developing countries. BASNEF is an acronym for Beliefs, Attitudes, Subjective Norms and Enabling Factors. Beliefs, Attitudes, and Enabling Factors have been discussed above. Subjective Norms refers to the overall perceived social pressure from people within a person's social network.



Man: *What on earth is the use of latrines?*

Dog: *Is he still wondering?*

Figure 2.9 A perceived need for latrines is essential.

(Adapted from Tin-Glao 1984)

The BASNEF model suggests that the formation of a behavioural intention depends on the combined influence of a person's overall attitude towards a behaviour and the perceived social pressure known as subjective norms. Both may motivate towards the proposed behaviour. If one of these factors is in favour and one against then the formation of a behavioural intention will depend on a person's strength of will compared with community and family influence. Once the behavioural intention has been formed a particular behavioural change will also require the enabling factors to be in place.

BASNEF may be used to plan hygiene education activities as the likelihood of influencing behaviour may be anticipated. When the required behaviour has been defined the enabling factors may be described. It may quickly become obvious that too large a shift from existing practices is required or the enabling factors are absent. An alternative programme may be able to put the latter requirements in place first but often this will not be possible.

Another problem is that the subjective norm may act as a significant barrier to change. To overcome this the support of key influential persons or "*opinion leaders*" may be enlisted e.g. to demonstrate a new latrine.

As explained the changing of attitudes first requires an impact on beliefs. Predicting how beliefs may be changed, in turn requires an understanding of it's origin. A belief which has been formed through personal experience or from highly credible sources in the community may be particularly difficult to change, although a demonstration may overcome this. If a barrier to latrine use is that latrines are smelly then a VIP latrine could demonstrate that this is not always the case.

To conclude the chapter Table 2.9 (adapted from Hubley 1986) outlines the characteristics of effective hygiene education by combining aspects of behavioural science with communication theory.

Table 2.9 Characteristics of effective hygiene education

- Promotes actions which are realistic and feasible within the constraints faced by the community
- Builds on ideas, concepts and practices which people already have
- Repeated and reinforced over time using different methods
- Adaptable, and uses existing channels of communication e.g. songs, drama, stories
- Entertaining and attracts the community's attention
- Uses clear simple language with local expressions and emphasises short term benefits of action
- Provides opportunities for dialogue and discussion to allow learner participation and feedback on understanding and implementation
- User demonstrations to show the benefits of adopting new practices

CHAPTER 3

CHANGING PRIORITIES - COMMUNICATION AT POLICY MAKER LEVEL

3.1 The importance and impact of government policies

It is a truism to state that Government policies have a highly significant impact on activities within the sector. Policies are really broad plans of action, which set the direction for detailed planning. If the government does not take the lead then activities are unlikely to be co-ordinated and investment levels are likely to be low. For example, if handpumps are not standardised then a wide variety may be introduced leading to maintenance difficulties. WASH (1990) considers that national governments should assume primary responsibility for sector management including planning donor coordination, policy reform, regulation, and institutional aspects of development.

3.1.1 Who are the decision makers ?

The key policy makers influencing development priorities by their policy decisions are politicians, leading civil servants and legislators. Other secondary policy makers are opinion leaders including those setting media agendas thereby influencing what the public, politicians and public servants think about.

3.1.2 Background

The scope of a country's water supply and sanitation development programme is significantly affected by its resources and the country's social, political and economic systems. The sector operates in the context of competition for scarce funds from other sectors and resource limitations. In many Countries population growth can outstrip the rate at which additional facilities are provided. If there is no infrastructure in place then clearly this makes transportation and telecommunications difficult so that progress is further hindered. These challenges are obviously outside the control of the sector.

It is important that the sector is given a reasonably high profile, as other sectors depend upon it, particularly economic development, agriculture, housing and health.

3.1.3 Sector Plans

Sector Plans serve the vital function of helping to develop a clear strategy for water supply and sanitation and in setting priorities for sector funding. A study undertaken by WASH (1989) investigated basic sector information in twenty African countries. Surprisingly four of these nations had no prepared sector plans and another three stated that their plans were still "*in preparation*" at the end of the IDWSS Decade. Water and sanitation activities within a nation cannot be properly coordinated or directed if there is no overall plan. The countries selected for inclusion were Benin, Burkina Faso, Cameroon, Guinea, Ivory Coast, Liberia, Mali, Niger, Nigeria, Senegal, Togo and Zaire in West and Central Africa; and Burundi, Kenya, Malawi, Rwanda, Sudan, Swaziland, Tanzania and Uganda in East and Southern Africa.

Government traditions play a key role in sector development depending on whether governments can form and institute policies, and focus their efforts in the sector. In the case of the above twenty African nations only seventeen were able to report their progress at the time of the Mid-Decade Review and only twelve of the seventeen included sanitation information in their reports (WASH 1989). There is a clear need for better information systems so that a planning baseline is provided, but that issue cannot be addressed in detail here. Areas of weakness of the WASH study are the limited time taken in preparing the report, the fact that the countries involved were not visited as part of the study and the discrepancies of source documents. The report does not discuss whether their findings are applicable to the developing world as a whole but it is likely that the broad picture is comparable.

The weak economies of third world nations is a major constraint on their ability to improve water and sanitation facilities. The investments required by most of the 20 nations above to meet their year 2000 targets are so large that they cannot in all probability be met. Furthermore these targets do not aim for 100% coverage for water supply and especially not for sanitation. Paradoxically there are significant economic benefits from improved water and sanitation facilities at national as well as other levels. These economic and also social benefits spring from released time leading to greater agricultural productivity and a better quality of life, particularly for women for example. It is in these circumstances that many commentators (e.g. Briscoe and deFerranti 1988) are suggesting that governments must move away from their traditional role of providers to that of the promoters of services.

3.2 How can governments be influenced ?

There is little in the literature about influencing government policy regarding the sector. This is probably because governments and therefore external support agencies too are sensitive to the suggestion of outside interference in government affairs. Internally top sector professionals may be able to exert an influence but they will need to understand the politics of government decision making in order to be effective.

In the context of training, Pickford (1984) has commented that a public relations effort is required to promote the sector to politicians, providing them with sufficient information to make good decisions. He wisely adds that promotion through printed material will be most effective if it is given at the time of a visit or other personal contact and includes local information.

3.2.1 Sector Ambassadors

Sector ambassadors can act as persuasive advocates in promoting the sector. One of the most well known must be former United States of America President Jimmy Carter. He has boosted the campaign for guinea worm eradication since 1986 when he visited Pakistan's president at that time Gen. Mohammed Zia-ul-Haq and persuaded him to put the issue near to the top of the nation's agenda. Carter in turn agreed that Global 2000, a charitable project of the Carter Center would provide major assistance to the campaign. Prior to that support for eradication activities was not strong. Between 1987 and 1991 Global 2000 made agreements to work with the Ministries of Health in Ghana, Nigeria and Uganda.

In March 1988 Jimmy and Rosalyn Carter were present at Africa's second regional conference on dracunculiasis hosted by Ghana. They visited Ghanaian villages and saw the impact of guinea worm on infected adults and children. In Lagos, Nigeria he signed the Global 2000 agreement with the Nigerian health authorities. Both activities drew considerable publicity and promoted the campaign. In December 1989 Carter gave the keynote address at an international donors conference in Lagos entitled "Target 1995: Eradication of Guinea Worm". UNICEF, UNDP, Global 2000 and Nigeria's head of state Gen. Ibrahim Babangida on behalf of the Government, each pledged \$1 million. The total promised at the conference was \$10 million. Significant reductions in the level of dracunculiasis have resulted from the interventions that followed. Both Ghana and Nigeria reported a reduction of 30% in one year (Hopkins 1992). Appendix 3.2.1 is a copy of an overhead project viewfoil illustrating the successes of the campaigns to eradicate guinea worm in Nigeria and Ghana.

Once heads of Government and State have been convinced by the campaign goals their role has been crucial in focussing attention. Flight Lieutenant Jerry Rawlings, Ghana's Head of State was filmed visiting twenty-one endemic villages in the northern region of his country to show people how to filter their water properly. In Nigeria Vice-President Augustus Aikhomu announced three guinea worm commemorative postage stamps and dictated that local government health departments should assign 10% of their budgets to the campaign (Hopkins 1991).

Political support for a cost effective eradication effort is probably feasible because guinea worm disease is a common, important cause of disease in affected areas and the goal is absolutely tangible. The eradication campaign holds important lessons in successfully mobilising support at global, national and village levels. For further details of the mobilisation activities see Hopkins (1991). A caveat is that specific campaigns are always easier to promote and likely to receive more significant support compared with sector-wide promotions. A health promotion example of this in the United Kingdom, is the effort traditionally given to the fireworks safety campaign immediately prior to "bonfire night" on November the fifth each year, which far outstrips the relative risk compared with other safety hazards. Both campaigns are worthwhile and have an excellent impact because they are focussed but caution must be exercised in scaling up to the whole sector and expecting a similar impact.

Famous actors such as Roger Moore, Audrey Hepburn and Peter Ustinov have been used by UNICEF as ambassadors for child survival. The world class cricketer Imran Khan has also acted in this way in India (de Jong 1992). All these ambassadors have promoted UNICEF's work in health, water supply and sanitation, education and nutrition.

3.2.2 The Role of the UN agencies

This section will discuss the approach of UNICEF to promoting the sector. While UNDP\World Bank and WHO are also active in the sector their approaches will have their own distinctive features and are not discussed in detail here. UNICEF (de Rooy 1992) considers that the role that it has in the sector is as follows:

"to demonstrate, advocate and facilitate approaches (policies, strategies and technologies) which can accelerate water and sanitation coverage to the unserved in a sustainable manner."

Pilot projects serve to demonstrate the effectiveness of approaches so that they may be advocated with governments leading to implementation as national strategies. One of the best known examples of this must be the VIP promotion success in Lesotho (IBRD 1990).

This approach is a way of marketing development. However to be successful pilot projects must be replicable. The approach is not possible where pilot projects use a large number of expatriates, which clearly is a pitfall to avoid.

To facilitate approaches refers to the involvement of the private sector. In Niger State, Nigeria for example, UNICEF supported a successful experiment to find an in country replacement for a frequently failing handpump rising main by facilitating the local manufacture of suitable substitute plastic pipes. In the long term this led to financial savings for the project and economic savings for the country. In these circumstances Governments may be persuaded to encourage the involvement of the private sector in water and sanitation provision. UNICEF's ultimate objective is not to provide service coverage but to assist Governments to increase service coverage. Each UNICEF project aims to be operating at ground level but also to impact on government policy through strong linkages with decision makers. This policy target is ambitious. Although it will not come to fruition from some projects, a number of notable successes have made the strategy worthwhile. UNICEF has convinced governments to invest in their assisted programmes. In 1989 for example India committed \$600 million and Bangladesh \$15 million to UNICEF assisted programmes (de Rooy 1992).

3.2.3 Sector Monitoring

WHO and UNICEF have set up a joint monitoring programme to assess the development of the Watsan sector in the 1990s (WHO 1991 and de Rooy 1992). The WASAMS (Water and Sanitation Monitoring System) computer programme provides the facility to analyse annual progress at country, regional and global levels. The programme is based on key indicators in the following areas:

1. Service Coverage
2. Service Management
3. Service Funding

Service Coverage examines the number of functioning systems using the Minimum Evaluation Procedure concept (WHO 1983). The second area includes information on the proportion of operation and maintenance costs contributed by users to assess sustainability. Service Funding incorporates data on the proportion of national sector investment allocated to low-income rural and urban communities. This has been included partly with the aim of convincing governments to extend coverage to poorer communities. Peri-urban areas and indigenous people in rural areas are often left out of the statistics (de Rooy 1992). WASH (1989) are also of the opinion that some of the published information of service coverage is above actual operating conditions, such as listing entire communities as served

when only a proportion may have reasonable access. Reports also sometimes indicate new installations without examining how many are operable.

As discussed above in section 3.1.3 an overview of the existing situation is essential to decide investment priorities. Sector Monitoring may help governments to assess present service provision more accurately, focus resolve and ensure that sustainable service levels improve.

To conclude WASAMS is therefore one awareness raising tool by which governments may be persuaded to extend or promote service coverage to the unserved.

3.2.4 Non-Governmental Organisations

Non-Governmental Organisations (NGOs) in general have only a localised and short-term impact on development as they find it difficult to react with political and other forces at national and international levels. This was the conclusion of a recent conference at the University of Manchester, Institute for Development Policy and Management (Edwards and Hulme 1992). A number of delegates during one of the workshops agreed that one successful way of influencing governments is to work within their structures from the outset. Government bureaucracies could be made more responsive to grassroots needs through NGOs influence, although it is recognised that the power of larger donors (such as the World Bank and the International Monetary Fund) far outweighs NGOs. Even authoritarian regimes may be influenced e.g. in the health sector, Chile developed progressive policies on breast milk substitutes with the help of NGOs.

In Ghana Wateraid has been closely involved in the organisation of a national conference for each of the last four years, bringing together everyone in the sector. Wateraid has convinced key decision makers of the advantages of protected hand dug wells, in appropriate conditions, over boreholes and handpumps (King 1992).

To summarise, in general NGOs have successfully swayed government policy through lobbying on individual projects but not on fundamental issues of ideology and overall approach to development.

3.2.5 The International Training Network

One and two day seminars and workshops for top civil servants have been laid on by the International Training Network with the aim of influencing government policy (Pickford 1992). The effectiveness of this approach does not appear to have been evaluated, to date. See section 4.3 for more information about the ITN.

3.2.6 Sector professionals comments

A survey undertaken by the author, of sector professionals from sixteen developing countries (see Chapter 4) revealed that the majority had not thought about how key decision makers could be persuaded of the importance of the sector and therefore the need for more investment. There was, however, a consensus that this was a difficult task and most felt that politicians are not open to persuasion.

An incidental finding of the survey was that sector professionals in general, are aware that politicians often do not come from scientific backgrounds. As a consequence of this any communication to convince them of the importance and benefits of improved water supply and sanitation must be non technical and tailored to suit them.

Two particular approaches were of note. In Malaysia advantage is taken of specific problems in the country such as cholera and typhoid outbreaks. Cabinet Ministers are invited to open national water and sanitation sector conferences and will customarily stay to hear the keynote address which will highlight the problem together with a persuasive solution. This approach has worked to release funding in many cases. Earlier work, Pickford (1984) has noted that in the Philippines the national water authority AWAS, organises courses for politicians and members of local committees.

In Mexico at the "Conision Nacaonal Del Agua", a National Government Institute, twenty staff work to produce posters and videos. These materials are to convince key decision makers and managers to undertake proposed programmes, in the health or sanitation field, for example. This approach is sometimes successful. The Mexican sector professional interviewed concerning this commented that in his view their work is: *"a waste of money as good quality videos which are very expensive to produce may be viewed for five minutes only"*. He thinks that it is not necessary to produce materials specifically for this group particularly when they normally watch the videos alone but may pay no attention to them. The Malaysian approach has a number of advantages as a Minister may feel more compelled to act under the pressure of sectors professionals presence at a conference - he or she is more in the public eye than when watching a video alone.

3.3 What needs to be communicated to key decision makers ?

Clearly, the demands upon key decision makers are enormous. To enlist them they need to be persuaded of the importance and benefits of Watsan sector investment.

WASH (1990) considers that politically it can be shown that health improvements from actions in the sector are non-controversial, which is a debatable point depending upon what it is competing with. Improved water supplies and sanitation generally do enjoy popular support however, and bring immediate benefits to the community. For example health benefits to children in a successful programme may be less diarrhoea and therefore a reduced infant mortality rate. Franceys and Pickford (1989) have estimated that water related and sanitation related disease cause the deaths of approximately 15 million children per annum. To be able to demonstrate an improvement in the lives of some of these children is likely to be popular with politicians in any state. This is not a short term task however.

The health and resulting economic benefits of improved facilities must be demonstrated to politicians. It has been estimated that on average one tenth of each person's productive capacity is sacrificed to water-related diseases in developing countries (UNCED 1992). To take a specific example, in Nigeria it is estimated that guinea worm causes the loss of 50 million working days a year from the agricultural sector and 40 million schoolchild days (Hopkins 1991). In India (Mukherjee 1990) it has been estimated that 1 800 000 000 productive person hours are lost due to water and sanitation related diseases every year. Further work could compare this with the cost to the Government of installing or promoting water and sanitation services. It should be possible to demonstrate the economic advantages to the country of sector services.

An opinion survey undertaken by Harris and Taylor (1990) concluded that political survival now demands sensitivity to public opinion on environmental matters. In almost all countries there was concern about water pollution in some form: the public, in twelve out of the sixteen countries, listed either the pollution of drinking water or that of lakes and rivers as one of their two major environmental worries. 8325 adults were interviewed in both developing and developed nations. If all interviewees were in developing countries then drinking water may not have held such an important position however, compared with other issues such as the degradation of the land.

A number of other changes in operation must be communicated to and introduced by policy makers if the sector is to operate efficiently and effectively. Examples are the need for decentralisation and for community management. Responsibility for the implementation and operation of facilities should be delegated down to the lowest level possible e.g.

community and household (UNCED 1992). Unfortunately the concept of "*empowerment*" which makes community management possible will be an anathema to some governments.

CHAPTER 4

COMMUNICATION AT SECTOR PROFESSIONAL LEVEL

4.1 The Communication Orientation

If improved communication is to make an impact in improving sector performance then it is the sector and therefore sector professionals who must make the major thrust and take responsibility for that change. What is required is not merely to bolt-on a communication component to programmes but according to van Damme (1992) a new "*communication orientation*" amongst all sector professionals and sector activities. This would mean that all sector activities are looked at from a communication perspective and requires a major re-training exercise. It is sector professionals who must ensure that policy makers are informed and persuaded that sector activities must be brought near to the top of the political agenda. They must also take responsibility for ensuring that user communities are educated and "sold" the concept of the importance of improved water supplies, sanitation and hygiene. The performance of sector professionals is key to ensuring that the sector achieves its goals.

4.2. Routes by which communication may be improved

The capacity of the sector to improve its communication skills may be developed in a number of different ways. For example special presentations could be laid on to which appropriate sector ambassadors could be invited to recommend new approaches (de Jong 1992). Three other possibilities will be considered.

4.2.1 Professional Associations

Professional associations are the major route by which professionals in industrialised nations are updated and kept abreast of current developments. These associations provide regular seminars and training courses together with the publication of professional journals. According to Grover and Howarth (1991) well established national associations also undertake the following:

1. setting of standards for training etc.
2. promoting applied research on outstanding issues
3. encouraging coordination with related professional associations, both within the country and internationally
4. lobbying the government to make the necessary policy changes and regulations to ensure the development of the sector

Professional associations can also help to raise the profile of the sector. The United Kingdom Institution of Civil Engineers is so convinced of the importance of the promotion of their sector, that one of its performance indicators is the number of column inches of news concerning civil engineering in national daily newspapers (Franceys 1992).

One of the objectives of the International Water Supply Association (IWSA 1992) is to ensure a maximum exchange of relevant information of common interest to sector professionals. Specifically to achieve this in developing and newly industrialised countries the IWSA Foundation for the Transfer of Knowledge has been created. The IWSA FTK will work through the organisation of workshops and conferences in developing countries and through scientific and technical publications. A three year programme has been planned (Anon 1991) to strengthen and promote associations of sector professionals in several developing countries by involving existing organisations. Where organisations already exist the aim will be to expand them, broaden the range of services which they provide and help put these associations on a self-sustaining financial basis. The foremost priority will be to upgrade technical and management skills through the above workshops and by the means of in-service training programmes. The author has written to the IWSA Foundation for the Transfer of Knowledge for more information but to date no reply has been received.

A survey of sector professionals from developing countries (see section 4.4) indicated that there is a need to develop professional associations specifically for the sector. Out of thirteen developing countries ten were found to have civil engineering professional associations but nothing specifically for the sector. In one country surveyed professional associations do not exist. Every country has a civil engineering or engineering professional association but meetings concerning sector work are generally held only annually. Two nations do have sector professional associations. The Malaysian Water Association for all those involved in water supply and sanitation was started in 1990. One of its objectives is to set up task forces to produce specific research publications. Senegal has an association for water supply professionals and an organisation for sanitation workers. In Mexico there is no sector professional organisation but a national water commission holds two courses a month for anyone working in the water sector, thereby fulfilling a similar function.

According to Pickford (1992) the only other nation with sector professional associations is India which has the Indian Waterworks Association and the Institution of Public Health Engineers, India.

In Nigeria, UNICEF (de Rooy 1992) funded an annual water engineers' conference for three years and encouraged nationals to present papers of successful approaches in the sector. Nationals informed and convinced other nationals leading to improvements in the way the sector operates in that country. It is thought that the conference is still operating each year.

To summarise there is therefore scope for organisations such as the IWSA Foundation for the Transfer of Knowledge and UNICEF to promote professional associations to serve the sector and improve communication.

4.2.2 Networking: Another strategy for professional development

Networking is a relatively new concept in industrialised nations but may have application in the sector in developing countries. Heathcote (1990) has undertaken a review of six health education networks in England. These networks provide a forum for the exchange of information, ideas and experience together with access to social and moral support. The activities undertaken range from informal discussion concerning the sharing of problems and socialising, to formal informational input or skill orientated input using a network member's particular expertise or a guest speaker. Often ex-students from the Water, Engineering and Development Centre or other past students from anyone of the International Training Network Centres may not be given appropriate support by their employing agencies for them to implement the skills and knowledge which they have gained through their study. This may result in a sense of isolation. Networking, a more flexible form of professional association in the style described above may provide some welcome support.

Oxfam are initiating a network system in developing countries (McDonald 1992) whereby professionals in meetings within a nation identify common problems. International exchanges are then to take place to compare the approach taken in another developing nation (one exchange has occurred so far). The idea is to "*bring people together at grass roots level*" so that resources can be pooled. So far Oxfam have been concentrating on gender and environmental issues but in due course the approach could be expanded into the water supply and sanitation sector particularly in view of its impact on the environment. The United Nations Conference on Environment and Development (1992) recognised

technical cooperation between developing countries as crucial to make the best use of the available information and experience. It also stated that this process is happening already and is proving cost effective.

4.2.3 Inter-Disciplinary relationships

As Grover (1983) points out inter-disciplinary professional and inter-departmental or ministry relationships are often poor. One of the conclusions of the IDWSSD (1981-1990) according to de Rooy (1992) and WASH (1990) has been the need to draw people together from different disciplines.

One of the open ended questions in the sector professional survey examined this area. In view of the above the author had anticipated that significant difficulties would be indicated by discussion of this area. However only two professionals admitted to a lack of co-ordination between ministries. Two others stated that monthly inter-disciplinary meetings are held for all sector professionals. All the others interviewed did not even suggest that there were any difficulties between different professions with comments such as "*in major projects, professionals of all disciplines work well together*" and "*most water supply projects are satisfactorily integrated and have different specialists working on them*".

The survey may have reached different conclusions from those expressed above for a number of reasons. One explanation is that the situation may have changed since the end of the Water Decade; this is unlikely to provide the full answer as improvements usually only take place slowly. Another is that the sector professionals did not wish to speak negatively about their countries or do not see the home situation objectively when away from it as suggested by Douglas (1985). Perhaps of more importance is the fact that the sample size is too small to be of significance. WASH (1990) has come to the conclusion that coordination and collaboration are important but often depend more on professional networking and personal relationships than on institutional relationships.

4.3 Training

Much has already been written about training e.g. Wilson and Allison (1986) concerning the training of trainers in low cost sanitation and other work such as (Pickford 1991). It is not intended to repeat such information here. Nevertheless training will be essential to communicate the new communication orientation. The current view is that training yields the best results when it employs participatory experiential training methods (WASH 1990).

One publication which has been highly recommended for the technical training of sector workers is the "Communication Skills Manual for Trainers 1991" written by communication specialist Laver (de Jong 1992).

The international training network for water and waste management

The ITN aims to support training in low-cost water supply and sanitation through a network of local, regional and international training institutions. ITN Centres work to provide training, disseminate information and promote local applied sector research on low-cost water supply and sanitation. The organisation is part of the UNDP-World Bank Water and Sanitation Program. It likes to consider itself *"a vital partnership of training centres, host agencies, governments, donors and associated training institutions in industrial countries."* In January 1992 forty affiliated institutions were linked through thirty countries. One of it's activities has been to produce a comprehensive audiovisual training series on low cost approaches and the major emphasis of the programme has been the promotion of institutional development. The ITN operates in partnership with PROWESS (promotion of the role of women in the sector), whose major objective is to make people-centred approaches an integral part of programmes. Another of it's major themes is the local production of communication tools (ITN 1992). The setting up of ITN Centres has not proved easy however (Pickford 1989).

4.4 Survey of sector professionals from developing countries

Sixteen sector professionals were interviewed from thirteen developing countries concerning two areas. Firstly regarding professional support within their jobs and secondly to assess their attitude towards the group project communication exercise.

The survey consisted of five open-ended questions designed to elicit responses in the following areas:

Professional Support and Co-operation

1. The level of activity of professional associations in the sector to assess the extent to which information and concepts could be communicated through this route
2. The level of inter-disciplinary co-operation between different professionals in their home situations

Group Project Communication Exercise

3. The relevance and value of the group project communication exercise to them, together with suggestions as to how the exercise could have been improved
4. Their awareness of the need to promote the sector and suggestions of the most effective way of achieving this
5. Their opinion of the value of such an approach using the mass media and it's usefulness for promoting the sector in their situation

Interviewees were invited to discuss these and related issues in any degree of detail resulting in interviews ranging from thirty minutes to one hour and twenty minutes.

Texts such as Sudman and Bradburn (1985), McCrossan (1984), Moore (1983) and Peil (1982) were studied to guide the interview approach. Douglas (1985) does point out that the most strenuous attempts to avoid biasing the answers to questionnaires and interviews have been demonstrated to have failed by a plethora of studies. However, interviews can reveal useful information provided that this limitation is accounted for and wherever possible guarded against.

It was recognised that undertaking interviews would be time consuming compared with sending out questionnaires but the opportunity to ask additional probing questions to obtain more complex information was preferred. Furthermore questionnaires usually have a notoriously low level of response and researchers can never be sure if those responding are representative of a whole group. They are often easy to complete and analyse but the responses given often only reveal part of the picture (Moore 1983).

An overview of the responses of those interviewed is presented in the relevant sections of this report because it illuminates a number of valuable points.

4.5 MSc. Group Project Communication Exercise

Part 2 of the MSc. for which this project will be submitted includes a group project communication exercise. The two aspects in this year's task were persuasion and publicity. In the publicity part each team was asked to produce a short radio announcement and a poster to communicate a specific message to the people of an imaginary nation. For the persuasion exercise each group was required to prepare and present a short lecture on a specified subject with the aim of persuading politicians or senior civil servants to adopt a different attitude. In each case each team was given a different scenario. The author

discussed the exercise with the organiser (Coad 1992) and the other participants. This was to assess the objectives of the exercise and how it facilitates learning about the importance and role of communication.

The aim of the exercise according to Coad (1992) is to get professionals thinking about how to communicate, i.e. in this case *"how to knock down complex messages into a simple form so that they communicate to the public. Each task requires the marshalling of known facts into a form which communicates and persuades. The participants seem to respond with interest and enthusiasm, but often do not tailor their presentation to the intended audience and have an inability to present a case forcefully."* A secondary aim according to Coad is to encourage consideration of structure and use of visual aids rather than just conveying information. On a scientific course the emphasis is usually on presenting all relevant advantages and disadvantages of a situation but this approach can lack the punch to persuade. The group project communication exercise required the presentation of a clear argument to persuade a specific target audience.

Fifteen out of sixteen participants saw the exercise as valuable to them, the other one could not see how it was useful to him. Another stated that the exercise was *"not valuable in my present job but I recognise the importance of these skills."* One water engineer said *"as engineers we are not very good at communication and need to improve our skills, in public speaking for example."* Others had clearly been helped to think about the lay person's perspective and how important it is to be able to persuade and help people change their attitudes. Finally another positive comment was that the exercise gave an insight into the work of others and *"was helpful to consider what instructions to give to the health education unit."*

When asked how the exercise could have been improved thirteen participants stated that the exercise should be extended in future years to allow more time on the subject of communication. This would enable everyone to be able to give a presentation, for example. In response to the author's questions the organiser of the exercise agreed that he recognised communication as an essential component of the sector professional's role and therefore stated that *"not enough time is spent on it at present during the MSc., and that in future years hopefully the exercise will be extended."*

Four respondents felt that the exercise had convinced them of the need to promote the sector. The majority said that they were already aware (7) or that they were partly aware and the exercise had raised their awareness (5). One made the interesting observation that *"previously I didn't appreciate the role of the public relations department but now I realise that they are doing a good job."*

On the question of the value and usefulness of such an approach using the mass media for promoting the sector in their situation responses were mixed. The vast majority (14) of those interviewed felt that in the right circumstances the mass media can successfully be used in the way illustrated by the exercise. In contrast two sector professionals recognised barriers in their home situations which made the use of the mass media inappropriate. In one case many announcements have been made on the television and radio over a period of 5-6 years but the situation has not changed; promises have not been kept and even in the capital most people still do not have running water. The credibility of any future public announcements by the sector has been completely undermined. In another situation where the water supply is adequate the barrier to the introduction of latrines is perceived to be not a lack of knowledge but the shortage of land and personal finance.

It is interesting to note how many of the conclusions reached in the literature review in chapter 2 were also stated by sector professionals in the survey. They cannot have undertaken detailed research but intuitively have come to some of the same conclusions through experience. Everyone interviewed recognised that although the mass media has successfully been used and also has the potential to reach a vast audience, it also has significant limitations. The majority (9) mentioned the need for interpersonal communication in response to the author's general question. This was because mass media does not reach many of the rural areas and also as the best approach was considered to be public meetings or other more personal methods. The appropriate application of the mass media was recognised by several to be that of providing a specific non-complicated message to a specific target audience in the local language. Some misunderstanding was implied by overestimating the power of the mass media: *"if the potential user knows about and can afford the service offered then this will lead to success"* i.e. uptake of a service. This does not allow for people to think in a different way from the "professional view". One comment was that posters cannot be used in rural areas *"because they would be misinterpreted"* i.e. in the jargon of communication, the level of visual literacy is low.

Three of those interviewed were concerned that often the level of service offered is not affordable to the potential users i.e. the market research if undertaken, has not ensured the "right" four Ps of marketing (see Chapter 2). An alternative to the use of the mass media to promote the sector was mentioned in one interview: *"the education of schoolchildren as a pressure group on parents has been successful in the long term."*

Two responses emphasised that success in itself promotes the sector as follows: *"if a good service is provided this will promote the sector"* and *"the best way to improve and promote the sector is to have successful programmes"*.

CHAPTER 5

COMMUNICATION WITH USER COMMUNITIES

This chapter includes various examples of communication between the sector and user communities to see what lessons can be learned.

5.1 The gap between what people believe and do, and what the professionals think people believe

One of the largest studies of its kind was undertaken in India to find out how people act. Policy makers in the Government of India's Technology Mission on Drinking Water (the Mission) found that the provision of services will not automatically result in an improvement in health and life expectancy for the recipients (Mukerjee 1990). Public health is only significantly improved following the provision of services when people's behaviour changes, as previously discussed. UNICEF was asked by the Mission to help develop a strategy to provide services and ensure that the necessary behavioural changes take place.

Prior to developing the strategy it was first necessary to find out what people know, believe and do regarding water use and hygiene in different parts of the country. As a prerequisite for developing a social mobilisation and behavioural change plan UNICEF oversaw a country wide knowledge, attitudes and practices (KAP) study on water use and hygiene in rural areas. The study, undertaken by the Indian Market Research Bureau, investigated both the rural population and the implementors views. The findings are of significance because it was clear that there was a nationwide gap between what the implementors believed and what people actually did.

The survey (IMRB 1989) revealed three important gaps in understanding between the implementors and the people:

1. The implementors had inaccurate information concerning what communities believed about water and how they used it. For example, although 80% of the population had access to water from handpumps only 30% used it as their drinking water source. Reasons given for this included the taste and the distance of pumps from homes i.e. inconvenience compared with other sources.

2. There was widespread public ignorance about how unsafe water affects health. Implementors were unaware of this. Twenty-six per cent believed that "germs" could be seen in affected water and in general water was judged by how it looked, smelled and tasted. "Bad" water was thought to cause colds, coughs and fever rather than diarrhoea diseases. A link between impure water and ill health was therefore recognised.
3. Project officers did not think that people would be prepared to pay for the installation or maintenance of handpumps. In contrast when asked 66% of families indicated that they would be prepared to contribute towards maintenance. This could facilitate an important shift away from the attitude of "*it is a government pump*" to the community assuming ownership and responsibility.

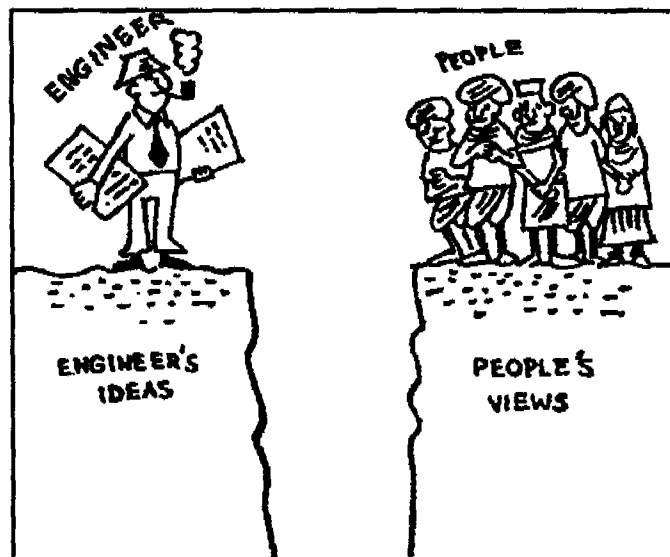


Figure 5.1 (Adapted from WHO 1985)
The gap between the engineer's ideas and the people's views

Earlier work (White et al 1972) also found that there can be a difference in perspective between users and government officials concerning the most suitable water sources. The incorrect assumptions concerning willingness to pay also compares with other research findings such as Dworkin (1980) who found that villagers in Thailand were prepared to pay a high price for the level of service that met their perceived needs. The Indian research is of particular note because it covers an extensive part of the sub-continent.

Once the survey results had been assimilated it was possible for the Government to draw up an action plan to implement the survey lessons (McIntyre 1992) in the following ways:

1. Communication strategy development workshops have been developed for policy makers in fourteen states.
2. The Government of India has asked all Departments of Public Health Engineering to set up communication and training cells with support from experts in the media and social sciences.
3. Each pilot project has to include detailed plans for IEC using mass media and a mixture of traditional and local media.

The clear lesson from this work is that programmes should always be matched to the knowledge, attitudes and practices (KAP) of user communities to ensure effective outcomes. Information, education and communication should not be additions to programmes but, as in this case, a central pillar. Other research (Laver 1985b) has also indicated that a lack of communication between project implementors and the people at all phases of a project is a major contributory factor to misunderstanding of objectives and that an urgent need exists to bridge this gap with relevant information. Appendix 5.1 is a copy of an overhead projector viewfoil used to illustrate the successes of the mission's project.

5.1.1 The Mission's IEC Strategy for the Eighth Plan Period

(Chatterjee 1991) states that "*Communication has over the past three years been accepted by the Mission not merely as a support to water supply efforts, but indeed as the programme itself: there is no longer any debate that the nature of the task is changing behaviour.....behaviour change, and not media products is what communications is all about.....messages have to be exchanged*". Ten per cent of the Government of India's Central Rural Sanitation Programme annual funds have now been allocated for IEC activities including community management and participation. In 1991 this would provide a potential budget of almost the equivalent of US\$ 2 million. A directive from the central government has been issued ordering the Rural Water Supply Departments of all state governments to establish *Communication/Training cells* employing social science and media professionals. By April 1991 four state governments had submitted proposals for central government funding. Lhalungpa (1992) also states that a commonly accepted practice is to allocate 10% of programme budget for communication activities

A recent visit to India by an IRC official could find little evidence of the implementation of this IEC Strategy (de Jong 1992). The Government of India is known as a little bureaucratic and therefore the execution of the strategy may only now be taking place. In areas where the mass media does not penetrate innovative media strategies are already

emerging however. Chatterjee (1991) states that "*Periodic Village Contact Drives (VCDs) are being undertaken in Rajasthan, Madhya Pradesh, West Bengal, Jammu, Haryana involving many small teams walking from village to village, with messages on safe water and hygiene disseminated through folk songs, ballets, puppet shows, street plays and slogans. All the media materials are evolved by the local communicators during their orientation on subject matter. The VCDs also serve as channels of information collection and dissemination between Project authorities and the Community.*"

5.1.2 Media Package Development

A media package has been developed to communicate safe water and hygiene awareness in rural India as part of the implementation of the above findings (UNICEF 1991a). The Mission's collaboration with UNICEF has in this case changed conventional organisational perspectives about communication development to concentrate specifically on the process rather than the products.

The fundamental challenges to the provision and consumption of safe water were crystallized by a UNICEF commissioned professional communication agency (UNICEF 1991a p10) as follows:

1. Inadequacy of facilities to ensure user's access to safe water as per norms
2. Sub optimal utilisation/misuse of existing facilities implying poor maintenance of handpumps, lack of cleanliness around handpumps and unhygienic water handling practices which render even handpump water unsafe

The first challenge requires a hardware solution although improved communication could help express demand for handpumps. In contrast, the second requires a principally software solution to change the KAPs of end users and of implementors, which is so rarely achieved in programmes. It was decided that the thrust of the communication effort should be on the latter challenge to create inter alia, an awareness of the link between water and health. If people could be convinced that unsafe water could cause disease then they could also be motivated to adopt hygienic practices for the handling of drinking water, handwashing and disposal of human waste. Other tasks were to motivate communities to maintain the handpumps and surroundings by creating a sense of community ownership, and to promote the handpump as the safest source of drinking water. Women were chosen as the primary target group because women take the primary responsibility for the collection and storage of water.

Clearly, it is a far bigger challenge to change culturally ingrained habits than to just sink new boreholes and install handpumps. Research indicated that the target audience had a low literacy level but that radio offered sizeable penetration. In common with the findings of chapter 2 inter-personal communication was recognised as the most effective channel for behavioural change. However in India along with other countries drinking water and sanitation does not feature significantly on the agenda of established interpersonal communicators such as health visitors. For this reason the strategy focuses on enlisting and motivating existing face to face communication channels on the subject of safe water and health. The primary interpersonal communicators chosen were the Public Health Engineering Department field workers so that they would operate as technicians and communicators. These technical staff would be required to develop a "*communication orientation*" as discussed in Chapter 4. Radio, Television and live folk media would be used to raise awareness of the issues.

A communication package was developed using the mediums of television, radio, songs, posters, banners, bunting and a flipbook. The central theme would be provided by a 30 minute folk play telling the story of a battle between the King of the germs and the villagers. The outcome of the battle demonstrates the defeat of the germs when the villages accept the gift of a handpump and the advice of "*Mother Earth*", a carefully chosen concept. Field testing of this prototype media package was completed by September 1991. This indicated the suitability of all proposed materials, with minor alterations.

5.2 Social Mobilisation

Mobilisation (de Rooy 1992) is "*the purposeful spurring to action, by stimulation, advocacy, negotiation and promotion, of relevant institutions, organisations and individuals to accomplish the demonstration or manifestation of interest, conviction or commitment through financial support or other action. Social Mobilisation is the above mobilisation undertaken on a broader scale, usually at country level, and involves a range of such participants around a nationally or regionally recognized objective. Both Mobilisation and Social Mobilisation take into account political and popular motivations and incentives to forge a coalition of interest around the action or support.*"

It is reported that UNICEF employs more than 120 staff to undertake this approach (de Jong 1992) which demonstrates the importance that the organisation places on mobilisation. Clearly, enthusiastic support from senior politicians can make a significant difference to what can be achieved through social mobilisation. A greater impact can be anticipated if the public attitude is favourable in terms of approving the purposes for which they are to be mobilised and if a network of local organisations for mobilisation is already established.

The Water Supply and Sanitation Project to the urban marginal areas of Tegucigalpa, Honduras (UNICEF 1991b) shows what can be achieved through social mobilisation and community participation. Residents, through membership of water associations, own the water distribution system and are responsible for the operation and upkeep of the systems, collecting water fees and bookkeeping and deciding how to use the profits generated for other community projects. Part of the success of the project is due to the special effort to reach the women of each community through "Clubs de Amas de Casa" or Housewives Clubs. An interactive approach is used by the project health promoters: they listen to the interests of the community as well as talking to members. Women are trained as volunteer health workers, committing themselves to spread their health knowledge to other community members and thereby creating a demand for an improved water supply. The training of local people to educate and mobilise their own communities demonstrated here is essential, as sector professionals clearly cannot do the job alone.

Another example of successful mobilisation has been documented by Young (1989). This project in Nicaragua started by testing the bacteriological quality of water supplies for *E.coli*, informing communities of the results and suggesting repairs or improvements. Community motivators visited villagers in their homes to discuss the water situation, explain the health issues involved and to encourage the election of local drinking water committees. These visits were in general considered to be fruitful. Seven out of sixty three communities in the province of Boaco were relatively quickly mobilised into repairing their water supplies and then taking more responsibility for their repair than they had before. Basic sanitary education was given to villagers, often around the wells where repairs had taken place. Few visual aids were available at first but when videos were introduced this encouraged record audiences to attend. The success of the pilot project in Boaco led to the Nicaraguan Institute for Water Supply and Sewerage drawing up a national plan for the routine monitoring of the water quality of all water supplies. The aim is that this will lead on to remedial action.

To demonstrate the overall concept of planning mobilisation at the country level, the example of how this operates in Nigeria is now considered.

UNICEF and the Federal Government of Nigeria (UNICEF and FGN 1991) have entered into a 5 year agreement of co-operation which includes a key mobilisation element. Advocacy, information, communication and education will be targeted at allies and at communities at different levels to promote the objectives of the country programme. It will aim to improve the knowledge, attitudes and practices of user communities and sector workers. The intended result is increased mobilisation of, and communication to a variety of target groups including: policy and decision makers, media producers and journalists, women's groups, traditional and religious leaders, communities and members of NGOs. It

must be noted that the country programme of co-operation covers health, education, nutrition etc. as well as water supply and sanitation. The plan includes supporting a network of communication and mobilisation coordinators. A range of communication techniques which have successfully used in other developing countries will be used to achieve the goals of the programme as follows: posters, slide shows, cassette production, silk-screen printing, socio-cultural live performances, low cost video productions and other audio visual techniques.

5.3 Marketing Services: What motivates people to adopt a new service such as latrines ?

Traditionally campaigns to encourage the acquisition of latrines have emphasised the health benefits (Fawcett 1992 and Nimpuno 1986) but with little success. The topic of human excreta disposal is highly sensitive in many cultures and experience has shown that it is a difficult area in which to attempt behavioural change. Sociological studies of participation patterns in sanitation projects seem to be unanimous in that health education could not have played any noticeable role in motivating people to change sanitation habits, according to Nimpuno (1986). The latter study does not indicate whether traditional discredited didactic approaches to health education or more modern promotional or participatory methods were used together with full target audience research. The IDWSS Decade (1981-1990) has achieved great strides forward in improving water supplies but the progress in sanitation provision has been far slower (Pickford 1992). Since sanitation improvements appear to provide the greater challenge this discussion will concentrate on the promotion of latrines.

One of the lessons of the decade has been that it is naive for project implementors to assume that communities will have or adopt the same motivation for sanitation as they have themselves. To maintain life everyone requires a water supply but latrines are probably considered unnecessary by most of the population in most developing countries. To create a perceived need for latrines is essential (see figure 5.3). Where latrines have been provided they are not always used as anticipated (Feueurstein 1986) but may become storerooms for valuables such as bicycles or chickens! Sanitation projects, unless latrines are already in use, require a significant change in behaviour.



Figure 5.3 (Adapted from Boot and Heijnen 1988)

Hygiene education picture designed to show the disadvantages of open field defaecation which is common practice in rural areas of Nepal.

As previously indicated for many people the link between sanitation and health is not clear so that people will not consider health improvements a reason to adopt sanitation facilities. It is more likely that people can be persuaded to buy sanitation facilities on the grounds of privacy, status or convenience. The traditional hanging latrine found in many parts of Asia (Wegelin-Schuringa 1991) illustrates that latrines may be constructed for reasons of privacy rather than health. The position of the latrine results in human waste polluting the water below which is often used for washing, bathing and possibly drinking.

The need for privacy for defaecation will vary from culture to culture or even within a culture according to gender, for example, as often women will be required to be more discreet than men. The desire for privacy has often lead to latrines being rejected (Burgers et al 1988) when the user was visible under the door or even when a person could be seen entering. In Zimbabwe VIP latrines are thought to be popular not only because they solve the fly and odour problems that can give latrines a bad image but also because they provide privacy for bathing (Morgan 1990).

Status is a more significant stimulus for men than women (Wegelin-Schuringa 1991, and White and Gordon 1987) in latrine acquisition. It is likely that those already having a latrine will be the more affluent section of society, so that prestige may be associated with possession. Having a latrine may also be associated with being "modern", and therefore desirable. This aspect of the perceived value of a latrine is clearly determined by the superstructure. Wegelin-Schuringa (1991) points out that where the users are responsible for the superstructure, as is often the case, and prestige is an important consideration,

potential owners may not be prepared to participate unless low-cost but impressive designs are on offer.

Convenience can be an effective selling point for latrines particularly where the customary defecation area is distant from the property. The inconvenience of walking to the designated location will be particularly noticeable when it is raining or dark.

Privacy, convenience and status are therefore the most likely arguments to motivate to latrine acquisition although some work (White and Gordon 1987) has suggested that the health arguments should be emphasised on the grounds of honesty. The difficulty is that health arguments by themselves have thus far been unsuccessful. A balanced view is for promotions to concentrate on the advantages other than health improvements and for education to demonstrate health benefits and hygiene requirements. Much has been said about facilities being constructed but not used, so hygiene education and information must allow for this.

When the normal practice is to defaecate in the open, people's experiences of latrines will be of great significance in determining their perception. If the only latrines they have seen have been smelly, dirty and full of flies then a project must demonstrate how the facilities should operate. In a review of the literature Burgers et al (1988 p25) state that "*latrines are often rejected because of the risk of collapse, poor construction, great distance from the house, presence of snakes, children's fear of the dark hole and of falling in, and bad smell.*" In addition, other work (Hubley 1987) has found common objections to latrines to be an unwillingness to share them with others, fear of contact with faeces, smells and flies. The resources required in time or the cost of materials may be other objections. Programmes should use social marketing to find out people's preconceptions and address them in promotions.

The advantages of flyless and odourless latrines such as the VIP have been assumed (Laver 1985a) to be seen by users in the broad context of health. This may exceptionally be true where communities have learned some appropriate lessons from basic hygiene education. For the majority, their perception of these advantages is unlikely to be directly associated with health.

Another factor which may have a strong influence on latrine acquisition is group pressure. Nimpuno (1986) considers this the most important motivational factor to participate in sanitation i.e. of greater significance than privacy, convenience or status. In societies with a clear community identity, once opinion leaders together with a significant proportion of the local population have latrines, there may be a compelling social force requiring compliance to avoid loss of goodwill. If most people participate then this in itself constitutes a psychological pressure on others to conform, whether or not community

leaders have decided that everyone should have a latrine. It may be possible to enhance this group pressure indirectly by educating schoolchildren in the benefits of sanitation facilities.

5.3.1 The promotion of VIP latrines in Lesotho

People in rural areas of Lesotho were so effectively "sold" the benefits of ventilated improved latrines (VIPs) that they were willing to pay a month's wages to buy one. The UNDP/World Bank discussion paper on the successful pilot project which turned into a national programme (IBRD 1990 p26) emphasises the role of "*health education in raising demand for latrines by enhancing women's understanding of the need of proper hygiene and improved sanitation.....and the potential health benefits.*" This is in contrast to the work discussed above (such as Nimpuno 1986) which considers that health education is not effective in promoting sanitation facilities. The other factors e.g. group pressure, status, privacy, comfort and convenience, will undoubtedly have also influenced consumers in Lesotho however.

The private sector was used to promote sanitation by training members of local communities in how to construct VIPs. These local latrine builders (LLBs) then marketed their skills in the community with a personal financial incentive to promote improved sanitation. Radio announcements and posters were used (Hubley et al 1988) to help raise awareness of the availability of LLBs. Poor rural villagers were persuaded to pay the equivalent of \$75-150 (approximately a month's income) for their own facility. Customers can only be persuaded to pay this high a cost when their demand for the product is high, due to an appreciation of the advantages it brings. At first hygiene messages using the medium of leaflets were found to be relatively ineffective. Other work such as that of Laver (1985a) has noted a deficit of suitable information materials to close the gap between low cost sanitation technology and people. Instead the participatory methods of home visits, small group discussions and community meetings related to latrines and health, particularly with women, were successfully used to change attitudes and behaviours in Lesotho. A Theatre for Development promoted the latrines by portraying, in story form, the link between sanitation and health. Appendix 5.3.1 is a copy of an overhead projector viewfoil used to illustrate the successes of the project.

A whole year was taken at the outset to get to know local communities and build the team of sector professionals. The VIP design and construction technique was demonstrated to local people through workshops. KAP studies were undertaken and health messages relating to sanitation were incorporated into primary health education.

The final outcome has often been quoted as a model for other projects as villagers were persuaded to demand latrines through effective communication and training. The

Government's role was to contribute towards the expenses of organisation and promotion but not construction. It will be interesting to see how often this model is replicated in other countries; one distinctive feature of Lesotho is the high level of migrant labour. Almost half of the active male labour force is employed outside of the country (IBRD 1990) so that the rural economy of Lesotho is largely cash based, unlike many other developing countries. The importance of this is that villagers in other countries will rarely have the cash to pay a month's income to buy a latrine; even in Lesotho the VIP is not affordable for many. An appropriate alternative may be to upgrade or replace part of an existing latrine. In Botswana the total financial cost of a single VIP latrine is P558 which is more than seven times sum of the cost of the slab, vent pipe, fly screen and squatting pan at P30, P10, P2 and P35 respectively (Larbi 1990). Another significant point is that about 20 per cent of rural households already had latrines before the project started; latrines were already culturally acceptable, which may not always be the case elsewhere.

5.3.2 Promoting demand for Latrines in the Philippines

Promotional work in the Rural Water Supply and Sanitation Project was undertaken by the local Rural Health Unit together with the barangay health brigade and barangay health workers (all volunteers). Motivating families to improve their sanitation practices was found to be the biggest challenge (McCommon et al 1990). Promotional campaigns were adapted to local circumstances. Health education, promotion and financial assistance preceded the installation of pour flush latrines. Field staff worked with barangay leaders to prepare a sanitation plan in every case. Some support was provided from civic organisations such as the Lions club, religious groups and mother's clubs. The project was very successful according to McCommon et al (1990) in that requests for toilet bowls exceeded the supply by a factor of 4-5. In earlier work (Mitra 1986) pointed out that the level of motivation must be carefully balanced with the available resources such as funds and materials, so that credibility is not lost. The project does demonstrate how intensive promotion can be used to generate demand for improved services. The behavioural change required did not appear to be that significant, however. Toilet bowls were provided free of charge to participating residents who were responsible for the pit, providing a wooden platform and the superstructure.

5.4 The correct balance of water, sanitation and hygiene education

An integrated project in rural Bangladesh (Aziz et al 1990) produced significant behavioural changes. The project involved the installation of handpumps, pour flush latrines and hygiene education. The latter was provided by household visits, group discussions and training sessions. The project evaluation indicated that 90% of households in the project area used handpump water for all domestic purposes compared with less than 20% in the control area. Again 90% of latrines were found to be regularly in use in the project area compared with 80% in the control area. One significant success was that the majority of the community switched from using mud for hand washing to using ash. Observation revealed that ash was available for use in 62% of the latrines in the project area but only 1% of the control latrines. The most striking impact of the project was in the number of days on which the average child suffered from diarrhoea. For the intervention area this was half that of the control zone in the last two years of the project. Diarrhoea of all kinds was substantially reduced in each village in all seasons in each year of the project. *Ascaris* infection rates were also significantly reduced. The project report did not consider the cost of the intervention to be unreasonable.

Aziz et al (1990) concluded that improvements in water supply and sanitation can have a positive impact on community health, which is usually the justification for interventions but can rarely be demonstrated. This is reassuring in view of the number of projects which do not achieve the intended impact on health, as discussed in section 2.9. The project also clearly portrayed the advantages of the integrated approach of combining water supply, sanitation and hygiene education.

Two successes of the project were a sanitation coverage of 90% and the fact that investigations indicated that the latrines were used. However these may not have been achieved without the large subsidy that was offered. Aziz et al noted that the potential market for improved sanitation in Bangladesh is enormous as only 2.2% of the rural population at present have latrines. A closer study of the market and how it may be stimulated could help to indicate how sanitation facilities may be promoted. The report indicates that *"it is feasible, through a reasonably replicable program of hygiene education, to bring about significant changes in the behaviour of a rural population"* (Aziz et al 1990). The study took more than 5 years to complete and cost hundreds of thousands of dollars so it is unlikely to be truly replicable. Furthermore the high profile of project staff is likely to have had an influence on behaviour.

The report also highlighted the need for further research on effective evaluation methods, especially to tackle subject areas with a stigma attached, taboo behaviours or occasional behaviours such as forgetting to wash hands.

WASH (1990) found two aspects of hygiene education to be of critical significance in ensuring effectiveness-the materials and the educator. It also considers that hygiene education must be undertaken with audiovisual materials. This appears to be far too prescriptive as although aids are helpful they are only a tool; while they would normally be effective there are situations where story telling alone may be successfully utilised. Well designed audio visual materials can inform, inspire and motivate both community members and public health workers. Locally produced materials can be equally as effective or more effective than high cost externally produced materials. Materials must be tailored to the people and context in which they are used. Careful knowledge, practices and attitude studies should be undertaken together with an investigation into the past experiences of the target audiences before materials are prepared. Hygiene education should be undertaken by trained health educators preferably from the local community so that their credibility will be higher. Alternatively educators should deliver their messages with the assistance of local people which is important for sustainability. It is best to use women as health educators as in most cultures it is not acceptable for men to speak to women about matters of hygiene (WASH 1990).

For more detailed information on what makes hygiene education successful see texts such as Boot (1991) or Pillsbury et al (1988).

5.5 Case study demonstrating the need for communication and the involvement of women: The Water Utilisation Project, northern Ghana

The Water Utilisation Project initially installed 2650 handpumps in 1000 communities in the first 8 years of the project (CIDA 1990). This provided access to clean drinking water for the first time for between 600 000 and 700 000 people. Evaluation of this phase indicated that although these water sources were well used in the dry season, women preferred to use unprotected sources that were closer in the wet season. Later, the project was transformed into a success when education and communication was made a central part of the intervention.

Since 1979 user education has been undertaken with the aim of ensuring that the health benefits of the new water supply were realised. This has been achieved through the following:

1. Establishing and training approximately 5300 Community Water Organisers (CWOs), aiming for one man and one women at each of 2650 pump sites. Their role was to act as pump caretakers and as a focus for communication at village level.

2. These CWOs have communicated a variety of water and health messages to 600 000 pump users
3. Involving women by urging each pump community to select one women CWO, who would then work with women in the community

One of the successes of the project has been to organise large numbers of village volunteers who have gone on to mobilize almost the whole community in mass communication efforts.

Women were largely excluded from village education activities in the early years of the project, despite the fundamental role they play in water use and hygiene. In the second phase of the project special emphasis was placed on directing new health knowledge at women and involving them as CWOs for example. According to the final evaluation report (CIDA 1990) this approach appears to have worked. The CWO mixed teams seem to work well with men and women sharing tasks, but there may be an underlying social resistance. Much has been said and written (e.g. Wijk-Sijbesma 1985) about the importance of women being the most effective educators of other women however, so it is probable that their central role has been invaluable in this case.

Once a thorough assessment was made of the communication challenge, clear and targeted messages were prepared and implemented. Social change followed from this strategy, with surveys providing evidence of improved health. The project highlights the importance of sector programme planning including an educational communications strategy. This was found to be most effective in Ghana (CIDA 1990 p167) when adult education and community education principles were applied with:

1. A narrow focus on a limited number of topics and messages
2. The aim of building awareness and related behavioural change
3. Interactive, learner-centred educational methods
4. An approach that involves community participation
5. Pilot experimental projects expanding into a mass programme
6. Evaluation fed back into programme design

To summarise, effective education and communication have been proved essential in the development of water resources. The report does however indicate that a large number of outside staff were involved over the eighteen years of the total project. Therefore in view of this and the centralised maintenance of handpumps, the approach is unlikely to be sustainable or replicable in the present form. Nevertheless the communication lessons learned remain valid and could be implemented elsewhere. Appedix 5.5 is a copy of an overhead projector viewfoil used to illustrate the successes of the project.

WASH (1990) at the end of the IDWSSD (1981-1990) have come to many of the same conclusions as the above project. Both agree that hygiene education must be firmly rooted in the community and that women as the family leaders when it comes to health must be involved. WASH go further in stating that "*training must utilise accepted village practices, local trainers and will only work when it is the outcome of broad community participation.*" Exactly what are their defined limits to "*accepted village practices*" is not clear. Local trainers are preferable but other trainers may be suitable if their cultural characteristics match those of the target group.

CHAPTER 6

THE IEC OUTLINE STRATEG

6.1 The Water Supply and Sanitation Collaborative Council IEC Core G

The Collaborative Council was formed at the end of the United Nations International Drinking Water Supply and Sanitation Decade (1981-1990) to *"keep the momentum of the decade alive by providing a framework for global cooperation between sector agencies. It is comprised of a group of professionals from developing countries, external support agencies (ESAs) and non-governmental and research organisations all working in the water, sanitation and waste management sector. They are dedicated to enhancing collaboration among developing countries and ESAs in order to accelerate the achievement of sustainable water, sanitation and waste management services to all people, with special attention to the poor"* (WSSCC undated). At the WSSCC Global Forum held in Oslo during September 1991 the Council agreed to focus principally on seven issues, one of which is information, education and communication (IEC) for promotion of the sector. The IEC Core Group was mandated at this conference to design appropriate communication/promotion strategies on Information, Education and Communication. The IEC Core Group is lead by the IRC International Water and Sanitation Centre.

6.2 Overview of the IEC Outline for Strategies

The material in this section, explaining the IEC proposals, is drawn from Lhalungpa (1992) "Towards Effective Communication - An outline for strategies".

The outline for strategies emphasises the key importance of communication and promotion in and beyond the sector to accelerate provision of water supply and sanitation facilities, and to build on the changing role of the sector from provider to promoter of services. It advocates that the sector and the wider sphere of all institutions concerned with water and water management must work together to solve the problems of the depletion and degradation of water resources.

In common with the findings of earlier chapters of this project report it recognises that changes in attitude and behaviour can only be brought about on the basis of effective communication efforts. Effective action towards the proposed changing sector approach is

stated to depend on changes in people, both those who make and influence decisions about water and other development priorities and those at village and low-income urban areas, who make changes in their every day lives. In this process the users are said to be central so that the sector must develop a new more communicative approach in response to their needs.

Communication is stated to be of paramount importance to fully comprehend the most important issues at all levels that need to be addressed in developing suitable and sustainable water and sanitation programmes. "Towards Effective Communication" contains an outline-strategy for intensified communication action in developing countries and at the global level. At the country level this process consists of three overlapping phases, as follows:

1. Advocacy of communication, leading to policy decisions that communication must become an integral factor in all sector work and that it is essential for effective linkages with the environment and health sectors
2. Capacity building and training in communication, in the sector and with the help of a grand alliance of all sections of society
3. Implementation of communication strategies, gradually leading to the required change in sector approach and achievements

At the global level the process consists of two phases:

1. Advocacy and promotion support to assist participating countries add a central communication component to their sector programmes to make them more effective and sustainable.
2. The concurrent development of a global promotion plan to mobilize the media in support of the sector's work and its vital contribution to health, social and economic development.

The immediate establishment of a global work force is seen as the only way to develop a full communication strategy. The *raison d'etre* of this team is twofold:

1. To enter into consultation with countries to support ongoing communication efforts and assist the initiation of new efforts
2. To start promotion efforts on the importance of the sector and its new approach

The overall objective of the communication strategy is stated to be "*to initiate a decentralised process directed to raise a communication orientation in the sector, so that communication gradually becomes an essential ingredient of all sector work.*" It is hoped that this will lead to an increased inclination to adopt principles such as participatory techniques, community management and promotion of water and sanitation itself, thereby stepping up the pace of the sector. The specific objectives at user, sector and policy level are laid out in Table 6.2.

OBJECTIVES FOR MORE EFFECTIVE COMMUNICATION IN WSS

AUDIENCE	OBJECTIVE	ACTIVITIES
USERS	<ul style="list-style-type: none"> * Awareness re: need for improved water and sanitation facilities * Awareness of advantages and implications 	<ul style="list-style-type: none"> * Identify problems, needs, solutions * Educ/comm. Activities * Dialogue and feed-back
SECTOR	<ul style="list-style-type: none"> * Communication orientation re: dialogue externally and within the sector * Encourage/initiate I.E.C. Activities * Relate to users * Relate to policy people 	<ul style="list-style-type: none"> * Orientation/training various levels * Production of material
POLICY LEVEL	<ul style="list-style-type: none"> * High priority for I.E.C. * Wider understanding and recognition of water and sanitation * Increase commitment and resources towards water and sanitation 	<ul style="list-style-type: none"> * Orientation * Field visits * Special events

Table 6.2 (After Lhalumpa 1992)

6.3 A Critique of the IEC Outline for Strategies

To improve communication in the sector is essential so that more can be achieved. As previously discussed a large number of projects have failed throughout the IDWSSD (1981-1990) where the software element has not been adequately planned or implemented. In every aspect of life involving people good communication is fundamental to success. The seven communication case studies featured in McIntyre (1992) demonstrated that *"wherever communication was neglected the programme went awry; whenever communication was tackled it was put back on course"*. Many other programmes and projects have been positively evaluated which has been found to be due to successful promotion and communication approaches (e.g. range of examples given by Gorre-Dale 1991). There is therefore a clear case for improving and utilising effective communication throughout the activities of the sector. Each situation is unique but it is not unreasonable to assume that the majority of the seven case studies have significant parallels with the challenges facing the sector as a whole. Clearly the hardware aspects of a project can also fail but this is usually a relatively easy engineering task to rectify; the software side involving people is more unpredictable. The effective integration of technical and social factors requires adequate communication. This section evaluates the Outline for Strategies offered by the IEC Core Group as a means to develop effective communication throughout the sector.

Section 6.2 provides a summary overview of the Outline for Strategies; the full proposals have been presented by Lhalungpa (1992). The overall concept suggested is a good one, although it does involve a large leap from the individual successful case studies at programme level to the global sector wide and beyond strategy. There is little doubt that communication improvements could make a really worthwhile impact. For the Strategies to be possible an assumption has been made by the IEC Core Group that communication can be organised on a sector wide basis. However the proposals are not prescriptive but allow individual countries to choose to participate and then develop country specific ways of implementing the strategy. Therefore this is not an unreasonable assumption. Another question concerns how many countries will choose to participate. Top sector professionals from Mexico, Nigeria, Indonesia and Guinea Bissau have expressed interest in receiving support in incorporating a communication component into their programmes (van Damme 1992 and de Jong 1992). The Department of Rural Development of the Government of India has already allocated 10% of funding for IEC activities.

It is a little simplistic to suggest that once national policy and decision makers have been informed of the importance of drinking water and sanitation they are likely to allocate more resources to the sector. It is commendable to try to increase their understanding of the value of a strong sector but at the same time it is necessary to be realistic as to how much can be achieved. A successful example of politicians being influenced has already been

given in chapter 3 i.e. in the campaign to eradicate guinea worm disease. Politicians may change their opinions but many will want to know what is in it for them. In most developing countries there are probably only a few hundred critical policy makers. The suggested "Basic elements for messages" aimed at policy makers has been drafted with the assumption that key policy/decision makers are altruistically inclined towards the populations that they "serve" but this will be the exception rather than the norm. For example "*Water is essential for life, and disposing excreta a daily bodily function*" and "*Water being such a basic need for life is an easy entry point for community action and involvement for broader scale development*". These elements could be rewritten to emphasise what improved sector services provide for the nation as a whole. Note that the Resource Booklet for Communication in Water Supply and Sanitation does preface its suggestions with a comment indicating that the "messages" must be adapted for each country's specific circumstances. It is intended that the global workforce will give guidance on this (de Jong 1992).

The Outline for Strategies states that users are central to effective communication but the process cannot occur unless the sector initiates it. To bring about this new communication thrust the sector must be central rather than users, as it is unusual for new programmes to begin at community level. It is true however, to say that the sector's new more communicative approach must be developed in response to the needs of users.

For sector professionals to develop a new "*communication orientation*" a major training exercise will be required. This has been recognised because centres will be appointed so that capacity building and training on communication can be undertaken. It will be important to avoid duplication of effort. Existing institutions should be utilised to the full such as those within the International Training Network. Key decision makers within the sector will need to be convinced of the importance of communication and ensure that the new approach together with increased advocacy becomes the new way of operating. The change should be an evolutionary one building on existing practice rather than revolutionary in style. The proposals recognise that there may already be effective communication actions taking place within the sector so these should be built upon. Only in areas where there are critical gaps are new communication activities called for.

One notable aspect is the mandate from the Water Supply and Sanitation Collaborative Council, for the IEC Core Group to quickly establish an appropriate work force to undertake communication/promotion strategies on IEC and to support countries in the development of their strategies. See Figure 6.3 for the proposed institutional structure.

RELATION PATTERN IEC INSTITUTIONAL ACTORS

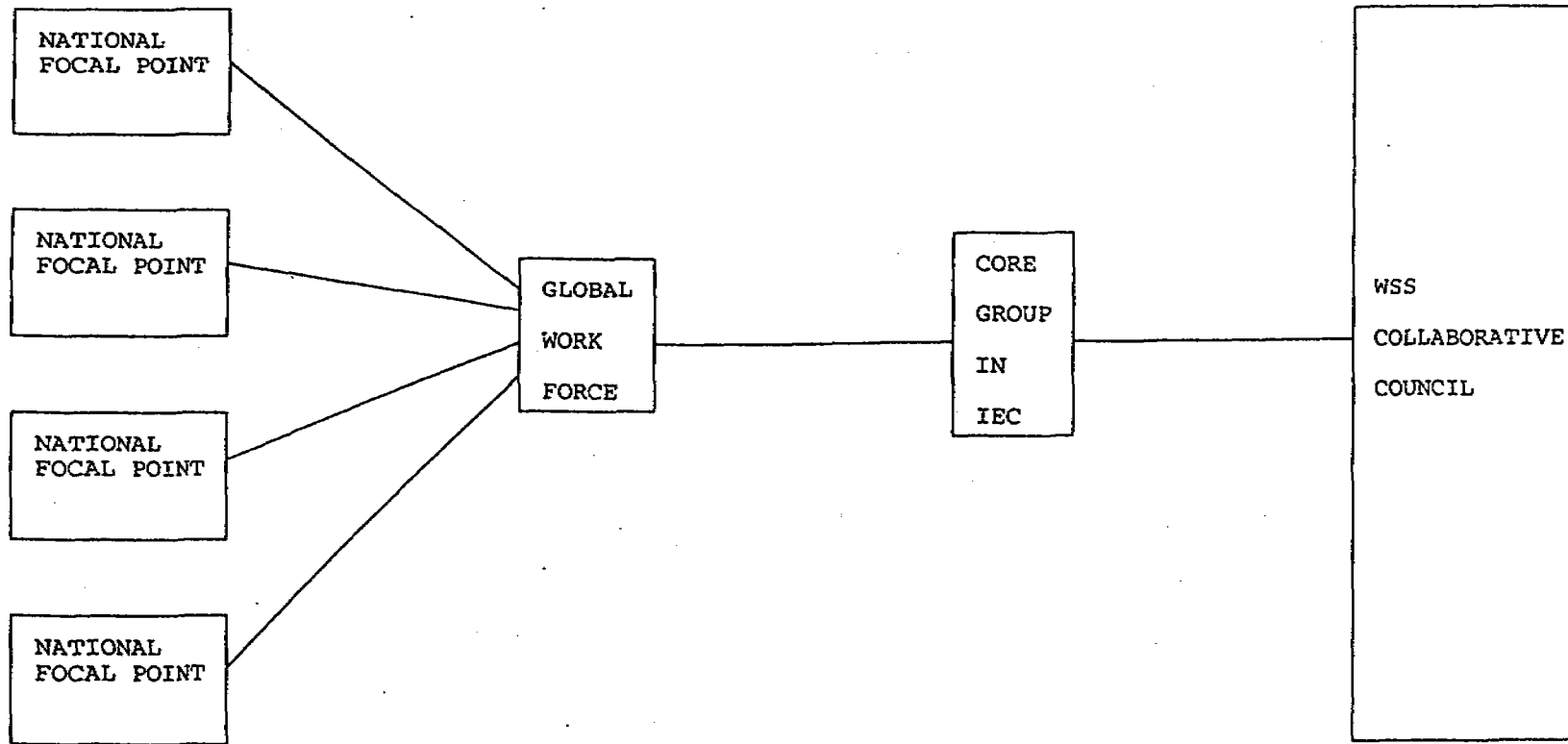


Figure 6.3 (After Lhalungpa 1992)

This workforce is yet to be set up owing to a lack of funding (van Damme 1992 and de Jong 1992). It will interlink with the national coordinator/focal point at country level. At present details of the global workforce are vague but it must be provided with clear objectives and regular evaluation to ensure that their activity is producing the required materials and support needed at national level. A danger to be avoided is that the approach is a top-down one with too much concentration on the national and global levels with few effects filtering through to potential beneficiaries. However the global work force is probably the best way to develop the communication strategy fully and as widely as possible across the sector. This team should be set up within an existing accepted organisation in the sector and be of a size appropriate to the number of countries willing to be involved. It is essential that improved communication is promoted at all levels, particularly for sector professionals.

National coordinators will not be able to alter the way the sector operates single handed, as pointed out by Franceys (1992). Annex 2 to "Towards Effective Communication" describes a Scenario for a Simplified In-Country Communication Development Approach. This indicates that the national coordinator/focal point is not set up until it is established by the top authority in the sector. The Strategy relies on convincing key decision makers at the top of the sector within participating countries before the other aspects fall into place. Nevertheless the national focal point will still have a sterling task to coordinate communication actions within and beyond the sector. One of the failures of the IDWSSD (1981-1990) is considered to be the lack of overall coordination (IRC 1990). Spontaneous communication activities cannot have the same overall impact as a coordinated plan so specific efforts must be made to sustain them through the focal point.

The communication coordinator will need to assess which aspects of national sector programme work requires the most urgent action e.g. raising the profile of the sector in the country and ensuring that a national KAP survey is undertaken. It is suggested that a seminar should be organised by the coordinator on the communication development approach for senior sector staff and representatives of the external support agencies with the aim of ensuring that they develop the new communication approach.

The strategy is somewhat over ambitious or unrealistic in places e.g. "*solve the problems of depletion and degradation of water resources*". Realistically these problems are always likely to be with us in one form or another. It also hopes for user community "*demand-driven approaches*". In practice interventions are almost always externally generated (Pickford 1992) even if community management does follow on from mobilisation efforts. The strategy also calls for a grand alliance of all sections of society to broaden and intensify efforts to achieve safe water and sanitation for all. This is a commendable goal. Teachers and educators, mass media, government and community leaders, non-governmental organisations, employers and business leaders, artists and entertainers, and religious leaders are all to be enlisted to promote the sector. The "Facts for Life" campaign (Adamson 1989) provides an example of a successful precedent for this concept. There are significant differences however. Improvements in immunisation rates has been one of the principle successes. In one province in the Philippines immunisation rates rose from 12% to 85 % (UNICEF 1990). This one-off behavioral change is far easier to achieve (see Chapter 2) than longer term alterations of hygiene practices such as the shift from open defaecation to the use of latrines. It is also easier to promote. James Grant the Executive Director of the United Nations Children's Fund has persuaded presidents and prime ministers around the world to be photographed giving immunisation injections to children to promote the campaign (de Rooy 1992). It is good that national leaders do this, but cynically concern for children will always increase the popularity of a leader. These same politicians are unlikely to be prepared to be photographed entering a latrine! This just would not have the same appeal. Sanitation is a taboo subject in most cultures (Wegein-Schuringa 1991).

It also seems unrealistic to suggest that the media will be prepared to make a long term commitment to ensure that every listener, viewer and reader becomes aware of what they can do to protect their children and themselves for survival and healthy development. The media by definition is looking for what is news and are therefore always moving to the next issue rather than repeating the same old tired stories. The media may however, support specific campaigns or report success stories while they are current. Responsibility for presenting the success stories to the media will fall to the sector. The "*communication orientation*" will be invaluable here to raise the awareness of sector professionals of the need to persuasively articulate success stories and market key messages. While it is important to be realistic it is also unwise to give up before trying to use the media and other sections of society as allies. Section 7 of the Resource Booklet for Communication in Water Supply and Sanitation (Gorre-Dale et al 1992) provides a wide range of examples of key messages disseminated outside of the sector. It does not provide an evaluation of their effectiveness, however. It is essential that messages are not contradictory but that they are simple and clear. Incorporating key topics into entertainment scripts is suggested as means of persuasion but a major risk is that this can result in ineffectiveness owing to dilution of messages.

It will be important for those implementing the strategy to start on a relatively small scale and continually evaluate effectiveness to prove what works so that if appropriate, relationships with the "*grand alliance*" may be quickly fostered. It is a common mistake to start on too large a scale. A grand media launch of the new more communicative approach should wait until it is proven. Conversely there should not be an unnecessary delay otherwise the sector's mission will never be fulfilled. It is unwise to give up without ever attempting to improve the profile of the sector when potentially so much could be achieved. These proposals for a grand alliance warrant further research.

Not only will sector professionals need to develop a new orientation but communication specialists will also be required to implement the strategy. These specialists can either work within the institutions responsible for the sector "hardware", the "software" institutions such as health or be contracted from the private sector. Each national situation is different and the best combination of the above arrangements will need to be found in each case. Integration of hygiene education and communication aspects with technical activities has often been a serious challenge in projects. In the rural sanitation programme in Lesotho outlined in Chapter 5 coordination of the Ministry of the Interior and the Ministry of Health was necessary. During the pilot project stage the lack of cooperation was a barrier to successful implementation but with time these inter-disciplinary links were built. Gaining cooperation between government or other agencies with very different functions may not be easy but will often be essential for maximum effectiveness.

Detailed costings of the proposed Outline for Strategies has not been given because costs, budgets and situations vary so much from country to country (van Damme 1992), which is reasonable as it is clearly impossible to be precise. Lhalungpa (1992) does state however, that a separate set of action proposals with objectives, activities and cost estimates is being prepared with a time span of the next three to five years. From an economics viewpoint investment in communication, providing it is done properly, is likely to prove cost effective because of the resulting increased efficacy of efforts. Lhalunga (1992) also states that "*In terms of resource allocations for communication in WSS, a commonly accepted practice is to allocate ten percent of programme budget for communication activities.*" No evidence is provided to substantiate this claim.

It is necessary to make a final comment about the current draft of Towards Effective Communication. This Outline for Strategies would communicate more effectively and be more persuasive if the typing errors were corrected, the missing words inserted and the phraseology improved! Seven significant mistakes were noted in the text of the first two pages. The document is a draft which will not have undergone the full checking procedures necessary prior to publication so the criticism must be read in that context.

6.4. Survey of sector professional's response to the IEC proposals

In view of the low level of representation of sector professionals from developing countries (six out of thirty) on the IEC Core Group the author undertook a survey of fourteen such professionals from a variety of nations. These sector workers were a different group from those interviewed for Chapter 4. The aim of the survey was to ascertain their views of the IEC Outline for Strategies.

First, four of the communication case studies outlined by McIntyre (1992) were explained to the group to illustrate how in a number of well-documented programmes communication has made all the difference. The Appendices contain copies of the overhead projector viewfoils used to illustrate these case studies. The IEC Outline for Strategies was explained together with table 6.2 and figure 6.3 which are taken from Lhalungpa (1992). Two and a half hours were taken to discuss the communication case studies, the Outline for Strategies and the survey.

The fourteen sector professionals were asked to give their comments on the proposals with the following questions provided to guide their thoughts:

1. Is the IEC "Outline for Strategies" the best approach to improving sector performance and overall service coverage or do you think that a better strategy could be found.
2. What is your opinion of the strategy e.g. advantages and disadvantages ? Do you think that it will work ? Do the proposals fall into the top-down trap ?
3. Will the idea of a national co-ordinator/focal point work ?
4. How should training in communication and professional co-ordination be improved ?

The consensus among the fourteen sector professionals surveyed was that the IEC "Outline for Strategies" was the best approach to improve sector performance. Provisos to this were "*if it is applied correctly*", "*if communities accept it*" and "*if it is implemented by skilled persons*". Respondents in general indicated that the Strategies could be expected to work in their home situations but two expressed concern about "*the time it would take to be effective*". One commented negatively that "*it would work for a short time while the strategy is fresh in people's minds but would fade as time goes by*" and another felt that "*in some places it will work but in others the cultural barriers are too great*".

The survey asked sector professionals to indicate what they felt to be the advantages and disadvantages of the IEC proposals. Every professional felt that improving IEC would "*a help community awareness*" or other similar comments stating that this would lead to better implementation of sector programmes. One similarly commented that "*it will help potential user communities to appreciate the advantages of sector services*". One advantage suggested was that "*the scheme will help the transfer of ideas between communities and implementing agencies*". Six emphasised that improved communication could have significant advantages for sustainability with comments such as "*it will help train people for future operation and maintenance work*", "*in the longer term it will lead to better services*" and "*promoting a sense of ownership by communities is important as facilities are more likely to be sustainable*". One suggested that projects would be cheaper probably due to increased community management, "*costs will be minimised during implementation*". Four commented optimistically about the effect on key decision makers e.g. "*raising awareness of the importance of the sector may influence policy makers to allocate more funds*". Finally one professional was hopeful that the strategies would "*bring intersectorial unity and could help in the co-ordination of activities*".

In suggesting disadvantages of the Outline for Strategies the comments were principally in terms of limitations rather than strictly disadvantages. Six respondents were concerned about the cost of the proposals with comments such as "*the investment cost would be high*" and "*to operate properly it requires developed institutions, such as educational facilities and working mass media such as TV and radio, all of which cost a lot of money*". While the initial cost may be high the long term impact is likely to prove that the investment has been cost effective. Others pointed to the human resources requirements e.g.: "*will need highly qualified personnel in planning, organisation and supervision*", "*requires experienced communication specialists*" and "*training will be required to provide skilled manpower*". The strategy recognises training as an issue and suggests the appointment of centres to undertake capacity building and training on communication. In addition to the training of sector professionals, skilled communication specialists (as mentioned above) will be required for sector project planning, implementation and follow-up. Another anxiety was the time required: "*it takes time to motivate communities*". It was not possible in the time available to explain every aspect of the proposals to those surveyed, but an anticipated time frame has been included within the plan .

Several thought that the strategy would be of limited effectiveness in areas where the infrastructure is poor i.e. "*difficult to use in rural area without a communication system*", "*more difficult to implement in the poorest countries due to lack of infrastructure e.g. transport and mass media*" and "*in Ethiopia in the villages there are some radios but they are not listened to by people in general*". One emphasised the importance of using the existing system of communication "*as in many rural communities verbal communication in meetings and households is the most important form*". The Resource Booklet for

Communication in Water Supply and Sanitation (Gorre-Dale et al 1992) should be read in conjunction with the The Outline for Strategies under discussion. It suggests that appropriate channels of communication and media that are most effective in reaching and influencing the target audience should be identified. Therefore in areas which the mass media does not penetrate interpersonal communication alone would be utilised to carry the required messages.

An important area of comment was that of barriers to implementation. "*Cultural and religious beliefs are not easily changedand the measurement of benefits from communication can be problematic.*" The strategy will be "*difficult to implement as beliefs are not easy to change*" and "*language/cultural barriers will have to be overcome.*" One of the principle reasons for proposing this new approach is to enable barriers to successful programme outcomes, such as these, to be overcome. The barrier of political resistance was raised "*in developing countries it is normally difficult to convince policy makers*", "*key decision makers may not see the importance of spending more in communication - since they may consider that water is essential for life*" and "*the sector may not be seen as a national priority*". Each of these statements make valuable points. It will be necessary to have optimistic yet realistic expectations of what can be achieved in trying to persuade politicians of the importance of the sector. A cautionary expression of opinion was that "*it may be a complete waste of money and effort if the implementation is not effective*".

Two professionals thought that the proposals were likely to fall into the "top down" trap. The majority felt that the strategy would not remain a top-down affair if the scheme is "*well managed and the communities are fully involved*", "*if it is implemented at grassroots level*" and "*if users are given the place they deserve*".

The idea of providing a national communication coordinator/focal point was in general, considered to be a good one. Conditions to this were "*if it is implemented correctly and with good feedback*" and "*it will work if there is the political will to invest in logistics support to the national coordinator*". Only one sector professional was of the opinion that it would not work because "*the task is too big for one person - even a team of ten persons could not do it in a country with a wide cultural diversity.*"

Finally demonstration visits to successful projects elsewhere was suggested by two people as good ways to convince both potential users and policy makers. Sector professionals felt that their colleagues should be trained in communication through workshops, seminars and visits to other countries to show them the successful implementation of the strategy. This should convince them it works if there was any doubt. Another idea was to "*open avenues for promoting dialogue and the exchange of information and ideas between sector professionals*". This is another description of the networking described in chapter 4.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 The Outstanding Challenge

More than a billion people are still without safe water supplies and adequate sanitation provision despite the successes of the IDWSSD (1981-1990). There is general agreement in the sector that in future better use must be made of the available resources. Much has been written about the importance of community management in creating a sense of ownership, generating the involvement of user communities and ensuring that projects are sustainable. Making community management work to see the unserved motivated and provided for, relies on effective communication with poor communities and policy makers within the sector. Improved communication can have a far reaching impact both within the sector and beyond.

One of the major successes of the IDWSSD was to increase the number of "safe" water supplies, although the task is far from complete. To convince people of the need for wholesome water is a relatively easy task. In contrast the reported figures for the number of people with sanitation facilities indicate an increase of only 4% in rural areas and 10% in urban areas over the last decade. This means that the proportion served is less than 1 in 5 in rural areas and 2 in 3 in urban zones. Even where facilities have been constructed they may not be used properly, often due to poor communication.

Effective communication is a two way process, as even in the case of the mass media there must be arrangements for feedback and effectiveness testing to ensure that objectives are met. There are a number of stages to effective communication and barriers which must be overcome. A communication must reach the target group, gain attention, be understood and accepted, which will then lead to changes in behaviour and health if it is fully effective.

7.2 The role of Social Marketing

Social marketing has been suggested as one solution to the challenge of the vast number of people lacking basic facilities, and the past failures of interventions to ensure that they are properly used and lead to the anticipated health benefits. It offers a comprehensive approach adapted from commercial marketing to integrating improvements in water supply and sanitation with the behaviour change necessary to make these technologies effective in improving public health. Social marketing has many similarities with the more conventional disciplines of health communication. What social marketing has to offer is a comprehensive

overall approach emphasising the importance of consumer orientation and exchange theory. Sector professionals need to know and empathise with the beliefs, motivations, attitudes, aspirations and needs of their "consumers". The concept of exchange theory is that the "supplier" absorbs some of the values of the consumers, producing goods for the intended customer while changing their ideas according to the consumers viewpoint. The Indian experience outlined in section 5.1 illustrates how sector professionals can have incorrect impressions of how people actually behave. Social marketing with full market research is one approach to bridging this gap. Examples from other sectors have demonstrated how a social marketing approach has successfully "sold" immunization, use of oral rehydration therapy and other health related behaviours.

Where projects fail the blame can sometimes be ascribed to the intended recipients and their behaviour described as irrational. However people behave in a way which is rational to them. Influences on people's behaviour include their experience, beliefs, attitudes, resources, their cultural background and the influences of others in the community whose opinions they value. In planning the hygiene education element of programmes it is important to take the significance of these factors into account. Education attempting to alter behaviour can fail at a number of different stages: in the planning process, at the communication phase itself and during evaluation by not incorporating research findings into decision making. Successful planning will first involve defining the existing and proposed behaviours and thereby assess the likelihood of influencing behavioural change. The BASNEF model has been developed to take account of all appropriate factors in the process of behavioural modification, and assess the likelihood of the hoped for shift in practices taking place. If applied within the sector it will be invaluable in assessing hygiene education proposals.

Strengths of social marketing are an increased awareness of the audience, close monitoring of progress, strategic use of the media, realistic expectations and realistic estimates of the requirements for success. Weaknesses are the large investment of financial and human resources required to ensure successful programmes, and the fact that the approach has no effect on broader problems such as poverty, which may prevent target groups adopting the marketed behavioural change. Social marketing is of greatest value in modifying individual behaviour. However most health problems in developing countries are linked with the surrounding economic, social and political environment.

The mass media is social marketing's primary tool, often reaching large proportions of the population at a relatively inexpensive cost. Evaluations of the use of the mass media have drawn differing conclusions. A number of studies indicate that the use of the mass media alone is not effective in altering individual behaviour. Where the mass media has been used in an agenda setting role in connection with a community component, behavioural modification has been observed, but the modification may have been entirely influenced by

the community component. Mass media campaigns are useful for influencing one-off behavioural actions, providing basic information and for increasing awareness. The mass media could be successfully used by the sector in agenda setting, enlisting opinion leaders as catalysts for change and in advertising an information point for people to visit.

One difficulty in introducing social marketing into sector programmes is that of defining the institutional responsibility. Circumstances will vary but either one organisation has all aspects of a project within its remit or more than one agency will need to be coordinated, which can be problematic. One criticism of social marketing is that it seeks behavioural change without altering knowledge and attitudes.

Further work could review all the research into the effectiveness of the mass media in developing countries, as this report has concentrated on the literature concerning the industrialised nations. It is not clear, as discussed earlier, if the conclusions these studies are applicable in developing nations. Despite the barriers to success, social marketing has the potential to be very effective in promoting the sector. It does offer a valuable integrated approach to incorporate hygiene education into sector water supply and sanitation interventions. Nevertheless in view of the human and financial resources required social marketing will be appropriate at programme rather than project level.

7.3 Policy Makers

Government policies obviously have a significant impact on the sector but are difficult to influence. To help ensure that the unserved obtain safe water and sanitation facilities the sector must raise its profile by effective promotion to key decision makers.

Sector plans serve the vital functions of developing clear strategies for water supply and sanitation and in setting priorities for sector funding. Seven out of twenty nations studied had no sector plans so sector activities in these countries is unlikely to assume a high priority. An important task for those at the top of the sector in these countries will be to develop overall plans for sectorial action in their countries in collaboration with government leaders. These leaders may first need to be convinced of the importance of the sector.

There is little in the literature about influencing government policy regarding the sector. Sector ambassadors can act as persuasive advocates. Former U.S. President Jimmy Carter has successfully boosted the campaign for the eradication of guinea worm, by arranging to discuss the issue with government leaders in affected countries. In several countries

communication has been effective at local, national and global levels. The campaigns have been exemplary as in both Nigeria and Ghana a drop of approximately 30% in cases has been reported in one year.

UN agencies such as UNICEF can have an impact on government policy by demonstrating, advocating and facilitating approaches. Pilot projects, where risks can be taken, serve to demonstrate the effectiveness of approaches so that they can be advocated with governments as national strategies. This was successful in Lesotho in the promotion of VIP latrines. UNICEF have persuaded governments to encourage the involvement of the private sector in water and sanitation provision in certain situations. The above approaches can assist governments to accelerate water and sanitation service coverage to the unserved in a sustainable manner. Exactly how significant the impact of these activities are, compared with overall needs is not clear, but it is likely that they make a small but valuable contribution.

Sector monitoring provides the facility to analyse annual progress at country, regional and global levels. This does not review the number of facilities installed but the number functioning, the level of involvement of users and the proportion of national finance spent on low income communities. The aim is to help governments assess present service provision more accurately, to convince them to extend coverage to poorer communities and promote sustainable services. Sector monitoring is therefore one awareness raising tool by which governments may be persuaded to extend or promote service coverage to the unserved, although it is too new for a full evaluation of its effectiveness to be undertaken.

Non governmental organizations in general have only a localised and short term impact on development as they find it difficult to react with political and other forces at national and international levels. In general NGOs have successfully swayed government policy through individual projects but not on fundamental issues of ideology and overall approach to development.

The International Training Network has laid on seminars with the aim of influencing national government policy although the impact of these meetings is still to be evaluated.

National crises such as cholera outbreaks can be instrumental in focussing national resolve. Malaysia for example, has been successful in promoting the sector by highlighting the effectiveness of improved services in controlling cholera.

Key decision makers must be informed and convinced of the health and resulting economic benefits of improved water and sanitation facilities.

7.4 Sector Professionals

If improved communication is to make a major impact on sector performance then the key is for sector professionals to develop a new "*communication orientation*." The consequence of this is that all sector activities will need to be viewed from this perspective. Only if sector professionals change will key policy makers be persuaded to give the sector its true positioning and user communities be persuaded to "buy" or even demand sector services. Sector professionals must take full responsibility for promoting the sector so that the unserved can obtain services.

A crucial pathway to improve the sector professional's communication skills and help them develop a communication orientation is through professional associations. These associations can provide training courses and publicize current developments. In a sample of thirteen developing countries only two were found to have associations specifically to serve sector professionals. The International Water Supply Association has recently set up the Foundation for the Transfer of Knowledge to strengthen and promote professional associations in developing countries. At present professional institutions cannot be utilised as a primary route to promote the communication orientation as these associations do not appear to exist in the majority of developing countries. This assumes that the small survey undertaken was representative, which is reasonable as it has arrived at the same conclusions as Pickford (1992). In the longer term, once they have been created, professional associations in developing countries should perform an invaluable role in providing continuing professional development for sector professionals. The FTK does intend to strengthen existing professional associations. An alternative to creating new institutions, to serve the sector specifically, is to promote a water and sanitation section within existing civil engineering associations. Whether to create a new association or to work within an existing one will need to be decided in each national situation. As an interim measure the External Support Agencies may be able to perform the function of promoting the communication orientation.

Networking is another strategy for professional development, providing an informal forum for the discussion of common difficulties, or for skill orientated input using a network member's particular expertise. There is a clear need to draw professionals together from different disciplines within the sector.

Training institutes will need to incorporate the principles of improved communication within their courses.

A survey indicated that sector professionals need to be encouraged to see the importance of good communication and public promotion. There was agreement that communication is an essential component of the sector professional's role, and that it is important for training

courses within the sector to devote sufficient time to this subject. One important observation made during the survey was that the sector can lose credibility if it makes promises it cannot fulfil. The survey indicated that in general, upon asking, sector professionals are aware of the principles outlined in chapter 2, although some ignorance was illustrated by over estimating the power of the mass media. Two respondents were of the view that success in itself promotes the sector. While this may be true to some extent, professionals must be ready to make the most of the successes by fully publicising them. An inability to present a case forcefully was identified, so in future it is recommended that, as this skill is so important, the training of professionals fully develops this ability. This will help sector professionals to persuasively present the success stories to the media, user communities and key policy makers etc.

7.5 Communication with user communities

It is now recognized that public health is only significantly improved following the provision of services when in addition people's behaviour changes. The nationwide survey in rural India revealed important gaps in understanding between sector professionals and the people. The clear lesson from this and other work is that programmes should always be matched to the knowledge, attitudes and practices (KAPs) of user communities to ensure effective outcomes. Information, education and communication should be a central guiding force within programmes. It is also important that communication development should focus on the process rather than products. The methods used to attempt to modify the KAPs of user communities must be carefully researched and pretested to ensure that they work effectively. Communication specialists will be required to develop and implement strategies; engineers can no longer afford to work independently of other professionals if the sector is to operate effectively. In the future the involvement of experienced and skilled communications specialists at all stages of project planning, execution and follow-up will prove to be of critical importance.

Social mobilisation can be used to motivate a variety of groups within society to promote projects. It utilises the persuasiveness of interpersonal communication to stimulate support. Use in other sectors and to a limited extent within the water supply and sanitation sector have proved the value of this methodology.

Sanitation is not often a high priority especially in rural communities. Households are more likely to acquire a latrine for privacy, convenience or status rather than health reasons. Family health does not appear to be effective as a sales argument. Sector professionals must operate with this understanding if communities are to be convinced to build sanitation facilities. They must also start from what the community already does, believes and desires.

In Lesotho local latrine builders were trained to build and market VIP latrines which together with promotion through hygiene education has proved to be very successful. The participatory methods of home visits, small group discussions and community meetings particularly with women were successfully used to change attitudes and behaviours. Unfortunately VIP latrines are often not affordable and can be unpopular due to their dark interior, so it is recommended that further research on low-cost fly free and odourless sanitation options be undertaken.

Few of the evaluations of health or hygiene education programmes include detailed costings, probably because the professionals involved do not have a "business philosophy". An early review of mass media and nutrition education undertaken by Leslie (1981) suggested that large numbers of people (several million) can be reached at as low a cost as \$0.01 per person. The study suggests that there would be "*a reasonable expectation that behaviour modification could follow*" which does not provide a robust enough case to justify the investment costs. Further work could more accurately assess and monitor the cost of the hygiene education components of programmes, and of making communication central to sector work. Another subject for research is to accurately compare the economic cost to a country of installing sector services with the cost of promotion and ensuring that the enabling factors are in place. It would also be interesting to compare the efficiency of each approach in working towards full national coverage of sector services.

Effective education and communication have been proved essential in the development of water resources. Careful investigations of the communication challenge must be undertaken and messages which are easy to understand must be directed at the appropriate target group. Women as the key users and carriers of water must be incorporated into promotions.

7.6 The IEC Outline for Strategies

It is clear that there is wide scope for communication concerning the sector to be improved. Changes in attitude and behaviour can only be brought about on the basis of effective communication efforts. "Towards Effective Communication" provides an outline for strategies for intensified communication action in developing countries and at the global level. It proposes the advocacy of communication so that it becomes an integral factor in all sector work, together with capacity building and training in communication.

The overall concept suggested is a good one as there is little doubt that communication improvements could make a really worthwhile impact. Whether the setting up of a global task force is the best way to support developing countries communication efforts and develop a global promotion plan is another question. However if there is no central and

recognised focus to promote the sector then communication efforts are not likely to be as effective. The assumption must be made that it is possible to influence the sector positively on a global basis. Clearly each developing nation will choose whether or not to participate and plans will need to allow for this.

It is necessary to be realistic about how much politicians can be influenced. The guinea worm campaign does provide an example of successful advocacy but is not directly parallel to the promotion of the sector as a whole. One lesson here is to promote specific achievable goals. The "Basic elements for messages" should be rewritten to emphasise the advantages to the nation as a whole.

It is clear that for the sector to develop a new communication orientation, a major retraining exercise will be required. This will need to take place in-house, while professionals are in post and as a new thrust in the training institutes. Centres will need to be appointed as suggested and equipped. The proposals recognise that communication actions are already taking place within the sector. These should be built upon. It is in those areas where there are critical gaps that new communication activities are called for.

The IEC Outline for Strategies calls for the IEC Core Group to quickly establish an appropriate work force to undertake communication/promotion strategies on IEC and to support countries in the development of their strategies. It is intended that this workforce will interlink with the national coordinator/focal point at country level. The objective of the communication strategy is to initiate a decentralised process but the paradox is that for this a central global workforce is proposed. There has been some criticism of this concept, but it is probably the best to generate and support communication activities on a sector wide basis. National coordinators cannot alter the way the sector operates single handed but will require the support of the top sector professionals. Clearly experienced communications personnel who are familiar with the sector will be required for the "workforce" to undertake and promote communication. It is important to avoid creating new bureaucracies for their own sake. Conferences and new approaches can lead to the creation of further new permanent institutions (Kalbermatten 1991) which may not be the most efficient way of proceeding.

Forming a grand alliance to promote the sector is an ambitious but commendable goal. This should be supported but with realistic expectations. The example of the Facts for Life campaign provides a successful precedent. However a one-off immunisation for children is easier to promote than a permanent lifestyle change to the use of latrines. It also seems unrealistic to suggest that the media will be prepared to commit themselves long term to promoting the sector.

Communication specialists will not only be required for the workforce but also at programme and project levels. The question arises of where these staff will be located. They could be based in institutions with a mandate for every activity within the sector, in departments such as rural development or be contracted from the private sector. It is inappropriate to be prescriptive as each national situation is different but usually it is anticipated that either of the latter two options will be the norm. A more central role will be played by all sector professionals in working on the basis of communication as fundamental to all sector activities. Gaining cooperation between all those involved in the sector despite their different functions will not be easy but will be essential for maximum effectiveness.

The survey of sector professionals from developing countries arrived at a consensus that the IEC "Towards Effective Communication, An Outline for Strategies" was the best approach to improve sector performance. Every professional felt that improving IEC would improve community awareness and lead to the better implementation of sector programmes. Six emphasised that improved communication could have significant advantages for sustainability. Four commented optimistically about the effect on key decision makers whereas most others were cautious as to what could be achieved in canvassing politicians. Visits to successful projects was suggested as a good way to convince both potential "beneficiaries" and policy makers. Again for sector professionals, visits to successful projects was recommended along with training in communication through workshops and seminars.

To conclude it is clear that there is great potential for communication to be improved principally with policy makers, sector professionals and user communities, but also with the media and all segments of society. This is essential if the unserved are to obtain safe water supplies and sanitation facilities. The greatest thrust to improve sector performance must be through sector professionals so that effective communication or IEC is recognised as a necessity in everything that the sector does.

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(These appendices are copies of overhead projector acetates which were adapted from McIntyre 1992. They are numbered according to the section to which they refer).

Campaign to Eradicate Guinea Worm in Nigeria and Ghana

- * In Nigeria and Ghana, the two countries with the highest incidence of guinea worm in the world, a campaign to eradicate it is having spectacular successes.
- * Both countries reported a drop in incidence of over 30% in one year.
- * In Nankumbi District in Northern Ghana there was a 77% reduction.
- * The results are testimony to a high profile global approach, political commitment at the highest level, a village drive to find cases, and a broad approach to prevention and cure. At every level a communication challenge has been met.



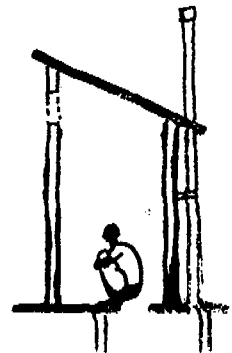
Rural Sanitation Programme in India

- ✗ 10% of the Rural Sanitation Programme in India is now being spent on IEC projects.
- ✗ This puts \$US 1.9m each year into increasing awareness and understanding of water and sanitation issues, at every level from state decision makers to rural villagers.
- ✗ The action was taken after a survey showed huge gaps in what the sector thought and ordinary people did.
- ✗ Fundamental changes in the practice by water engineers and planners are being brought about by this communication exercise.
- ✗ Villagers are ready to take on responsibility for maintaining their clean water supply



Rural Sanitation in Lesotho

- x Poor rural villagers have each invested \$US 75-150, a month's income, in having their own latrines built.
- x People who recently had no latrine now beautify them with pictures, plants and carpets.
- x The change came when people understood the role of sanitation in their family's health and welfare.
- x A small pilot project was translated into a national programme - through a campaign of education and communication.
- x 4,000 rural health workers have become advocates for VIP latrines, built by villagers who earn their living from the project.



Water and Health in Northern Ghana

- * Those who attended village education sessions had a 28% increase in knowledge.
- * A survey showed evidence that health had improved where communication had taken place.
- * Maintenance of pump sites improved by 50%.
- * 100,000 people attended water education sessions in 2,000 communities.
- * The project now has 5,000 Community Water Organisers, and 2,500 pump sites producing safe water.
- * Changes for the better came about when communication targets were clarified and key messages identified.

