VICTORIA UNIVERSITY OF TECHNOLOGY

PARTICIPATORY AND NON-PARTICIPATORY MODES OF NUTRITION COMMUNICATION IN A DEVELOPING COUNTRY: A CASE STUDY OF NEPAL

by

Netra Bahadur Khadka

B. Com., Pg. Dip. (Food Science & Nutrition),
MPS (Food & Nutrition Planning)

A thesis submitted in fulfillment of the requirements for the degree of Doctor of Philosophy

Faculty of Arts
Department of Social Inquiry and Community Studies, and
Department of Communication, Language and Cultural Studies
St. Albans Campus, Victoria, Australia
December, 1997

Declaration

I declare that, except where otherwise acknowledged, this thesis is entirely based on my own original research.

_____

Netra Bahadur Khadka

Victoria, Australia

December, 1997

DEDICATION

This thesis is dedicated to my father, Jagat B. Khadka,

my mother, Khadga K. Khadka (deceased),

and my wife, Brinda Khadka, who continually inspired me

to pursue higher studies.

ACKNOWLEDGEMENTS

ABSTRACT

The main objective of this study, a case study of nutrition communication practices in Nepal, was to investigate the role of people's participation in nutrition projects, and the most appropriate modes of nutrition communication in the context of a developing country.

Field surveys, focus group discussions and interviews with various key persons involved in nutrition development, at the national and village level in Nepal, were the main field methods used in this study. Quantitative and qualitative analyses were undertaken to enable the author to make an assessment of various approaches to nutrition communication in Nepal.

Some of the findings include:

- differing perceptions between development authorities and villagers about the level of participation required for making nutrition communication effective and participatory;

- strong villager preference for two-way modes of communication involving dialogue and discussion between project staff and villagers, and the need for the consultation before any nutrition project is actually implemented;

- villagers' preference for a combination of group discussion and video as one of the most empowering and interactive modes of nutrition communication in the village context.

The study concludes with a consideration of some of the policy and strategy measures required for participatory nutrition communication development and a recommendation for further studies in this area.

Table of Contents

Appendices

ACRONYMS OF ORGANISATIONS

ADB	Asian Development Bank
ADB/N.	Agriculture Development Bank, Nepal
ANM	Auxiliary Nurse Midwife
APROSC	Agricultural Projects Services Centre
CBS	Central Bureau of Statistics
CEDA	Centre for Economic Development and Administration
CERID	Research Centre for Educational Innovation and Development
CHV	Community Health Volunteer
CIDA	Canadian International Development Agency
CNAS	Research Centre for Nepal and Asian Studies
DADO	District Agriculture Development Officer
DPHO	District Public Health Office
EEC	European Economic Community
FAO	Food & Agriculture Organisation of the United Nations
FCHV	Female Community Health Volunteer
FPAN	Family Planning Association of Nepal
GTZ	German Technical Agency
HKI	Helen Keller International
HM	His Majesty
HMG/N.	His Majesty's Government of Nepal
HP	Health Post
ICN	International Conference on Nutrition
IFAD	International Fund for Agricultural Development
INGO	International Non-Governmental Organisation
IVACG	International Vitamin A Consultative Group
JNSP	Joint Nutrition Support Program
JT	Junior Technician

JTA	Junior Technical Assistant
MOA	Ministry of Agriculture
MOECSW	Ministry of Education, Culture and Social Welfare
MOFAI	Ministry of Food, Agriculture & Irrigation
MOH	Ministry of Health
MOHP	Ministry of Home Panchayat
MOLAJ	Ministry of Law and Justice
MOLD	Ministry of Local Development
NCP	Nutrition Communication Project
NFP	Nutritious Food Program
NGO	Non-Governmental Organisation
NNCC	National Nutrition Coordination Committee
NNJS	Nepal Netra Jyoti Sangh
NNPCC	National Nutrition Policy Coordination Council
NPAN	National Plan of Action for Nutrition
NPC	National Planning Commission
NPCS	National Planning Commission Secretariat
NTV	Nepal Television
NVAP	National Vitamin A Program
PHC	Public Health Care
QSR	Qualitative Solutions and Research
SCF	Save the Children Fund
SFDP	Small Farmer Development Program
SHP	Sub-Health Post
SNV	Netherlands Development Agency
SSNCC	Social Service National Coordination Council
TAG	Technical Assistance Group
UN	United Nations
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and, Cultural Organisation

GLOSSARY OF TERMS

Except where otherwise stated, the terms used in this study are defined as follows:

Full Participation: Involvement of the people in all the main phases of a project, including the design, development, implementation and evaluation of development works.

Group Discussions: Discussions or dialogue in a group setting, including dialogues between a communicator and a group of people or between members of the group itself.

Information: The messages or content of communications in the project.

Interpersonal Communication: Personal or face-to-face encounters between two or more people, including group discussions or one-to-one discussions.

Mode of Communication: The medium or communication strategy used in the dissemination of information.

Nepali: The people of Nepal or relating to Nepal.

One-to-One Communication: A dyadic communication, involving interaction between two persons, face-to-face, on a one-to-one basis, e.g. interaction between a nutrition worker and the head of a household.

Partial Participation: The people's participation in one or more but not all phases of a project.

Participation: The involvement of the people in development processes. Development processes may be related to infrastructure or nutrition and health.

Participants: Unless where otherwise stated, participants, in the context of this thesis, denote 'project beneficiaries' involved in a project.

Project: A program or a project that contains a set of planned activities designed to fulfil certain development goals or objectives.

Target audience: The beneficiaries of development project information.

CHAPTER 1 : INTRODUCTION

The 1992 Human Development Report of the United Nations (UNDP, 1992:14-17) estimates that about '1.4 billion of the world's 5.3 billion people live in poverty'. The number of people not getting enough food is estimated to be 800 million (UNDP, 1993:12, and 1995:16), and, of these, about 500 million people of developing countries are 'chronically malnourished', with 'more than a third of children...malnourished and underweight'. It is also estimated that 34,00 young children die each day due to 'malnutrition and disease' (UNDP, 1993:12). In nutritional diseases, vitamin A deficiency has become a major problem in the world. It is estimated that 'some 10 million children clinically, and nearly 50 million more children subclinically' are affected by this problem (IVACG,1992:viii).

Considering the problems of access to food and the high prevalence of nutrition-related diseases, especially in Asia, Africa, Latin America and the Caribbean, a recent International Conference on Nutrition, with representation from 159 states and the European Economic Community (EEC)[1], pledged to act in solidarity to ensure that freedom from hunger becomes a reality throughout the world (FAO/WHO, 1992:1- 2). It recognised that the 'nutritional well-being of all people is a pre-condition for the development of societies and that it should be a key objective of progress in human development' (p.3). Development scholars, such as Myrdal (1972: 353) and Harrison (1987: 267), have similarly emphasised that nutrition is a pre-condition for economic and social development.

Many specialists (cf. Harrison, 1987: 279; FAO/WHO, 1992: 2; Gautam et. al., 1995: 2) believe that the alleviation of poverty, especially by increasing the purchasing power of poor people, will bring about nutritional well-being. While poverty is certainly an important factor, it may also be argued, as Berg has, that 'many nutritional deficiencies

---

[1] Now European Union.

would be moderated if people knew how better to use the resources already at hand' (Berg, 1973:74). There are many examples in the world where poverty itself is not the only factor inhibiting nutrition development. Berg (p.74) refers to studies in countries such as West Africa, Brazil, Zambia and Kenya where malnutrition was found to be the outcome of a lack of knowledge. Further, Berg states that 'malnutrition raged among the Bangladesh youngsters crowded in Indian refugee camps in 1971, even when adequate foodstuffs were available to their families'. Similarly, a study by Behrman and Wolf (1984 cited by Hornik, 1988: 100) reveals that an increase in income does not necessarily correspond to an increase in the consumption of nutritious food.

Food habits and practices are also very important factors in nutritional well-being. Barasi and Mottram (1990:129) view food habits and practices as being 'closely related to the typical behaviour of a particular group of people or culture'. They assert that such behaviour 'follows codes of conduct in relation to food choice, methods of food preparation and eating, number of meals eaten per day, time of eating, and the size of the portion eaten'. Similarly, ethnicity is the best cultural predictor of food preferences. Christian and Greger (1991: 286-287) contend that 'ethnic groups and nationalities have developed unique cuisines through a combination of environmental and social factors'. Such factors influence the cultural norms of people which determine whether they accept and reject various foods and food preparation practices. For example, Bryant et al. (1985, in Christian, and Greger, 1991: 287) state that each ethnic group encourages its people to eat foods which are theirs and available to them and discourages the consumption of the other foods even to the extent of creating cultural taboos. Christian and Greger (1991:287) point out that 'some foods, accepted or even praised by one culture, may be unacceptable or even disgusting to another'. Many food taboos are directly related to religion and produce deleterious effects on nutritional health. Passmore and Eastwood (1986: 515) provide examples in tribal Africa and Polynesia where 'food taboos reduce the nutritional value of the mother's diet during her pregnancy and lactation and affect the health of both mother and child'. Such effects can be related to the fact that 'many of the foods considered ritually dangerous are high in protein and other nutrients' (Bryant et al. 1985:213).

Nepal, like many other developing countries, has severe nutritional problems. One of the major problems is stunting, that is, the retardation of growth due to chronic malnutrition, which affects 64% of children in Nepal (CIETInternational,1996:35). The other major problem is vitamin A deficiency. In 1989, vitamin A deficiency problems related to Bitot's spots[2] were as high as 2.1% among the children of the southern green belt, the plains areas (the terai regions) of the country (Gautam et.al. 1995:2). Such problems can be attributed not only to poverty, but also to a lack of knowledge, food habits, food taboos, and cultural and traditional practices. In view of the multi-faceted nature of the problem, people need to be informed and educated in a manner that helps them to fight the problem effectively. To this end, communication can play a vital role. However, as indicated by Bordenave (1976: 50) and Schramm (1964: 114), there may be a need to ascertain which modes of communication are the most appropriate for informing and educating people in the resolution of their problems.

The question of which modes of communication are the most appropriate in a given situation may depend on the efficiency of the mode of communication in bringing about behavioural changes in people. Many social and communication specialists, such as Nair and White (1994), Servaes (1996), and Arnst (1996), currently believe that a mode of communication is likely to be more effective and empowering if the target audiences are included in its processes. In accordance with this perspective, this study aims to investigate the role of people's participation in nutrition projects in Nepal, and the most appropriate modes of nutrition communication in a context of a developing country. This study is based on field surveys in the districts, including focus group discussions and individual interviews exploring self-reported perceptions and practices related to existing nutrition activities in Nepal. Quantitative and qualitative methods of data and information analysis were employed for numerical and non-numerical data and information processing. This study seeks to make a contribution to the body of knowledge that already exists on conditions for effective strategies of nutrition communication in developing countries.

---

[2]Bitot's spot is an eye ailment 'associated with greyish or glistening white plaques formed of desquamated thickened conjunctival epithelium, usually triangular in shape and firmly adherent to the underlying conjunctiva' (Davidson, Passmore, Brock, and Truswell, 1979:305).

3

Chapter 2 is devoted to discussions on communication and its role in social change and development, and provides a theoretical basis for the study. In this chapter, some important communication paradigms are surveyed to highlight theoretical developments in the field of human communication. These developments are reassessed in the context of understanding how communication can empower people to bring about social change and development.

Chapter 3 examines the prevalence of a one-way paradigm of contemporary development communication and argues that participatory communication is an appropriate and alternative paradigm for social change and development. On the basis of this alternative paradigm, chapter 3 focuses on the mutual sharing of information grounded in two-way transactional dialogues and actions. In the context of considering communication as an empowerment process in nutrition development, chapter 3 identifies some of the key characteristics and attributes of participatory nutrition communication. In addition, it also sets out the theoretical foundations of participatory and non-participatory communication paradigms, drawing upon Paulo Freire's notion of 'conscientisation' and the importance of consciousness in human empowerment, development and freedom, and upon Habermas' concept of 'communicative action' in relation to communication strategies aimed at mutual understanding.

Applying the concepts introduced in chapter 3, chapter 4 offers a brief historical account of participation in development, providing information about recent initiatives in participatory development. It surveys some participatory communication development projects that are reported to have been successful.

Chapter 5 explains the historical evolution of participation and communication in Nepal since the last century. It details the historical evolution of participative principles and approaches in Nepal. It focuses particularly on the Panchayat system (1960-1990), which is often considered as a 'participatory system' based on non-party democracy. The last section reviews the still current 1990 National Communication Policy of Nepal by discussing its major implications and assessing its role in national development. It further

provides information on the involvement of institutions and organisations in development communication and education in Nepal.

Chapter 6 presents a recent history of nutrition projects in Nepal. It explains the increasing importance accorded to nutrition in various national development plans, and is followed by an overview of some of the important nutrition projects carried out in Nepal during the pre- and post-Panchayat eras. Three of the projects reviewed provide the focus for the detailed field survey carried out in the present study.

Chapter 7 discusses the general and specific aims of the fieldwork component of the thesis and formulates some specific research hypotheses. The terminology and various methodologies used are then discussed.

Chapters 8, 9, and 10 provide a systematic analysis of a range of field data from the three selected districts: Nawalparasi, Gorkha and Ramechhap.

Chapter 11 identifies some similarities and differences among the projects analysed in chapters 8, 9, and 10. Some key elements are discussed and compared across the three districts.

Chapter 12 provides insights into the current views of the decision makers, planners and the implementers responsible for development in Nepal, drawing on interviews with key government and non-government personnel who are currently involved in nutrition and health activities. It seeks to highlight their beliefs about appropriate modes of communication and communication processes.

Chapter 13 concludes with a synthesis of the findings followed by a discussion of the implications of this study, particularly for communication and nutrition development policies and strategies.

CHAPTER 2 : COMMUNICATION AND SOCIAL CHANGE

In this current 'information age' where everything depends on communication and where people are increasingly being linked by communication networks (Kress, 1988: 3, Dizard, 1989: 1), the growing importance of communication throughout the world is closely linked with the ongoing efforts to bring about social change for development in developing countries. The contribution of communication to these efforts needs to be reassessed if we are to understand how it can empower the people of the developing countries. The following review discusses the literature on communication and its role in social change, and provides a theoretical basis for the study.

Communication and Communication Paradigms

> The meaning of the word 'communication' is at once both clear and obscure. It is clear enough in conventional usage, but obscure when we seek to determine the limits of its application. To illustrate, if someone talks to another and common understanding results (indicated by mutually satisfactory action), we have no qualms about saying that communication has occurred. If, however, misunderstanding results (indicated by mutually unsatisfactory action), we are uncertain whether we should say that there has been poor, or no, communication (Nilson , 1970 :15).

People have been trying to understand human communication for a very long time. As Trenholm (1991: 1) notes: 'For more than 25 centuries people have sought to understand communication'. Over the decades, a range of approaches to defining communication have been proposed (Bettinghaus and Cody, 1987: 2, and Windahl et al. 1993: 6) and some scholars, such as Applbaum, Dance and Larson and Merten have explored various definitions[1]. Yet, there is no final consensus on how to define communication. Hiebert, Ungurait and Bohn (1988: 2) maintain that 'communication is so diverse and so complex that one definition is difficult, if not impossible, to find.'

---

[1] Over the decades many definitions have emerged. Applbaum et al. (1973:223-225), for example, have explored 24 different definitions, while Dance and Larson (1976:171-192), listed some 126 different definitions. Similarly, Merten (1977 quoted in Wiio, 1983: 38-41) presented 160 different definitions of which 75 define communication as a one-way process, 64 as a two-way process and 21 as residual categories.

Communication, in general, may be considered as human actions (verbal or non-verbal) necessary for maintaining social affairs. Penman (1992: 242) considers it as a means of creating the social world. Cherry (1993: 11) asserts that 'man has evolved a host of different systems of communication which render his social life possible'. In the process of defining and theorising about communication, various theoretical paradigms have been developed by communication scholars. These may be broadly divided into three categories: (a) the linear paradigm (b) the non-linear paradigm and (c) the transactional paradigm. These paradigms are discussed briefly in the following sections.

Linear Paradigm

The linear paradigm views communication fundamentally as a process of transmitting information or messages from the sender to the receiver. In this paradigm, communication does not require any feedback, and the sender and receiver do not interact for sharing the meaning of messages or information in the process of communication. For this reason, Severin and Tankard (1988: 43) posit that such a paradigm has nothing to do with meaning. This paradigm, therefore, considers communication as a one-way process transmitting a signal from the sender to the receiver so that 'all the meanings generated by it can only be those in the mind of the recipient' (Borden and Stone, 1976: 81). Perhaps the best known example of this kind of communication paradigm is Shannon and Weaver's mathematical model of 1947[2] (Shannon and Weaver, 1963:34-35). Although this model is based on a one-way process of communication, this model is considered as:

> '..the most important single contribution to the communication models in use today. It has not only stimulated much of the later thinking in this area, but his [Shannon's] schematic diagram of the communication process has also been the impetus for many subsequent diagrams of communication models (Severin and Tankard, 1988:49).

It should be noted that the main objective of Shannon and Weaver's mathematical model was to achieve communication efficiency (Hymes, 1967: 8, O'Sullivan et al. 1983: 43). A few years later, Gerbner (1956) produced a linear model similar to Shannon and Weaver's. The main difference between his model and Shannon and Weaver's was that efficiency of communication is achieved only when the receiver decodes a message that is identical to that

---

[2] Claude Shannon actually developed the mathematical model in 1947 (Berlo, 1960: 29), while Waren Weaver summarised the main concepts of the model (Severin and Tankard, Jr. 1988:42).

encoded at the source (O'Sullivan et al. 1983:43). Clearly, his model added a new dimension to the communication process - that of assigning meaning.

Besides Gerbner's model, there have been other linear models such as Lazarsfeld's (Katz and Lazarsfeld, 1964:308-320) and Lasswell's (1971: 84-85), that mainly considered communication as a process of producing an effect rather than assigning meaning[3]. Theodorson and Theodorson (1969:62) also conceived of communication as a transmissional process, but their model was similar to Gerbner's model in terms of assigning identical meaning by both the sender and receiver: 'The meaning conveyed to the recipient corresponds closely to that intended by the sender' (p.62).

Although some of the linear models (e.g. Gerbner's and Theodorson and Theodorson's) indicated the importance of assigning meaning in communication processes, the main objective of all the linear models was to produce 'effect'. For example, no matter how a meaning is assigned by a recipient to a particular message in Gerbner's and Theodorson and Theodorson's model, the assigned meaning should be the same as that intended by the sender. This means that the sender is in control of producing a communication effect. Such control can be considered as being guided by a 'control paradigm' anticipating only effect or efficiency which, according to Krippendorff, (1987:190) 'goes back to Aristotle, who described the process of communication as involving a speaker, the speech act, an audience, and a purpose'. In this paradigm, it would appear that only the effect of communication is considered. It is precisely this paradigm that was employed by Christian missionaries in preaching Christianity and introducing Western ideas of social reform in various parts of the world (Krippendorff, 1987:190). Similarly, Carey (1989: 13-15) argues that a paradigm of communication as 'imparting', 'sending', 'transmitting', or 'giving information to others' is the commonest in the American culture, and perhaps in all industrial cultures. Carey (1989:14-15) considers all the linear models to be 'transmission models', which, as such,

---

[3] As early as 1944, Lazarsfeld developed a communication model based on the two-step flow of communication, where ideas and information flow from the source (radio and print) to the receiver (less active sections of the population) through 'opinion leaders'. This model simply introduced an intermediary (opinion leaders) in the process of the linear flow of communication. In 1948, Lasswell proposed a message transmission model, 'a verbal version of Shannon and Weaver's original model' (Fiske,1982: 32), of 'who (sender) said what (message), in which channel (medium), to whom (receiver) with what effect (function)' (Lasswell, 1971: 84-85).

ignore the fact that receivers can react to messages. Penman (1990: 17-19) describes these models as based on a conduit view of communication that ignores human capacity for playing a creative role in the communication process.

Non-linear Paradigm

Unlike the linear paradigm discussed above, the non-linear paradigm is based on the premise that human communication occurs in communicative acts which are not static at all and flow two-ways. Mortensen (1972: 40) believes such acts are based on 'dualistic aspects of communication'. In this paradigm, sender, receiver and feedback are the important elements, and 'when the receiver acts upon messages, that behaviour is considered to be feedback and is seen as a response to the sender's message' (Smith and Williamson,1985: 10-11). Oliver (1967: 273) observes this process as:

> ...a source that codifies a message, then transmits it through a channel to a receiver, who decodifies the message, and reacts to it, thereby providing some form of feedback, which should be noted by the communicator and ought to influence the system of codification he is using.

In their search for a non-linear paradigm, many scholars began to trying to modify or replace linear models of communication. Some notable examples are: Newcomb, Osgood, Schramm, Westley and MacLean, Berlo, and Dance. Newcomb developed a paradigm that emphasised the basic importance of communicative acts and co-orientations in the social system for bringing about harmony or understanding between persons involved in communication (Newcomb, 1953,393-404; 19f8: 55-68). In 1954, Osgood developed a model that emphasised the 'meaning' of symbols and of the 'sending and receiving functions within one individual' (discussed in Severin and Tankard, 1988: 33). The last of a series of communication models developed by Schramm (1980: 22) represents communication as a process of interaction between sender and receiver, where feedback is considered as essential to knowing how messages are being interpreted. McQuail and Windahl (1981: 14), and Ross and Ross (1982: 65) explicated this model as a circular continuous process. Similarly, Mortensen (1972: 40) believed that this model altered Shannon and Weaver's mathematical model by conceiving decoding and encoding as simultaneous activities on the part of the sender and receiver that facilitate a two-way interchange of messages. In Schramm's model meaning is viewed as something shared to produce effect. In this sense, according to Hiebert

et al. (1988: 2), 'communication is often defined functionally as the sharing of experiences or the transfer of meaning or the transmission of values'. In 1957, modifying Newcomb's model, Westley and MacLean (1968, 45-54; 1970: 73-82) developed a model emphasising the need for transmissible messages as a means of orienting the social system in which the 'gatekeeper' becomes as the important agent in selecting and transmitting information. This model includes the concept of feedback.

In 1960, Berlo developed a model highlighting the importance of the social system in communication and the various factors involved in an effective communication process, such as source, message, channel, and receiver (Berlo, 1960: 73). Though his model does not directly incorporate feedback as one of the components, feedback is considered as a necessary element to 'check up on ourselves, decode our own messages to make sure we encoded what we intended.' (p.103). Similarly, in 1967, Dance advanced a helical spiral model (geometrical model) of communication implying communication as a learning process. He believed that a linear paradigm does not provide room for modification of communicative behaviour in the future 'based upon communicative success or shortcomings in the past' (Dance,1967:295). Mortensen (1972: 42) describes this helical process of communication as 'an evolving process... that permits learning, growth, and discovery'.

All the models described above are different from those represented by the linear paradigm, especially in terms of the various factors involved in communication processes which are associated with the socio-cultural context and the meaning of symbols. For example, Newcomb's, and Westley and MacLean's models consider understanding of the social system as the key element of the communication process whilst Osgood emphasises the meaning, sending and receiving functions. Further, Dance's helical model focuses on communicative behaviour as a learning process. However, despite all these differences, the non-linear paradigm appears to be similar to the linear paradigm with regard to producing communication 'effect'. For example, most of the non-linear models discussed are, by and large, 'effect oriented' either through the mechanism of a circular, triangular or helical process or through the notion of feedback. This approach has recently been challenged by Nair and White (1994:154) who assert that 'the attention to effects simply gave the source more information which was used to alter approaches, but the message content was not altered to

fit the needs of the receiver'. This, in essence, means that, although the non-linear paradigm attempted to alter the linear paradigm, its main communication feature is still that it is 'source oriented' - that is, it gives the source power over the communication process and the receiver.

Transactional Paradigm

The transactional paradigm views communication as a transactional relationship: 'people simultaneously assume roles in relation to each other and the roles they assume determine which behaviours are to be interpreted as messages and what the messages mean within the context of those roles (Ruesch and Bateson in Smith and Williamson, 1985:13). In this paradigm, communication is characterised as a dynamic and continuous process of shifting roles of senders and receivers, and the communicative actions, therefore, become a never ending process (Windhal et al, 1993: 85, Myers and Myers, 1988:21-22). Myers and Myers (1988:19) contend that this process helps to achieve a better prediction of outcomes: 'the more you talk with people, the better guesses you can make about how they will behave'. In this process of communicative actions or transactional dialogues, a communicator becomes 'both cause and effect, stimulus and response, sender and receiver' (p22). Similarly, Meerloo (1967:131) considers communication as transactional, defining it as 'a cluster of transactional functions whereby a state of body and mind is conveyed from one person to another, and responses evoked' or as Nair and White (1987 in Rahim,1994:130) describe 'a dialogue, wherein sender and receiver of messages interact over a period of time to arrive at shared meanings'.

Barnlund (1970:83-102) introduced a communication model defining communication as transactional with an exchange of meanings:

> It is not a reaction to something, nor an interaction with something, but a transaction in which man invents and attributes meanings to realise his purpose. It should be stressed that meaning is something "invented, "assigned," "given," rather than something "received" (p. 88).

In his model, Barnlund interprets communication as dynamic, continuous, circular, unrepeatable, irreversible, and complex (Barnlund: 1970, 88-93). Mortensen (1972:53) has argued that Barnlund's communication paradigm presupposes that 'the terms communication and meaning are synonymous and interchangeable.'

Rogers and Kincaid introduced a convergence model (1981: 63-66), which is very similar to Barnlund's in that it presupposes communication as a dynamic and transactional process of mutual understanding rather than as effect-oriented. According to them, communication is 'a process in which the participants create and share information with one another in order to reach a mutual understanding'(p.65). Here, the participants are meant as both sender and receiver involved in the communication process. In this model the transactional process involving the simultaneous exchange of information appears to play an important role in reaching a mutual understanding of reality or establishing convergence or divergence between/among participants. Mutual understanding in this model is considered as 'a set of two or more overlapping circles which represent each participant's estimate of the other's meaning as it overlaps with the other's actual meaning' (Rogers and Kincaid, 1981:63). Nair and White (1994:155), discussing the Rogers and Kincaid model, affirm that communication is 'a two-way process of convergence, rather than a one-way, linear set in which one individual seeks to transfer a message to another'.

Theoretical Orientation and Comparative Features of Communication Paradigms

Of the three broad categories of paradigm discussed above, the linear paradigm considering communication as a one-way process appears to incline more toward the theoretical paradigm of the structural theories of sociology (structuralism) (see Table 2-1). O'Sullivan et al. (1983: 225) describe structuralism (in terms of communication) as 'not an interpretative approach to meaning'. Severin and Tankard (1988: 46) describe Shannon and Weaver's model as structural in that it ignores the human central nervous system as a functional system capable of learning. Similarly, Borden and Stone (1976) maintain that one-way communication is not communication at all because:

> ...communication is the sharing of meaning. We are using this in the sense of having meaning in common with others rather than the sense of partaking of a share of the meaning. To have "in common" implies that the meaning being shared is understood to be the same by both parties. This is an impossible situation if there is no feedback. One-way communication, then, becomes merely perception - the reception and interpretation of a signal. (p. 81)

12

Table 2-1 : Comparative Features of Communication Paradigms

Communication Paradigm	Type	Process	Theoretical Assumption	Theoretical Orientation	Exemplar Models
Linear	One-way	Transmissional process; communication flowing from source to receiver in one direction	Communication is something a sender 'does' to a receiver in anticipation of an effect. Receiver is assumed a 'passive' actor in the communication process	Structural/Mechanical (Communication without an interpretative approach to meaning)	Lazarsfeld (1944); Laswell (1948); Shannon and Weaver (1949); and Gerbner (1956).
Non-linear	Two-way	Two-way process involving discrete interactions between sender and receiver.	Communication is considered as a process for producing effect through symbols and sharing meaning.	Symbolic Interactionism. (Interaction between persons through shared significant symbols from which meaning is construed)	Newcomb (1953); Osgood (1954); Schramm (last model) (1954); Westley and MacLean (1957); Berlo (1960) and Dance (1967)
Transactional	Two-way	Two-way process with communication flowing simultaneously between participants.	Communication is considered as a process for reaching mutual understanding by creating, exchanging and assigning and reassigning meanings.	General system theory. (Exchanges of communication based on system as a whole, not on individuals)	Barnlund (1970) Rogers and Kincaid (1981)

The sharing of meaning, in contrast, which informs both non-linear and transactional paradigms, is primarily influenced by the theory of symbolic interactionism, which was originally developed by Charles Horton Colley, George Herbert Mead and Herbert Blumer (Trenholm,1991:37). According to Blumer, symbolic interactionism refers to:

> ...the peculiar and distinctive character of interaction as it takes place between human beings. The peculiarity consists in the fact that human beings interpret or "define" each other's actions instead of merely reacting to each other's actions. Their "response" is not made directly to the actions of one another but instead is based on the meaning which they attach to such actions. Thus, human interaction is mediated by the use of symbols, by interpretation, or by ascertaining the meaning of one another's actions. This mediation is equivalent to inserting a process of interpretation between stimulus and response in the case of human behaviour (1972:145).

Mead (1967) defines symbolic interactionism primarily in terms of the interlocking of mind, self and society, with the mind being the reflective intelligence belonging only to human organisms; self being an outcome of social experience and activity, and society meaning an organisation made possible by self (p:118-240). Duncan (1968:76), who assumes that 'self' and 'society' originate and develop in communication, posits Mead's symbolic interactionism of 'self' as an important factor of communication since 'the individual experiences himself as a self, not directly, but indirectly, from the standpoints of other members of the same group or from the standpoint of the social group as a whole to which he belongs.'

Self and society in a transactional paradigm of communication may be entirely related to system theory that goes 'beyond mere interaction between senders and receivers' (Windahl et. al. 1993: 85). This theory was first conceived by Ludwig vøn Bertalanffy during 1930s and 1940s, and the basic tenet of this theory is that 'the whole is more than the sum of its parts' (Windhal et al., 1993: 83, Wiio, 1983: 8, Bormann, 1980: 156). This tenet, according to Bertalanffy was derived from Aristotle (Wiio, 1983: 8). According to Myers and Myers (1982: 47) system theory deals with 'wholes made up of interdependent parts, the relationships between parts, and the relationships between the wholes and their environments.' In defining the transactional paradigm of communication in line with system theory, transaction refers to 'mutual causality among the parts of the system, that is, interdependency'. (Windhal, Signitzer, and Olson, 1993: 85).

Regardless of how communication is defined and theorised, many scholars strongly believe in the role of communication as a means of social change (De Fleur and Ball-Rokeach, 1982, and Hornik, 1988). Communication and social theorists and other seminal thinkers such as Lerner (1958), Schramm (1962), Pye (1963), Rogers and Kincaid (1981), Habermas (1984), Hornik, (1988) and Freire (1989) all believe that communication is a powerful source of generating change. Such change may be related to the structure and function of a social system, for example, or the change in a manufacturing technique, village development, and education and health (Rogers and Shoemaker, 1971:7). In the process of bringing about such change 'communication has self-generating capacities, and these capacities arise out of the very interaction of participants, not out of the properties of their external environment (Penman, 1992:249). In view of this, the ensuing section discusses 'development communication' as a means of bringing about social change for development especially in the developing world.

Development Communication

In discussing communication and its relation to human development, many communication and social scholars have expressed their views in regard to development and development communication. For example, Tehranian (1994: 276) defines 'development' as 'the process of the increasing capacity of a social system to fulfil its own perceived needs at progressively higher levels of material and cultural well-being'. Similarly, Rogers and Shoemaker (1971: 11) define development as 'modernisation at the social system level'. Kumar (1994:81), citing Rogers' views, defines development as 'a widely participatory process of social change'. In such a process, communication is perceived as one of the most important tools. Samanta (1990:78), in a symposium held at the University of the Philippines, defined 'development communication' as:

> the art and science of human communication applied to speedy transformation of a
> country and the mass of its people from poverty to a dynamic state of economic growth
> that makes possible greater social equality and the larger fulfilment of human potential.

In the process of development, especially in the less developed parts of the world, the use of communication has become 'the focus of theoretical attention only in the post-Second World War period' (Tehranian, 1994: 274). This period saw the expansion of capitalism and the spread on a global scale of productive activities assisted by new forms of information

15

technology (Reeves, 1993: 1-2). During this period the Western colonial powers started loosening their grip on their colonies; as a result, gradual change started taking place everywhere (Stevenson, 1988: 2). At the same time, overseas aid assistance, for promoting economic growth, played a dominant role in the development efforts of developing countries (Chu, 1994:34-35). During this time, according to Fugelsang and Chandler (1987: 1), 'development' was seen as a 'process of modernisation modelled on the industrialised societies of the North' where 'the measure of progress' was 'economic growth'. In this modernisation process, developing societies were considered as primitive and were to be 'watched, categorised, trained, mobilised, coerced, indoctrinated' (Shah, 1996:160). Communication, especially mass communication, was perceived as the agent of change for these societies. This was made evident in a study by Lerner (1958) who was the first to observe people's mobility and the effects of physical contact between villagers and urban people in a developing Middle East country, Turkey, and more importantly, the effect of radio in 'challenging the authority of tradition' during that time. Stevenson (1988: 2) referring to Lerner's observation of the effect of radio in Turkey notes that 'the radio ended centuries of isolation and stability and gave people a glimpse of what their future could be, not what it inevitably must be.' Similarly, Schramm (1964) made a study on the use of mass communication in development sponsored by UNESCO, and positively appraised its effectiveness.

During the post-Second World War period many social scientists, such as Schramm, believed that mass communication had a 'miraculous power' and that it was 'the magic multiplier' for bringing about social change (Kumar, 1994:81-82). Based on this premise, many mass media-based projects were launched worldwide during the 1950s, 1960s and 1970s in anticipation of social change and development (Hornik, 1988: x). Similarly, in the early 1970s, Rogers (1971: 39) suggested that mass media could bring about social change through the diffusion of new technologies and ideas. Many studies focused on this theme. Such studies, according to Rogers and Shoemaker (1971: 12), were concerned with those messages that could spread new ideas for social change. As early as 1976, Rogers propounded his diffusion of innovation model to introduce new technologies and ideas to the development process of developing countries (Rogers, 1995). In this model, opinion leaders and agents of change were considered important for bringing about social change. Opinion leaders were considered as

'members of the social system in which they exert their influence' while agents of change were 'individuals with influence in the social system.. who represent change agencies external to the system' (p.27). In his model, Rogers assumed the role of communication basically as the mobilisation of agents of change and opinion leaders in diffusion of innovations from change agencies to their clients. According to Servaes (1993), this model attempted 'to create an appetite for change through raising a climate for modernisation' (p.16). After formulation, this model, with the help of agents of change and opinion leaders, was extensively used in agriculture, health and family planning (Rogers, 1976: 8). In effect, this model became very popular in the development process, the orientation of which, according to Samanta (1990: xviii), was more toward a 'top down' or 'trickle down' effect of communication with virtually no direct links between the change agencies and their clients. This model represented a linear paradigm of communication involving a two-step flow of communication in which people (development clients) were not informed directly by change agencies (development agencies) but through their agents (agents of change and opinion leaders). Thus, direct feed-back to improve communication between change agencies and their clients appeared to have been a problem and only feed-back provided by the agents of change and opinion leaders to change agents played an important role in rendering 'the initial message more effective' (Servaes, 1993:17). Mass communication played the 'pre-eminent role' in the development campaigns using this model (p.17). At about the same time, the UNESCO General Conference approved the role of mass media in development in 1978 (Stevenson, 1988: 2). As a result, the United Nations' agencies, such as UNESCO and UNICEF, and the United States' aid agency, USAID, reinforced their support for many mass media-based projects in agriculture, health, family planning and formal education in developing countries (Mody, 1991: 10). As this discussion has highlighted, the notion of development that emerged in the early 1950s, with a strong focus on mass communication, was based on a process of transmission of development knowledge from source to receiver (development expert to development recipient), and could be characterised as being based on a linear model of communication. Moemeka (1994: 5) viewed such a transmission of knowledge through communication as essentially oriented towards producing an effect on the development efforts of the developing societies.

Despite the penetration of mass communication, including radio and television, in developing countries during recent decades and the potential of such media to foster development, development communication analysts such as Rogers (1976: 7-8), Hornik (1988: 14-26) and Stevenson (1988) have expressed their dissatisfaction and scepticism about mass communication. They view mass communication as having brought about little real development and social change. Stevenson (1988: 4), for example, referring to the national development efforts in developing , Third World countries observes that:

> The changes [brought about by mass communication] that had occurred throughout the vast continents where three-quarters of the world's population lived seemed not only to tear up the old ways but to leave in their wake mostly chaos and dashed hopes. The vision of modernity that development had promised - industrial, material, democratic - often seemed as incongruous and inappropriate in the Third World as an English cottage in an African plain or an American sitcom televised to a Latin American barrio.

Clearly mass communication as 'magic multiplier' did not work as effectively as assumed. At the same time, the theoretical paradigm of mass communication which is considered as having originated from Lasswell's one-way model (who says what, in which channel, to whom, with what effect ?) and the diffusion of innovation theory have also not functioned appropriately in producing the desired changes for development in developing countries.

Considering the theoretical and practical problems encountered in communication, especially in mass communication, for development and social change, Stevenson (1988: 29) comments that faint voices of criticism were already being heard during a conference at the East-West Centre in Hawaii in 1964. Similarly, Rogers also gradually realised the serious drawback of his own theory of diffusion of innovation, and acknowledged that his theory was focused solely on the linear dissemination of innovations to recipients. Thus, in association with Kincaid, Rogers, as discussed above, introduced a convergence model and recognised that communication or information did not flow vertically from the top down, as he had imagined in his original diffusion of innovation model (Rogers and Kincaid, 1981).

In the context of the growing scepticism and concern over the dominance of the modernisation paradigm of development communication in mass media or other forms of communication, many development communication scholars and practitioners started advocating the need for a different theoretical paradigm that was more suitable to the development context. Haberman (1986, in Samanta: 1990: xvii) insists that 'there is a

desperate need for communication theory formulation and research and that the history of development communication as a strategy for technology transfer in developing countries is characterised at its inception by an utter lack of theoretical conceptualisation'.

It should be noted that the 'Western model' of development in developing countries, started to face the greatest criticism after the end of the Vietnam war. Many critics believed that this model was merely a 'smokescreen' for a 'new style of colonialism' or 'cultural imperialism' (Stevenson, 1988: 4). Such cultural imperialism is described by Schiller (1976:9) as:

> the sum of the processes by which a society is brought into the modern world system and how its dominating stratum is attracted, pressured, forced, and sometimes bribed into shaping social institutions to correspond to, or even promote, the values and structures of the dominating centre of the system.

While criticising such cultural imperialism, Armand Mattelart, an influential writer on cultural dependency and imperialism, expresses his view on the role of mass media in developing countries as being 'essentially the diffusion or transmission of "collective representations" (the major values, ideologies, myth, images) developed in the advanced capitalist countries to dependent ones' (Mattelart, 1978: 13-33). With Dorfman, Mattelart cites an example of American cultural imperialism in Chile, and depicts how dominating the media is in the way it treats underdeveloped people as children. Further Dorfman and Mattelart comment on Disney comics that treat underdeveloped people 'like children, to be treated as such, and if they don't accept this definition of themselves, they should have their pants taken down and be given a good spanking' (Dorfman and Mattelart, 1975: p. 48). Similarly, Reeves (1993: 34), criticising cultural imperialism, notes that growing international cultural production through cultural imperialism means that 'consciousness can progress greatly beyond the real bases of social life, well beyond the state of productive forces in any one national society'. Golding (1974: 43-51), referring to the Western-style model of development put in place in developing countries, considers that in the development role of communication it has been assumed that the developing countries are 'emerging from static isolation' and 'require external stimulus'. However, many dependency scholars, such as Fejes (1981:284), argue that true national development cannot be expected from stimulus or dependency. Narula and Pearce, (1986, in Varan, 1993: 7) assert that dependency only helps promote capitalism by expanding the overseas markets of advanced capitalist countries such as the U.S. And, for many concerned individuals, such expansion of markets through cultural invasion, particularly

through mass media, is a catalyst for the vulgarisation of indigenous cultures and the traditions of developing countries (Fugelsang and Chandler, 1987: 3).

In the face of growing criticism of cultural imperialism and the recognition of the need for developing a different model of communication suitable to the development context, many communication scholars and experts, especially those concerned with development communication, such as Chu, Dissanayake, and Reddy, have advanced their views on appropriate models of development communication. Chu (1988: 204-210), highlighting Asian development and cultural practices, asserts that the western theoretical communication paradigm is either inappropriate or inadequate for explaining Asian communication behaviour. He argues that Asian paradigms and theoretical orientations are needed in order to take into account social structural contexts and relevant cultural values and religious beliefs. Similarly, Dissanayake (1988:1) suggests paying attention to the conceptualisation of the communication characteristics of Asian countries rather than being confined predominantly to 'metatheory associated with industrially advanced Western countries'. Reddy (1988: 72) also criticises the Western theoretical model of development and metatheory where 'poverty and tradition are equated with primitiveness while the desire for material wealth in an urban setting is seen as modernity'. She argues that such culture-bound assumptions do much harm to the development process. She further argues that ' tradition need not be surrendered upon the advent of modernity'.

In order to make development communication meaningful and beneficial in the development of developing countries, and also to mitigate the growing criticism and scepticism about its use in development, communication scholars and experts, such as Rogers (1978), Hornik (1988), and Hedebro (1979) have urged the necessity of viewing communication differently, in a manner that can enable it to foster mass mobilisation and development. They have argued for a conceptualisation of communication not as a linear process (one-way, vertical communication) dealing with transfer of information from source to receiver as prescriptions for development problems, but as a two-way process of sharing information by entering into dialogues between the parties involved in development

Conclusion

Over recent decades many communication models have been developed which can be broadly categorised as defining communication in one of three basic paradigms: linear, non-linear and transactional. Whilst some scholars view communication as being based purely on transmission of information, others view it as relying on symbols and meanings within a complex social system.

Regardless of their adherence to one or other of these different communication paradigms, communication and social scholars believe in the importance of communication as a means of social change. Initially, influential communication scholars such as Lerner, Schramm and Rogers believed mass communication would produce multiplier effects that would bring about social change. However, despite the many efforts to optimise the effectiveness of mass communication based on the linear Western paradigm (one-way transmission of information or messages), mass media has not achieved the goal of social change in developing countries. Consequently, more recently, many development communication and social scholars have started advocating the need for viewing communication differently in order for it to foster mass mobilisation and development. To achieve this, it is argued that it is necessary to conceptualise contemporary communication in developing societal contexts as something requiring a transactional process involving participatory communication. In this perspective, the next chapter examines participatory communication as an alternative paradigm for development communication that deals with the mutual sharing of information based on a two-way transactional process.

CHAPTER 3 : PARTICIPATORY COMMUNICATION IN DEVELOPMENT

In the design of development communication projects, the need for people's participation has generally not been adequately taken into consideration. As a result, the one-way, top-down transmission of development information has tended to dominate the communication process in the development context. Because of the lack of people's participation in development, the development organisations have had difficulty in understanding the social realities, including the cultural, traditional and economic values, that may have inhibited the people's responsiveness to development projects and processes.

Ettema and Kline (1977: 188-189) and Freimuth and Mettger, (1990: 235) contend that people will use information when it is functional in their lives. Similarly, Hope and Timmel (1984: 8) note that 'people will act on the issues on which they have strong feelings'. However, in contemporary development communication processes, the creation of strong feeling or motivation in the audience is not always present. For example, a case study of Nepal by Stone (1989: 209) explains how the target audiences of a watershed development project were not interested in the development messages because these were not addressing their preferred visible infrastructural development of schools, health posts and water systems. Similarly, Hedebro (1979) and Hornik (1988) provide examples of nutrition projects where target audiences were not motivated to change their behaviour. In his study of an Ethiopian nutrition program on supplementary food for children, Hedebro (1979 : 32-33) found that most of the target audiences were not motivated because they perceived the program as making them spend additional money to buy supplementary food, bringing them to a radical departure from their traditional feeding practices, and not offering foreseeable dramatic change in the health of their children. Further, Hornik (1988:122-123), describes some communication-based (mass media-based) nutrition projects conducted by Richard K. Manoff

International Inc.[1] in Ecuador, Nicaragua and the Philippines that resulted in knowledge and attitude changes but no behavioural changes in nutrition due to a lack of understanding on the organisation's part of the social and cultural practices of the audiences.

The failure to achieve desired changes in all the cases mentioned by Stone, Hedebro and Hornik appears to be accounted for by the design and dissemination of non-motivational information which did not take account of the audiences' local culture, tradition and social values. As a matter of fact, failure of this kind was already recorded in 1955 by Wellin (1955, pp.71-103 in Rogers and Shoemaker 1971: 2-6) in respect of a two-year campaign on the practices of boiled-water drinking in a Peruvian village. One of the reasons for the failure was linked with the cultural beliefs of the villagers who associated hot foods with illness; hence, hot water was meant only for the sick.

To avoid such failures, there has been a growing emphasis on the need for participatory approaches to development communication as a method of enhancing the audiences' motivation and of bringing about more successful development programs (Serveas and Arnst: 1992, Stone: 1989, Shrimpton: 1989). The remainder of this chapter focuses on the notion of participatory communication for development and its theoretical paradigm, and on the operational framework for this study.

Participatory Communication : An Alternative Paradigm for Social Change and Development

> Participatory communication can be defined as a type of communication in which all the interlocutors are free and have equal access to the means of expressing their viewpoints, feelings, and experiences. Collective action aimed at promoting their interests, solving their problems, and transforming their society, is the means to an end (Bordenave, 1994: 42).

In line with this view Serveas and Arnst (1992:18) contend that participation of the audiences in communication development and processing is essential as they are often the most

---

[1] Richard K. Manoff International, Inc. is a United States based advertising firm that used advertising techniques in nutrition-related behavioural change under contract with the U.S. Agency for International Development (Hornik, 1988:122-123)

23

qualified sources of information to decide what information can and should be applied at the local level based on the relevant cultural issues. They uphold that:

> Behavioural responses to planned messages is not participation; neither is it a strategy to make the target audiences feel more involved... striving for behaviour change is a means to an end, but should not be confused with participatory methods' (p.19-20).

Aubel (1991:10) also argues that communities are the source of information regarding their 'self-identified needs, priorities, and constraints'. Thus, participation of communities may be very important in a sense that 'people' (audiences/communities) are the 'ultimate and perhaps the most important beneficiary of the development communication policies and planning' (Keune and Sinha, 1978: 36). Stone (1989:212) contends that participation of the target audience in designing development projects may help bring effective social change rather than impose an external culture on a society. There are many research studies supporting this view. White and Maloney's research on promoting healthy lives (1990: 224-230), for example, reveals that 'most of the health messages of the past appear not to have shaken the deeply held belief of the hard-to-reach Americans'. Hence, these people consider chronic problems, such as heart disease, cancer and diabetes as largely related to fate and heredity. To deal with these problems, White and Maloney (p.230) suggest there is a need for audiences' participation in acknowledging 'the interplay of biological risk factors, such as family history, with behavioural risks factors, that is , diet, exercise and weight control in the design of health messages'. Similarly, Aubel's field studies (1991) on 29 vitamin A projects in various developing countries reveal that those projects based entirely on a 'social marketing approach'[2] do not produce 'dietary improvement in the primary target groups'. These studies indicate that the social marketing approach may have failed to promote people's participation and 'often focused on the one-way dissemination of motivating messages' (p.9). Bellicha and McGrath (1990:250) cite an interesting example from Arkin (1987) in relation to the campaign for the reduction of cardiovascular disease in the United States: one finding of the study was that 'the overwhelming choice of the audience for the most credible source of message delivery is another hypertensive'. This means that audiences prefer to see their own people participating in the formulation of credible messages for dissemination. Similarly, the

---

[2] The social marketing approach was developed in the 1960s (Nair and White, 1994:159) with the marketing principles of product, price, promotion and place, and is aimed at tackling particular health problems. (Wallack,1990:155; McKee 1994:196).

24

1972 Stanford Three Community Study (Farquhar, et. al, 1977, in Bellicha and McGrath, 1990: 247) demonstrated that mass media alone could lead to the adoption of certain risk-reduction behaviours, for example, improved eating habits, while behaviour such as giving up smoking required mass media supplemented with one-to-one communication and social support. This means that the latter required, in addition to mass-media, an interaction or two-way communication that involved the people's participation. As a matter of fact, there is increasingly growing dissatisfaction over current health promotion practices relying primarily on mass mediated communication. Clift and Freimuth (1995:68) suggest that for health promotion campaigns to be effective, mass media should be combined with 'community, small group, and individual activities, supported by an existing community structure' (p.71). Similarly, Welshimer (1995:280) suggests the need for a 'community networking strategy' to involve the maximum participation of people. Nutter and Kotch (1995:311) contend that to reinforce learning activities in health communication, people should be involved in a 'practical real-life situation'. All these views suggest that in order to effectively address community health problems, especially of the public health, appropriate policy measures and strategies which activate people's participation is very essential.

Long (1975:125) indicates that participation helps make people aware of existing inequalities. Shrimpton (1989: 635), referring to the experience of rural development programs, states that community participation in the design and management of a program 'greatly enhances the likelihood of program success due to improved [goodness of fit] and increased sustainability'. Servaes (1996a :105) suggests that the 'community' is the focal point of development, and 'self management', for example, in the design and dissemination of development messages, is the 'most developed form of participation' Supporting this position, Arnst (1996:111), referring to the traditional approach to development, asserts that 'top-down', 'trickle-down' development is anti-participatory. Linking this to communication paradigms, Tontisirin and Aree (1993: Annex 5.7) consider that participatory actions rest on two-way communication and development. They further argue that two-way communication helps avoid 'the pitfalls of a top-down approach, e.g. lack of awareness about local conditions and constraints'.

The main theory behind a participatory approach to development is that real development must be people-centred (Finsterbusch, and Wicklin, 1989). In this vein, Korten and Carner (1984: 201) argue forcefully that the development process should not ignore the 'creative initiatives of people' as they are 'the primary development resource'. Finsterbusch and Wicklin III (1989:591) claim that participation can lead to initiatives on the people's part and allow them to assume 'ownership' of the development process. Both Aubel (1991) and Stone (1989) stress that community participation helps individuals resolve their problems by themselves. Korten (1984:301) criticises the conventional method of expert-dominated decision making processes in people's development and further argues that there should be no more 'nonconsultative modes of central decision-making' and 'decision making must truly be returned to the people'.

Participation, in this sense, may be defined as a process of the empowerment of people (Gran, 1983; Oakley, 1987; Oakley and Marsden, 1984 in Ghai,1988:3). Empowerment may generally be referred to as 'the possibility that people can more actively control their own lives' (Rappaport, 1981, Barimah, and Nelson, 1994:174). In 1986, WHO indicated 'empowerment to health' 'as absolute control over matters pertaining to his/her health' (Barimah and Nelson, 1994: 174). In this sense, empowerment puts people in a situation that enables them to make decisions affecting their lives. It may, therefore, be called 'a process by which people make decisions that are right for them' (Merzel, 1991: 5). Such a process may be achieved through participation that changes the subjective nature of the powerlessness of the people, characterised by feelings of hopelessness and alienation from the world in which they live (cf. Rotter, 1971 and Seeman, 1959 in Wallerstein, 1993: 218). In this process, people are conceived of as subjects and thus as active participants rather than as objects and thus as passive recipients. As subjects they are able to make their own decisions and exercise control over the development activities and processes that affect their lives. To be achieved, this process calls for the peoples' genuine participation in a way that enables them to control the actions to be taken, and where the bureaucracy, local elite and the people work together co-operatively throughout the process of development, rather than continue what White (1993: 17) refers to as the traditional practice of pseudo-participation of people who come simply to listen to 'what is being planned for them and what would be done unto them', an approach she (White) totally rejects as being non-participatory. People in this paradigm speak

26

for themselves and value 'each person's perspective and voice' (Stuart and Bery, 1996:199). It is significant that this approach to communication supports the notion of Mumby (1997:21) that 'meaning or reality does not reside in people's heads but rather in the complexly articulated systems of discourse within which people are always situated'.

When participation is defined essentially as an empowerment process for development, communication involving participation may be characterised as follows:

a) In a participatory approach to communication, the participants are interactively involved in the communication processes. Thus, the conventional senders and receivers do not exist at all in participatory communication. However, transactional dialogues (feedback) are considered as a vehicle for sharing meaning as Borden and Ston, (1976:83) maintain:

> Without this feedback (sharing of the other's point of view, experience, meaning), we would have no way of knowing what was real. All of our mental activity would be the result of perception, in which case we would be generating our own meaning from those experiences without checking it with others to see if we were still "in the ballpark". As a result, our view of reality would be completely egocentric and we would lose our ability to communicate with others. Without sharing there is no human growth.

This view of communication sees ideas and understanding as emerging from a complex contextualised communication process (Crebert: 1991). Sharing meaning is possible in participatory communication if the audience is involved in its process. When this occurs, it helps us understand that human communication is not a process merely of action-reaction, but a coherent set of interactions (shared meanings or two-way communicative actions) associated with the acts of each participants involved in communication. Though Berlo (1960: 131) posits that interactions involve '…reciprocal role-taking, the mutual employment of empathic skills'[3], the participatory interactions may be seen as more than that as they involve not reciprocal but transactional dialogues and actions, in an exchange of meaning for resolving a problem at hand.

---

[3] Empathic skills are defined as 'the ability to project ourselves into other people's personalities' (Berlo, 1960: 119). This ability helps develop expectations and predictions about both the source and the receiver in the process of communication.

b) Communication enables the audience to understand the function of communication identified by Bordenave (1976:45): "not what the individual can do for communication, but what communication does for the individual".

c) Communication helps resolve the problems linked to cultural systems, customs and traditions, religion and myths, such as those Schramm indicates:

> Change comes hard in that village. The old men are the decision makers, and they usually make conservative decisions. There is a tight caste system, which limits the kinds of jobs any man can aspire to. There are rather rigid customs as to what kind of work a woman can do and what her influence can be. The government has been trying to break down these rules, but it is hard to do by law; the old customs linger. The whole village system tends to enforce what has been, and to oppose what might be (1964:7).

These problems may be resolved by raising the critical and communicative consciousness of the participants through interactions that are necessary for the construction and deconstruction of reality. Tehranian (1994) defines critical consciousness as a 'layer of consciousness that monitors the routine monitoring of social action and its rationalisations in order to unmask their hidden meanings and to hypothesise alternative normative structures'. He defines communicative consciousness, on the other hand, as 'closely associated with the social and interactive nature of human beings' where 'interacting is the central feature of the discursive practice in this mode of consciousness' (p. 295).

d) Communication helps promote a perception of mutual consciousness essential to human social organisation. Mead (1967: 253) observes that communication involving participation helps realise human social organisation which requires 'the appearance of the other in the self, the identification of the other with the self, the reaching of self-consciousness through the other'.

e) Communication helps create a sense of 'partnership' or 'solidarity' between development authorities and participants (development recipients) in the process of social change, just as Habermas (1984:66-67) argues that external factors, such as economic, psychological and sociological concerns cannot be sufficient to bring about social change unless the learning processes are conceived as solutions to the problems that 'can be insightfully recapitulated from the perspective of a participant and can be submitted to intersubjective

tests'. In referring to past developmental efforts, Jazairy, President of the International Fund for Agriculture Development, notes:

> Projects conceived and implemented by outside organisations have failed because adequate consideration was not given to the importance of local participation (1989).

Thus 'partnership' or 'solidarity' may be necessary in that it reinforces the idea of mutual efforts and allows for the sharing of relevant experiences in achieving project goals.

f) Communication helps break down the sceptical attitude of people living in poverty towards external help and assistance for development. McAnany (1980), and Freimuth and Mettger (1990) believe that the poor distrust dominant institutions. As McAnany observes:

> If the poor are at the bottom of the social system, they will have a built-in bias against information from a government source, unless that government has taken some clear steps to improve their situation. The danger that the poor may see in government information is that it can be self-serving and political and may simply be a device to substitute words for concrete actions in helping rural people (1980:11)

g) Communication creates a generative force for empowerment, especially amongst those groups of audiences who are difficult or hard to reach [4]. It may alter their deeply held beliefs and superstitions, and their fatalism about struggling against their development problems. Generative power, according to Nair and White (1994:163) is the process by which 'individuals and groups can develop their own source of power by strengthening their capacity for action and developing their strength'.

h) Communication helps create collective awareness by collective decisions. Collective decisions, according to Rogers and Shoemaker (1971:36) 'are those which individuals in the social system agree to make by consensus. An example is fluoridation of a city's drinking water. Once the community decision is made, the individual has little practical choice but to adopt fluoridated water'.

---

[4] Hard-to-reach audiences have been labelled in different ways. Freimuth and Mettger (110: 232) quotes different labels such as obstinate (Baur,1964), recalcitrant (Dervin,1989), chronically uninformed (Freumuth,1989), disadvantaged, information poor (Childers and Post,1975), have-nots (Rogers,1983), illiterate (Perrin,1989), and malfunctional (Fingeret,1984).

i) Communication helps break down the 'culture of silence' (Servaes, 1993: 29 & 1996a: 97) as many people may be empowered to come forward and challenge their existing situation, living conditions, and cultural and structural deprivation.

j) Communication makes people 'believe' what they hear and see. For instance, people believe 'what they hear more readily when they actively participate in the saying of it' (Barton et.al., 1974: 292). Likewise, they believe what they see[5] as the 'objectives of perceptions' when they participate in it (Heider, 1958: 22-23). This means participation reinforces the authenticity of the message because people can see it and hear it. This is very important in nutrition and health communication as most people in developing countries do not understand or perceive health-related problems unless they are severely affected by them.

k) Communication encourages the recipients of development programs to mobilise the limited resources available so that behavioural responses to the development information are made possible and retained. Berlo's thesis (1960: 85) - that is , 'responses that are easy to make are more likely to be retained than responses that are hard to make' - may be relevant in this regard. It is particularly important in nutrition and health communication where the resources available for better health are often limited and may be the only means by which changes in the behaviour of the target audiences in the developing countries can come about.

In essence, it can be argued that participatory communication is a process of empowerment of people for social change that involves, among other things, giving people the power to speak up themselves and the sharing of meaning and interaction for the construction and deconstruction of social reality, mutual consciousness, partnership and solidarity, increased capacity and collective awareness. It involves 'people's creative potential' that 'creates the communication processes according to each particular situation' (Altafin, 1991:312-314). It

---

[5] Duncker, (1947, in Heider ,1958: 22-23) observes that seeing has the phenomenal characteristics of 'being open to', or generally, 'participating in'. Thus, for example, seeing a tree is equivalent to participating in the tree or 'the tree is given to me in a definite manner', meaning 'the tree appears in person not by chance as image.

also mobilises people in their development through 'transformation of attitude and values' (Uddin, 1990:61).

As against these characteristics and benefits of participatory communication in the process of empowering people as discussed above, some contemporary development and communication scholars have identified potential shortcomings.

Finsterbusch and Wicklin III (1989:573-574), for example, suggest that 'participation is not always necessary or helpful. It has much greater benefits in some contexts than in others'. Pointing to contextual factors that inhibit participatory benefits, they suggest that 'participation is expected to have fewer benefits in the least developed countries' due to 'weaker participatory traditions' and 'less capacity for lower groups to participate'. They also indicate that in participatory projects 'more skilled beneficiaries' benefit more from their participation. It is assumed that beneficiaries become 'more effective participants' 'if the level of technology is relatively simple'. They suggest that beneficiaries' participation cannot contribute effectively to projects if they are not well organised. They also indicate that only smaller projects provide more benefits of beneficiaries' participation.

Varan (1993: 9-10) indicates that unless participatory principles and objectives are clearly defined in more concrete and broad terms, there may be a danger of 'unrealistic idealism', which may negatively affect the notion of participation. For example, in the discussion of empowering people, Lamichhane and Sob (1980:87-88) have cautioned that the danger of such unrealistic idealism may bring about a drastic change of the social structure through violence rather than critical thinking aimed at resolving problems peacefully.

Aryal (1988:21), highlighting a case study of people's participation in Nepal, suggests that participation of the poor and disadvantaged cannot be maintained in situations where elite groups of society have dominance in politics and economic power. He indicates that elite groups always take advantage over the poor and disadvantaged in decision making process. People's participation cannot be maintained if there is no partnership between civil society and the state. One cannot not always assume a harmonious relationship between civil society and the state (Gadotti, 1993:12). Thus a structural change may be warranted, which may

involve a difficult task of making an equitable sharing of both political and economic power (Servaes, 1993:23).

Since participation is not necessarily a process of compliance gaining, it may sometimes create 'conflict' and 'threat' to 'extant structures' (Servaes, 1993:40), which may create difficulties in achieving development.

Participation can be manipulated and misused to create an illusion of people's participation in their development. In such case 'people's co-operation is manipulated in such a way that they have the illusion of participating of their own accord when all they are doing in fact is giving free help to carry out government projects designed without consulting the population' (Bordenave, 1994:45).

It should also be noted that participatory processes may well be time consuming and thereby requiring more resources and funding.

Within the context of participatory communication as a process of empowerment, the following section elaborates the theoretical basis of the participatory communication paradigm.

The Theoretical Basis of the Participatory Communication Paradigm

The participatory communication paradigm can be conceptually related to the concept of 'self-awareness-raising through collective self-inquiry and reflection' (Rahman, 1991:17). Such a concept, according to Rahman, is derived from 'conscientisation', a notion developed by Paulo Freire. Similarly, communicative action that involves verbal and non-verbal interaction to reach an understanding (Habermas 1984) also provides theoretical grounds for participatory communication.

In his philosophy of education and development, Freire points out that conscientisation involves praxis: action and reflection (Freire, 1989:38-39). Hope and Timmel (1984:10), analysing Freire's notion of praxis, define action as primarily a series of activities to resolve

problems, and reflection as critical analysis of what causes mistakes and failures. According to Thomas (1994:51), action and reflection are inseparable activities, an organic whole, and through dialectical interplay they constitute the process of conscientisation.

In his philosophical discussions concerning literacy education, Freire argues that the contemporary education system is dependent on a mechanical base where literacy is reduced to 'the treatment of letters and words as a purely mechanical domain' (Freire and Macedo,1987: viii). In this domain, Freire posits:

> the teacher deposits 'his/her own word in the learners, as though their conscious bodies were simply empty, waiting to be filled by that word. Such a technique is mechanical and relies on memorising; the learners are made to repeat again and again, with their eyes closed. (1979: 72).

He describes this technique as the 'banking concept of education, where learners' creative powers are ignored and the vested interests of the dominant groups (oppressors) are protected by avoiding 'the threat of student conscientisation' (Freire, 1989: 57-74).

In Freire's concept of conscientisation, consciousness is the main attribute of human empowerment, development and freedom. Freire stresses human consciousness and categorises it into main two types : (a) critical consciousness, and (b) magic consciousness (Freire,1979: 44-46). In defining critical consciousness, Freire (p. 44) refers to Pinto's views (1961) and defines critical consciousness as representing 'things and facts as they exist empirically, in their causal and circumstantial correlations'. In contrast, according to Freire, magic consciousness 'simply apprehends facts and attributes to them a superior power by which it is controlled and to which it must therefore submit'. Magic consciousness, therefore, is characterised by 'fatalism, which leads men to fold their arms, resigned to the impossibility of resisting the power of facts'; while critical consciousness, is 'integrated with reality'. As a result, 'critical understanding leads to critical actions; magic understanding to magic responses'. Freire, while advocating a functional education system, stresses the need to educate learners in critical thinking. To achieve this, he argues for an active dialogical method of critical thinking. Quoting Jasper (1952), he argues that entering into dialogue is itself a form of communication and participation. (Freire,1979: 3-4).

For Freire (1979:45-46) active dialogue is based on a 'horizontal relationship between persons' or 'between two poles who are engaged in a joint search'. He believes in dialogue that flows 'horizontally', such as A with B and vice versa (two-way communication). Such dialogue, he believes, forms love, hope and mutual trust, and creates empathy through which two people 'can join in a critical search for something'. Freire considers that such dialogue is a true form of communication. Conversely, Freire rejects 'vertical relationships' between people in communication, that is, communication from A over B (one-way communication), which he terms as the 'anti-dialogue'. Such anti-dialogue, he believes, breaks down love and empathy, and instead of communication, only 'communiqués' occur. This type of situation may be observed on a large scale in the form of communication which characterises cultural imperialism or invasion. In order to avoid cultural imperialism or invasion in adult education in developing countries, Kozol (1978:3) takes up Freire's idea that:

> ...any group of 'outside educators' who have grown up, lived and studied in a privileged situation must 'die as a class' and be reborn in consciousness - learning always even while they teach and working always "with" (not "on") the nations and the people that invite their aid ("collaboration", as opposed to "cultural invasion," is the crucial term).

The above views seem to indicate the necessity of establishing a dialogical method which involves the sharing and receiving of knowledge in the process of education and learning.

In his theory of communicative action, Habermas (1984) believes that this dialogical method creates justification or understanding of social realities in the sense that dialogues are 'communicative actions' for mutual understanding (for 'reaching understanding', 'verständigung')[6] that represent 'all interactions in which those involved coordinate their individual plans unreservedly on the basis of communicatively achieved agreement' (Habermas,1984:305). Communicative actions help develop interactional and cognitive competence in reaching mutual understanding even in a conflict situation (Outhwaite,1994:43). Reaching understanding requires interpretation that can be made through rationality. For Habermas, rationality relates to the 'reliability' (the validity claims[7])

---

[6] 'Reaching understanding "(Verständigung)" is the possibility of using reasons or grounds to gain intersubjective recognition for criticizable validity claims' (McCarthy, 1984: x). In reaching understanding the action plans of one actor with those of other actors are linked by speech acts through rationally motivating achievements (Habermas, 1991: 223).

[7] McCarthy, (in Habermas ,1984: x) summarises validity claims as being related to the truthfulness or rightness, the appropriateness or legitimacy , the sincerity or authenticity of our acts.

34

of the knowledge that can be 'criticised and argued for' (1984: 8-9). Alexander (1991: 54), analysing Habermas' notion of rationality defines rationality as 'the quality that makes an action defendable against criticism'. Further, Alexander states that 'to be rational, acts must rest upon criticisable validity claims' (p.54).

Habermas (1984: 397) argues that in order to maintain society within the context of 'the socially co-ordinated activities of its members' through communication, there is a need to satisfy 'the conditions of a rationality that is inherent in communicative action'. Such conditions are largely related to the truthfulness or rightness, the appropriateness or legitimacy, the sincerity or authenticity of human acts that can be achieved through the exchange of active dialogues (horizontal relationships between persons) that enhance participation. And these dialogues, which enhance participation, lead to the process of production of meanings, and the process of conveying values in human communication (Rahim, 1994:122).

It is apparent from the above discussion that, in the theoretical underpinnings of praxis (action and reflection for conscientisation) and rationality (communicative actions for reaching understanding) in Freire's and Habermas' work respectively, dialogic processes of communication have been given great significance in that they can create socially co-ordinated communicative actions necessary for facilitating participation. It would, therefore, appear that Freire's notion of horizontal dialogues and Habermas' rationality are very important concepts in a normative theory of participatory communication.

The Operational Framework for Participatory and Non-Participatory Communication

Considering the characteristics, attributes and theoretical basis of the participatory communication paradigm discussed above, participatory communication may be considered, in essence, as a two-way horizontal process of communicative actions, based upon community needs and evaluation (see Theoretical Framework Table 3-1). In this process

Table 3-1: Participatory and Non-participatory Communication: A Theoretical Framework

Characteristics	Participatory	Non-participatory
1.Process	Based on a two-way process of interactions oriented mainly toward 'reaching understanding' for resolving problems.	Based mostly on a one-way, top down, linear process oriented toward ' producing effect'.
2.Flow of Communication	Horizontal dialogues and communicative actions.	Unilinear: flowing from the top down, from sender to receiver
3.Agenda setting	By audiences themselves	Not by audiences, but by expert/communicator.
4.Role taking	Full participatory role, (involvement in design, development, implementation and evaluation of project and its communication process).	Partial role (mainly in reception of information or goods and services provided by the project).
5.Change agent /expert	Both project staff and target audiences.	Fixed change agent e.g. expert/communicator
6.Choice of medium/media and information	Based on input from target audiences.	Based on the decision of project staff.
7.Learning process	Knowledge sharing in a socially co-ordinated manner.	One-way learning emanating from expert/communicators to target audiences.
8.Evaluation of impact	Based on how people have used the media or information for resolving problems.	Based one how many people have been reached by the media or information.

social change - for example, behavioural change in relation to nutrition - is expected to result from the joint efforts of nutrition communicators and target audiences through a simultaneous exchange of dialogues between them. Similarly, learning is understood to be an integral part of this process which, in turn, involves both communicators and audiences as participants in such a way that increased capacity as well as ownership are facilitated through this process. At the same time, evaluation of the impact on the audiences is measured in terms of the extent to which the problems have been resolved.

Non-participatory communication, on the other hand, may be viewed primarily as a one-way, top-down, linear process, in which project information flows from communicator to audiences. Audiences are thus considered as being simply passive recipients of project information. In effect, this process operates only according to the expert communicator's own individual world view and does not involve the audience's participation. Any change, which may occur in this process, such as behavioural change in nutrition, is expected on the basis of

compliance gained through fixed change agents, such as the nutrition experts and communicators. As a corollary to this, the learning process emanates one way only, from communicators to audiences, and the audiences do not necessarily feel a sense of ownership of, or belonging to, the process of learning. It would seem that evaluation of impact is also measured according to the number of audiences reached by the media or information campaign.

Conclusion

Over the years, dialogical or participatory communication has been considered necessary by many development communication and social scholars in the wake of the many development failures which involved the use of development communication based on a linear paradigm. Most of these scholars strongly argued that the linear paradigm of development communication (top-down communication) fails to understand the target audiences which may have a negative effect on the development process.

Many development and communication scholars who advocate the necessity of participatory communication in development now put an emphasis on the participation of audiences in communication for development so that a process that may help bring about social change and enhance the likelihood of a project's success may be achieved. The rationale behind this is that participation is a process of empowerment that enables people to make their own decisions on matters affecting their own lives.

From the standpoint of participation as empowerment, the theoretical paradigm of participatory communication draws heavily on Freire's notion of conscientisation, a process of critical consciousness that is achieved through the praxis - action and reflection. In this process active dialogues between people who are based on horizontal relationships (two-way communication) occur. Habermas also emphasises the importance of dialogues as 'communicative actions' for achieving mutual understanding in the communication process. He asserts that reaching understanding can be achieved through rationality - that is, that the action is defendable against criticism and that rationality is inherent in dialogical communication.

On the basis of the position that has been developed, it can be argued that genuine participatory communication can be characterised essentially as dialogical (two-way and horizontal) communication whilst non-participatory communication can be considered as non-dialogical, (one-way, vertical). The next chapter is a review of some participatory development projects, including nutrition, which highlights contemporary efforts in the promotion of dialogical communication on development issues.

CHAPTER 4 : PARTICIPATORY DEVELOPMENT COMMUNICATION PROJECTS

Midgley (1986: 13) considers that the idea of participation can be traced back to the ancient cultural traditions and practices of small preliterate societies and the writings of ancient sages and philosophers. In recent times, the idea has been popularised by the United Nations (UN) and other official bodies who have emphasised the importance of community participation in development (Midgley et al., 1986: vii). For example, the FAO (1992:15) has decided to reinforce rural people's participation in development projects with the help of project support communication[1]. In addition, many claims have also been made, in various countries, about the success of participatory development projects supported by various organisations (see Bamberger and Shams, 1989:107-185; Ghai,1988: 4-10; and Afsar, 1988: 88). This chapter provides an overview of some of the projects that are considered to have been successful, in one way or another, in involving people's participation, especially in their communication processes; and it analyses the extent to which these projects relate to the theoretical framework introduced at the end of chapter 3. It should be noted, however, that in the case of some projects, such as the Food System Development Project, Integrated Total Development Approach to Selected Malnourished Children in West Rembo and Mother Loves Her Child, the evaluation of success is based on internal resources rather than external assessments.

Overview of the Participatory Communication Projects

The projects which are reviewed are discussed within two broad categories: community development projects, and nutrition-specific projects. The projects being reviewed are summarised in Table 4-1 and Table 4-2 below.

---

[1] Project support communication was introduced to the United Nations Development Program (UNDP) in the early 1970s with a view to including communication components to support the activities of development projects (Fugelsang and Chandler, 1987:2).

Table 4-1: Community Development Projects Involving Participatory Communication

Name of the Project	Country	Period duration	Main organisation/ institution involved	Overall objective of the project	Principal modes of communication	Communication strategies	Peoples participation
Fogo Island Audio-visual Communication	Canada	1967-1970	Canadian National Film Board and extension department of Memorial University	Stimulation of community revival.	Video	Involvement of community in information preparation.	People's participation in planning and preparation of information
Grameen Bank	Bangladesh	1983- ongoing	Bangladesh Bank/The World Bank	Build-up self-reliant organisation of the poor.	Interpersonal	Use of oral culture 'the mouth as a medium' in creating communication networks of project beneficiaries.	Beneficiaries' active participation in problem identification, resolution, and community networking.
PRODERITH	Mexico	1978- ongoing	Govt. of Mexico/FAO/The World Bank	Integrated rural development	Video,	Use of communication in situational analysis, motivation, and participation, sharing experiences and disseminating development information.	Beneficiaries participation in discussion, sharing experiences, and uncovering practical values.
Rural Radio	Mauritania	1985-1986	Government of Mauritania/ FAO and Coopération Française	Development of Rural Radio for attacking the root cause of underdevelopment.	Radio	Information preparation based on African oral tradition.	Participation in reporting rural problems.
Sarvodaya Shramadana Movement	Sri Lanka	1958- ongoing	Self-help groups	Consciousness-building for emancipation of the community from their ignorance	Interpersonal	Lateral, direct people-to-people communication involving interactions.	Participation in village family gathering to develop critical consciousness for development through interactions.

Table 4-2 : Nutrition-Specific Development Projects Involving Participatory Communication

Name of the Project	Country	Period duration	Main organisation/ institution involved	Overall objective of the project	Principal modes of communication	Communication strategies	Peoples participation
Food System Development Project	The Philippines	1988-1991	Canadian International Development Agency	Strengthen adequate and nutritious diet.	Interpersonal	Use of local knowledge, dialectical conditions and feasible mode/s.	People's participation in project activities such as income generation and vegetable and herbal gardening.
Iringa Nutrition Project,	Tanzania	1983-1988	Government of Tanzania, UNICEF and WHO	Reduce child mortality and morbidity and improve maternal and child health.	Interpersonal	Mobilise people from village to regional level to strengthen communications mechanism and process.	People's participation in discussion about nutrition-related problems and solutions, and participation in activities, such as baby weighing, health and nutrition education, and demonstration.
Integrated Total Development Approach to Selected Malnourished Children in West Rembo	The Philippines	1987-1990	Municipality of Makati and the Young Women's Christian Association.	Engender empowerment in nutrition knowledge and skills.	Interpersonal	Mobilise local people (mothers)	Participation in project planning and implementation.
'Mother Loves Her Child' Social Marketing of Vitamin A Rich Foods	Thailand	1988-1991	Mahidol University and USAID	Increase knowledge and consumption of vitamin A-rich foods.	Interpersonal	Mobilise local community leaders, monks, social development workers and actors	People's participation in information dissemination.

Community Development Projects

The Fogo Island Audio-Visual Communication Project, Canada

According to Sargent (1978: 13-15) and Fraser, (1987a: 10), the Fogo Island audio-visual communication project is one of the best examples of how communication media can be utilised in the development process. Fogo Island is situated off the east coast of Canada. Fishing was the mainstay for the whole population of the Island. However, this has changed and the people now depend on other sources of income due to the competition from deep-sea trawlers. When the fishing industry declined, the government of Canada attempted to move the people to an agricultural area. However, the proposed move was flatly rejected by the people. In investigating the best solution to this problem, the Canadian National Film Board and the Extension Department of Memorial University, St. John's, Newfoundland used film and video to propose other solutions to the problem. In this process, they provided the Island people with motion picture cameras to shoot pictures of important things they were interested in. The Island people expressed their feelings through the use of cameras and successfully made the government aware of how they really wanted to revive their island in order to make it a better place to live on. Finally, action plans were developed that helped save the Fogo Island community.

The Grameen Bank, Bangladesh

Fugelsang and Chandler (1987) include a succinct discussion on the Grameen Bank of Bangladesh's participatory communication, which will form the basis of the following discussion.

The Grameen Bank of Bangladesh[2], the literal translation of which is 'the Village Bank', was formally set up in 1983. Its main objective was to build up an organisation of the poor, that is exploitation-free and self-reliant.

---

[2] It was the outcome of several years of learning and effort on the part of Professor Muhammad Yunus who launched an action research project to extend credit to poor landless men and women.

The Bank provides credit and development facilities to its members who are formed into groups for a joint enterprise. The communication system of the Bank is based entirely on the groups and their centres. Each group contains five members with similar development objectives while six such groups make up a centre which normally consists of 30 members. Group discussions form the main basis of communication in groups and centres and every member is obliged to attend these. In group discussions, many important activities take place, such as weekly repayment of the Bank loan, discussions of the project's problems and issues, and decisions in regard to resolving the problems. Thus, the groups and centres become the action and decision-making units in the Grameen Bank. In essence, the role of the Bank workers in conducting the Bank business is just like that of facilitators.

Communication in this Bank's business is based largely on oral culture with 'the mouth as a medium' (Fugelsang and Chandler, 1987:18). Thus, the Bank workers and social development officers have 'very few communication media at their disposal for centre meetings or workshop sessions' (p.23).

Due to its far-reaching economic and social benefits, the Grameen Bank has been very popular among the poorest of the poor (Fugelsang and Chandler, 1987: 11). This popularity has led the bank to expand its activities throughout the country. At present, there are 1.9 million families (an estimated 16 million individuals) directly benefiting from the Bank (Grameen Bank, 1994, in Papa et. al., 1995: 190). Further, during the past few years, its popularity has inspired many countries to adopt the Bank's organising strategies (Gugliotta, 1993 in Papa et al., 1995).

The PRODERITH, Mexico

A rural communication system was incorporated in the integrated rural development program called Programa de Desarrollo Rural Integrado del Tropico Humedo (PRODERITH)[3] in Mexico in 1978 (see Fraser, 1987b and Fraser & Martinez 1990). PRODERITH put in place communication systems that were an integral part of the rural development program and the overall aim of these systems was to obtain 'the conscious and informed participation of the

---

[3] Program for Integrated Rural Development in the Tropical Wet-lands.

43

peasants in each and every stage of the rural development process' (Fraser, 1987b: 16). Communication was used for situation analysis, motivation and the participation of the beneficiaries in the program. It should be noted that the main medium of communication was video, which was used especially for creating discussions and sharing experiences among the beneficiaries. For example, video was used as an 'entry point into the community' to stimulate dialogue about what was being proposed by the program (p.17). Similarly, it was used for exchanging experiences between the communities and for uncovering practical cultural values that could be utilised to resolve the present village problems. An example of the use of video for uncovering practical cultural values is a video clip on a traditional stone water filter which had gradually been disappearing in recent decades as a result of being 'out of fashion', but which could still be useful for resolving water filtration problems at the community level (Fraser and Martinez, 1990:36-37). Similarly, the views of a local farmer who sought in a video recording to share his technical knowledge regarding the solution for flooding problems in the central land area were discovered to be technically sound by the program engineers who had watched the recorded program (p19).

Despite the absence of any formal evaluation to support its success, this program was considered to be 'one of the most imaginative and successful examples of development communication anywhere in the Third World' (Fraser, 1987b: 1). Fraser and Martinez (1990: 7) conclude:

> It achieved much, especially in terms of the approach to rural development in the tropics
> that it formulated with peasant communities and put successfully to the test. It thereby
> laid the basis for application over a larger area of the country.

Fraser (1990: 6) pointed out that the funding agency of this program, the World Bank, considered this program 'to be among the most successful development programs it was supporting, and it attributed much of that success to the Rural Communication System'. This program has been now operating as PRODERITH II.

The Rural Radio Program in Mauritania

A case study made by Querre (1987) revealed that the rural radio program in the African country, Mauritania, has been one of the successful communication programs.

During the 1970s, Mauritania strengthened its radio programming to tackle drought problems. For this, the OMR (Office Mauritanien de Radiodiffusion) set up a new magazine program in 1977 called 'OMR- Régions Sans Frontiéres'. This program appeared to be very popular due to the involvement of local people, who were able to speak up and listen to problems and solutions on the program. With the outbreak of war in 1978, this program collapsed. However, in mid-July, 1985, with the joint collaboration of the ORTM (Office de Radiodiffusion Télévision Mauritanien), FAO and Coopération Française, the rural radio project was revived. This project started training the local people in radio program production, and the radio programs that followed covered such developmental issues as environment, water resources, livestock production, agriculture, health, adult literacy, prevention of rural exodus and road safety. The program was largely based on traditional activities and local culture. For example, an educational message on vaccination was based on traditional rhythmic songs accompanied by hand-clapping and traditional dance. Similarly, the participation of performing artists, and the use of simple, down-to-earth language were used to attract audiences. It is believed that the rural radio program was very popular among local people and several anecdotes also confirmed its effectiveness. For example, the government authorities revealed that the radio program helped control bush fires, increased the number of parents bringing their children in for vaccination of their own accord, and increased the number of service bodies asking for radio collaboration in their development activities.

The Sarvodaya Shramadana Movement, Sri Lanka

The Sarvodaya Shramadana Movement can be traced back to 1958 with the knowledge-sharing experience of A. T. Ariyaratne, a Buddhist college teacher, and his students in a Sri Lankan village called Kanatholuwa (Ratnapala, 1980: 481). This movement is committed to a participatory concept of development (Ariyaratne, 1987 : 239-247). The movement is now popularly known as 'Shramadana - the sharing of one's time, thought and effort for the awakening of all'(p. 239). The main objective of this movement is to empower people and its principal thrust is to promote self-reliance, community participation and planned programs in community development. To achieve self development, activities are carried out in a series of village camps that take into account the various intervening factors of development, such as 'the basic human needs, priorities, availability of resources under their control, maximisation of the benefits to be received by the majority of the members of the community and so on'

45

(p.240). It should be noted that this program focuses its activities on awareness or consciousness-building, rather than on the building of infrastructure, such as roads, wells and irrigation etc. The whole idea of this movement is to emancipate the community from their ignorance and from an unjust society 'where political and economic power is wielded by the minority élite' (p.41).

The movement totally rejects a 'top-down' approach to communication as being 'mostly an alien development concept and model with its whole technological package on the people without any consideration for the latter's value system or any attempt to change the unjust socio-economic and political structures'(Ariyaratne, 1987 p.244-45). It therefore adopts a two-way system of lateral, direct, people-to-people communication. In effect, the movement's main mode of communication is family gatherings, especially in the evenings, with representatives from surrounding villages. In such gatherings, people share their development experiences and knowledge, sing songs that contain development information, and practice group meditation to develop a critical mass of consciousness. By virtue of the movement's activities and communication process, this program has been able to cover more than 8000 communities in Sri Lanka cutting across caste, creed, religion, and political affiliations.

Nutrition-specific Projects

Though many community health projects often integrate nutrition as one of the main components in their health promotion activities, some nutrition-specific projects have been carried out in developing countries to eliminate hunger and malnutrition. The following brief summary provides some examples of projects of this kind which were based on people's participation.

Food System Development Project, The Philippines

To deal with the issue of unequal access to food and the consequences of this problem, an action research project concerning food system development was implemented in three villages of the coastal province of Aklan in the central Philippines from 1988 to 1991 with the help of the Canadian International Development Agency. The main objective, as stated by

Armstrong (1991, in Einsiedel 1993: 2), was ' to help move the patterns of entitlement towards an adequate and nutritious diet'. This project involved participatory action research on communication development for the empowerment of the participants of the project.

In order to achieve the objective, the project involved local communities in various activities such as income-generation, vegetable and herbal gardening and community day care. It should be noted that communications were central to all these activities. The methods of communication which were used were group discussions and dialogues, information dissemination and educational activities. So as to have a theoretical basis for its methods of communication, the action research project investigated some vital factors affecting the communication process, such as the source of knowledge, the structural dialectical conditions of the local people, knowledge ownership, feasible modes of education and information.

The project facilitators believed that the source of knowledge was the local community, and that the structural dialectical conditions (thought processes and language) varied between subgroups, such as men, women, young and old etc. Similarly, they believed that the owners of knowledge were the people who were its repository as well as its user. At the same time, feasible modes of education or information were considered to be based in the community members themselves who were asked to come up with ways of information dissemination that were comprehensible to everyone.

Finally, the action research suggests that the people's participation is necessary for effective communication processes that enhance social rights and dialogic practice so that the community might further its sense of having shared meanings and experiences (Einsiedel , 1993:14).

Iringa Nutrition Project, Tanzania

Aubel (1991:B70-B74) nominates the Iringa Nutrition Project of Tanzania as one of the few projects of a participatory nature that involved people-centred development for self-reliance. This project was implemented in Tanzania from 1983 to 1988, its main objectives being the reduction of child mortality and morbidity, and the improvement of maternal and child health.

47

The communication strategy of this project focused more on strengthening the communication mechanisms and processes at and between all levels of society from the village to the regional level. For example, 'at the village level, the project encouraged communications on nutrition problems and solutions among households, village leaders, and resource persons; among Village Council members; and at successively higher levels' (Aubel (1991: B71). Similarly, community participation, especially the mobilisation of community leaders and mothers, was engendered in nutrition-related activities such as baby weighing, health and nutrition education, and demonstration. Thus, the final evaluation attributed 'the program's success in improving infant/child nutritional status and reducing infant death' to the people's initiatives in the project at various levels (B74).

Integrated Total Development Approach to Selected Malnourished Children in West Rembo, The Philippines

The West Rembo Nutrition Project of the Philippines was the outcome of a learning process of the project undertaken by a multidisciplinay team. This brief account of the project is based entirely on the article by Dineros-Pineda (1992:203-215) and is included to highlight the effectiveness of a participatory approach to nutrition. This project, which began in 1987 for a period of three years, involved several phases in an attempt to make the project participatory in empowering people with nutrition knowledge and skills. The first phase in 1987 started off with a malnourished ward for ten children. In this phase, mothers of the malnourished children were encouraged to participate in the project activities. However, many mothers did not consider malnourishment of their children as a priority issue and many of them also did not believe that participation would alter the situation. A year after the first phase, the project moved into the second phase where it carried out a community diagnosis program with the help of some women who expressed interest in the project. These women initiated interactions with mothers of the malnourished children and diagnosed factors associated with malnutrition. The major factors noted were the influence of commercial media advertisements which lead to a tendency to consume ready-made (cooked) commercial meal (locally referred to as 'karinderia'), and unequal amounts of food distribution within the family. To address these major factors affecting nutrition and also to increase the income of mothers, the project started a third phase with activities relating to nutrition education and income generation.

48

By the second year, the project began the fourth phase, which adopted a more participatory approach, where one of the women leaders was involved in the project planning and implementation. At the same time, community groups such as community health organisers, a mother's club and co-operatives (agricultural co-operatives) were formed. The community health organisers were local women who had expressed interest in serving the community on a voluntary basis with nutrition-related activities.

Within a year of the fourth phase, this project was terminated. It was, however, noticed that the community continued and extended the project with some external support. This project is said to have been successful in that it recognised participatory strategies as essential in creating community level organisations that mobilised the community for collective actions on community problems.

'Mother Loves Her Child': Social Marketing of Vitamin A- Rich Foods, Thailand

Social marketing of vitamin A-rich foods in Thailand has indicated that a participatory approach is beneficial for developing information, media and materials related to nutrition communication for changing the nutrition-related behaviour of people. A summary of the project based on Smitasiri (1991: 8-11) and Aubel (1991: B77-B81) is as follows.

In order to resolve vitamin A-deficiency problems in the country, a three year project (1988-1991) on vitamin A was launched in the Northeast region of Thailand, which was a high risk area for vitamin A deficiency. A local green vegetable, the ivy gourd plant (*'coccinia indica'*), which was under-utilised in the region was chosen for vitamin A promotion. The target audiences of the project were primarily mothers, but also pregnant women and schoolchildren. The modes of communication used for the dissemination of project information were mainly interpersonal and were supported by the mass media..

To develop and pre-test project information, village mothers were mobilised with the help of project nutritionists. At the same time, local community leaders, monks, social development workers, and actors (Mr. Ivy Gourd, the actor) were the spokespersons of the project

information. School-based programs for encouraging home gardening were also conducted to promote the ivy gourd.

The project outcome was positive in the sense that every household now had a home garden with ivy gourds. The demand for growing the ivy increased and to cater for it, the project had to add an agriculture component to its activities, which had not initially been planned. The study suggested that there was a significant change observed in the community's knowledge, attitude, and consumption of vitamin A-rich foods.

Analysis of the Participatory Communication Projects Reviewed

Based on the above discussion, the following section, under various sub-headings, gives a brief analysis of the projects reviewed.

The Meaning of Participation

In all the projects (see summary Table 4-1 and Table 4-2), the meaning of participation was similar in that people's participation in the project's activities was related to their empowerment. Therefore, all the projects reviewed attempted to include at least some level of the people's participation either in needs assessment for project planning, or in the implementation of the project activities.

The Participatory Approach

The level of the participatory approach in all the projects reviewed was not always the same. Some projects were more closely related to 'full participatory' approaches than others. For example, the Grameen Bank, Bangladesh can be characterised as comparatively more 'participatory' in the sense that it provided the opportunity for beneficiaries to take an active role in problem identification and resolution concerning the project activities (see chapter 3). As a result, the Bank has been reported as very successful and popular in the development of the poorest of the poor. Similarly, the West Rembo Nutrition Project in the Philippines highlighted the level of participatory efforts involved in project planning and implementation. However, the remaining projects appeared to have a lesser degree of participation. For example, the PRODERITH, a Mexican project, despite being highly praised, seemed to limit

its beneficiaries' participation to providing information and uncovering practical values for the project so that the project could tailor project activities accordingly. Similarly, the Rural Radio, Mauritania, allowed for people's participation only in reporting rural problems, but not in designing information on those problems.

Horizontal Dialogues

The horizontal dialogues between the project and the project beneficiaries are very important elements of participatory communication (see chapter 3). Such elements appear to have been incorporated in the projects reviewed, especially in the Fogo Island communication, Grameen Bank, PRODERITH, Sarvodaya Movement and West Rembo Nutrition Project, where people were directly involved by interacting among themselves or with project staff.

Use of Communication Modes

Although, as has been discussed above, all the projects varied significantly in terms of the level of people's participation, most of the projects used interactive modes of communication, such as interpersonal communication and video, to stimulate discussions about the project activities.

Evaluation

None of the projects reviewed highlighted the people's role in project evaluation which is one of the essential components of participatory communication, as indicated in the theoretical framework.

Despite some limitations, all the projects reviewed reflected some degree of participatory involvement in each project's activities, and this participation appears to have made an important contribution to the projects' success.

Conclusion

Over recent years, projects involving some elements of participatory communication have been documented as being successful in informing and educating many people throughout the world. Among these projects, for example, Grameen Bank (Village Bank) of Bangladesh and

the rural communication system for development in Mexico's tropical lowlands (PRODERITH) have been highly praised for their successful assistance to poor people through a process of social and economic development which involved a participatory communication approach. Since nutrition and malnutrition are an integral part of development, it is very appropriate to utilise participatory communication approaches in nutrition activities to reduce this major problem in development.

In the field of nutrition, there is growing evidence of the importance of participatory communication. Target audiences' participation in prioritising nutrition-related issues and problems, in diagnosing factors affecting nutritional status, in unveiling local knowledge in the design and development of information, and in mobilising the local community in information dissemination are perceived as key factors for the success of nutrition projects. The effect of such factors on a project's success are reflected in the West Rembo Nutriton Project of the Philippines, the Vitamin A Project of the Northeast region of Thailand, and the Iranga Nutrition Project of Tanzania.

While the effects of participation are still relatively unproven, the discussion in this chapter has indicated that there is a growing body of research suggesting that people's participation is an important factor in nutrition communication in developing countries. Within that framework, the ensuing chapter reviews the historical evolution of participation and communication in Nepal as they affect the process of nutrition development in the country.

CHAPTER 5 : THE HISTORY OF PARTICIPATION AND COMMUNICATION IN NEPAL: A BRIEF REVIEW

The notion of people's participation in Nepal, locally known as 'jana sahabhagita', has been regarded historically as an important means of bringing about national development. Despite this, the notion of participatory development still remains a question of rhetoric rather than reality. In the same way, communication in Nepal has always been recognised as having an important role in national development, in spite of the fact that the development and implementation of a communication policy are of relatively recent origin in practice. This chapter seeks to give an outline of the historical evolution of concepts such as participation and communication, and shows how these concepts have contributed to 'participatory' development in Nepal.

The History of People's Participation

The history of Nepali 'jana sahabhagita' (people's participation) in local decision-making can be traced back to the long-standing traditional Hindu religious practice of setting up 'Panchayats' (village councils). Traditionally, the main objective in setting up Panchayats was to keep Hindu religious practices intact in society, and also to settle disputes on caste, creed and local social problems.

In or around the thirteenth century the Hindu religion and its religious practices and culture were brought into Nepal by high-caste Hindu migrants[1] from northern India (Sharma, 1992; Blaikie, Cameron, Seddon, 1980). Maheshwari (1963: 1-2), highlighting the connection between Hindu traditions and Panchayat[2], affirms that the notion of Panchayati Raj (Panchayat Rule) in India is an outcome of centuries-old ancient Hindu

---

[1] High-class Hindu migrants fled India to protect their faith, Hinduism, against the growing tide of Islam, introduced by the Muslim invasion in northern India.

[2] Since historically, India is dominated by the Hindus, the notion of Panchayat in India is as popular as in Nepal. Thus, many attempts have been made in India to bring about people's participation in development through Panchayat Raj (Panchayat Rule).

traditions originating from Vedic India.[3] Panchayat Rule, particularly in the context of rural development in India, remained for a long time the subject of considerable debate and discussion (Khan:1969). The 73rd Amendment to the Constitution of India in December, 1992, however, reinforced Panchayat Rule and considered it as a process of transformation of the people for development in rural areas, and a conscientisation process of Indians (Palanithurai, 1994:101). In contrast to its evolution in India, the Panchayat System of Government which was formally instituted in Nepal in 1960, was declared defunct in 1990.

Though the notion of jana sahabhagita (people's participation) was neither by tradition nor practice new to the social context of Nepal, the Rana regime (1846-1951)[4], which controlled power in Nepal for more than a century, failed to strengthen people's participation in development either through panchayats or other means for fear of loosing the status quo. Thus, there was very little observable impact on the overall development of the country (APROSC: 1986, Pant: 1991a, Ghimire: 1992). It is believed that 'there was no regular channel of administrative decentralisation for development activities all around the country, and the Rana government was satisfied with some countable [a very few] development efforts such as the provision of drinking water in Kathmandu valley[5], some schools, a few health programs, a few roads and some small scale irrigation works'(APROSC, 1986:14). Bista (1992:101-102) states that 'the orientation of the Ranas was always towards furthering the fortunes of their family, not of the country, and patriotism was even regarded suspiciously as a threat to their personal interests'. During this time, people were also not interested in thinking about participation in development works as they feared that their activities might be viewed as a threat to the regime (Raeper and Hoftune (1992:3).

---

[3]. Vedic India is a classical Hindu Sanskrit period where Sanskrit was the dominant language in India. Similarly, it was a period when Vedas (Vedic Samhitas- collections of prayers and ritual formulae) were very popular among Hindus; and it is believed that Vedas belonged to a period stretching from 2500 B.C. to 700 B.C (Winternitz quoted in Sen, 1963: 47).

[4] The Rana family took power from the Shah dynasty. The Shah dynasty started in Nepal when King Prithivi Narayan Shah of the Gorkha State of Nepal succeeded in expanding his State by unifying the scattered principalities of Nepal in 1768. In 1847, Janga Bahadur Kunwar (Rana) consolidated power from the then King Rajendra Shah with the wholesale Kot Massacre of his rivals. He then effectively imposed his family's rule in the country for over a century.

[5] Kathmandu valley surrounds the capital of Nepal.

Although the Rana regime was autocratic and self-centred, at one time it showed its interest in Panchayat for rural development. In 1926, surprisingly, the Rana regime made its first effort to establish Panchayats in Nepal in order to engage the peoples' participation in development. Caplan (1970) suggests that:

> In that year (1926), experiments in local government were carried out in the region of Kathmandu Valley and in 1930 were expanded to include four districts in both the hill areas and the Terai. It was not until 1948, however, that legislation was introduced allowing for the establishment of village Panchayats throughout the country. (p.163)

Mihaly (1965:110), on the other hand, argues that:

> Ranas promulgated decentralisation of limited authority to village panchayats, but it had never been implemented, one reason being that the Panchayats, allegedly an indigenous institution, virtually did not exist.

Whichever situation actually prevailed in regard to the implementation of Panchayats for peoples' participation in development during the Rana regime, the Panchayats, without any doubt, were operating at most only on an ad hoc basis to settle disputes, especially in relation to those problems concerning the caste system and caste-based social codes. These codes had been legally enforced throughout the country only since the time of Jung Bahadur Rana's regime from 1846 to 1876 (Joshi and Rose, 1966:, quoted in Ghimire: 1992: 11-13). As has been the case for decades, the role of Panchayats as an assembly or a council of five representatives of elderly people[6] has generally been confined to the resolution of disputes relating to caste and caste-related matters (Retzlaff: 1962, Khan 1969, Bista: 1992). In fact, Kumar (1980) commenting on the Panchayat System of Nepal defines it merely as a rudimentary political system.

Despite the history making success of the people in 1951 in overthrowing Rana rule, political life in the succeeding years consisted of internal turmoil, external conflicts[7], personal feuds and rivalry among political parties (Raeper and Hoftun, 1992; Pant, 1991; Khadka, 1991) leading King Mehandra to dissolve the multi-party system and ban all political parties in December, 1960. The King believed that the multi-party system was not yet suitable for the country, and was not the appropriate instrument for facilitating

---

[6] The literal meaning of Panchayat is 'an assembly of five people'.
[7] Sino-Nepal relations were deteriorating following the Mustang incident of June 1960, when Chinese troops killed a Nepali border guard and captured sixteen others.

rapid development (Bista, 1992:103-104; Raeper and Hoftun, 1992:9; Maheshwari, 1963: 199). He also strongly asserted that the government was spoiling the nation with inappropriate economic theories, and encouraging corruption and inefficiency (Mihaly, 1965: 108-109, Maheshwari, 1963:169). Further, he argued that multi-party democracy was 'alien to the traditional political culture of Nepal' (Burghart, 1994). With this in mind, in 1960 he finally introduced the Panchayat System as a national political system and revived the traditional role of the monarch by vesting in the King the ultimate source of political authority.[8]

Introducing the Panchayat System of government King Mehandra stated, 'there is no Nepali who does not know what pancha and a panchayat is. The development of the culture and civilisation in our country...has taken place under the panchayat system'. (Khadka, 1991:33). The major objectives of the Panchayat System introduced by King Mehandra were to create an exploitation free society, to decentralise development administration, to ensure maximum possible participation of the general public in economic progress, and to meet the basic needs of rural people by equitable mobilisation of natural resources and wealth (Sharma and Plotkin, 1985). The Partyless Constitution of 1962, stressed 'the need for active participation of people in realising the decentralisation program, and maintaining the process of economic development of the country' (APROSC, 1986:24).

For more than a decade, until 1980, the Panchayat System was not based on adult franchise, but used its constitutional power[9] to select people through its political networks to represent their constituencies in the various political tiers of the Panchayat System[10]. After 1980, the election procedures were based on adult franchise except at

---

[8] The ultimate source of political authority as stated in the answers given by the present King of Nepal, King Birendra Bir Bikram Shah, to a correspondent of Newsweek, published on 10 September 1973, is based on Dharma, a system drawn from the Hindu religion. According to the King, he cannot change this value system, and therefore, he too is governed by this ethical code according to which the King lives and has his being only to protect the people, to dispense justice to them and to punish the wrong-doers (Shah, 1990:9; Khadka, 1991:33).

[9] The election was not based on universal franchise, and was restricted to individuals invited by District Governors, who voted by a show of hands (Bista, 1992:104).

[10] The political structure of the Panchayat System was finally based on three tiers of political organisations: Village Panchayat or Town Panchayat at the grass roots level; District Panchayat at the district level; and National Panchayat at the national level.

the district level 'where election was on an electoral college basis' (Bista, 1992). Various class organisations containing peasants, women, labourers, ex-servicemen and youth were also formed to represent the different interest groups in the Panchayat System (Bista, 1992; Raeper and Hoftune, 1992; Maheswari, 1963; Shah, 1990).

During the period of Panchayat System, various national development plans and programs were designed and implemented with the help of multilateral and bilateral donors and international funding agencies, and these increasingly emphasised participation. Following the initial five-year national development plan, 1956-60[11], six consecutive national development plans (up to the seventh five-year plan, 1985-1990) were designed and implemented by the Panchayat System with a special focus on rural and local development. In the sixth five-year plan (1980-1985), 'people's participation constituted the basic strategy of local development and the plan adopted the policy of promoting people's participation' (APROSC, 1986:21). The seventh five-year plan (1985-1990), on the other hand, was more specifically committed to 'participation of women in development' (Maskey, 1988). In this way, the notion of participation in development was institutionalised only under the Panchayat System. During the time of Panchayat System, the government slogan of people's participation was a common way of thinking about national development. Rhetoric concerning participation was at a peak during that time. The bureaucrats and politicians of that time seemed to be very much committed to the dominant ideology of the importance of people's participation in development. This can be briefly exemplified by a report of a high-level seminar/workshop on people's participation in rural development in Nepal jointly organised by the Ministry of Home and Panchayat (MOHP) and Agriculture Projects Services Centre (APROSC) (APROSC, 1978: 7-15). During the seminar the Minister for Home and Panchayat clearly recognised the importance of people's active participation in development success. He held that:

> ...We came to realise that as long as the people for whom development is meant do not themselves become conscious and active, any program for their development would meet only frustration. Without participation by the local people in the village it becomes impossible to enlist their efforts in development (Minister for MOHP).

---

[11].The first five-year plan (1956-1960) was designed and implemented under the multi-party system of government after the downfall of the Rana regime.

The Secretary for the Ministry of Home and Panchayat similarly emphasised the need for people's participation:

> ...our success in development plans and programs depends mainly on people's participation. Enhancing the broad participation by the people in the implementation of our development programs and in the distribution of the benefits thereof has remained both an urgent necessity as well as a challenge before us. His Majesty the King himself has given us the direction for our development by saying that our development plans must enlist the wide co-operation of the people. (Secretary for MOHP).

The Minister for Food, Agriculture and Irrigation, on the other hand, pointed out, without hesitation, some striking shortcomings of participatory development efforts, such as the inefficiency of development plans in involving people's participation for successful development results. Recalling past experience the minister contended:

> Our past experience indicates that we have prepared plans for them (the target group) which were supposed to benefit them and thereby get their participation. However, we found out there was a wide gap between the ambitious plans and the implementation. The benefits that were envisioned in the plans could not be achieved. In spite of our substantial investment in the rural sector, the impact of this investment is not discernible in the living conditions of the people.

In addition to the above, the Minister strongly advocated the urgency of people's participation in all stages of the development process. He added:

> ... As far as people's participation in rural development is concerned, they should be involved to participate in planning, decision-making and implementation. Only then we can proceed in the right direction. Otherwise, in the name of people's participation we start opening several offices and increase the bureaucracy, we will end up where we were before and the effort will be self-defeating (Minister for Food, Agriculture and Irrigation).

Though the political and bureaucratic consensus for maintaining a participatory approach to development in Nepal may appear to have been very strong in the Panchayat System, Miller (1981:19) believes that the notion of people's participation at that time may have suffered 'the fate of becoming a slogan'. Consequently, the development process remained inclined more toward a top-down approach, as Purdey, Adhikari, Robinson and Cox (1994) argue:

> ...projects introduced top-down development schemes that tried to mobilise local people to assist in predetermined ways. Managers often misinterpreted this mobilisation as participation. Typically these [development] schemes did not achieve their goals because they failed to involve the intended beneficiaries in project planning (p.332).

An analysis of case studies in fifteen different development project areas of people's participation in rural Nepal by APROSC/FAO (1988) observes that:

> ..whereas the system [Panchayat] is quite effective in encouraging local participation in political and electoral processes, it is less effective in mobilising and sustaining local involvement in development activities (p.164).

Furthermore, the same case studies revealed that 'in some projects there was little clear definition of participation while in others, where an understanding of participation was evident, this understanding was usually expressed in physical terms eg. contributions, construction works or attendance at class'. Similarly, the case studies also asserted that 'the notion of participation barely rose above the level of commitment and general statement'. Thus, for the majority of people, participation meant cash or a labour contribution, for example, paid labour for the development works or attendance at classes. A case study by Stone (1989:201-202) also confirms that for village people, 'participation' in development (in Nepali, 'sahabhagita' or 'bhag linne') came to mean 'obeying a panchayat (village council) order to contribute land, money, labour or some other resource to a specific development project'. Accordingly, early in 1986, APROSC summarised Nepal's experience in people's participation as being:

> ...confined to volunteer physical and financial participation in the implementation stage of the local projects. Most of these projects were formulated by the directives of central authority and were not properly directed at the local people's needs. Thus, people are less willing to participate in activities which bear little or no relevance to their own needs. (APROSC, 1986:9)

The above view is also supported by Bista (1992):

> Often foreign aid will target a particular project. ...Such a project tends not to be determined with a local input, and the only participation of the local population is in terms of their paid labour. (p. 114).

As a result of these prevailing systems and practices of people's participation, people's general perception toward participation in Nepal would not seem to be very conducive to development. As APROSC/FAO (1988) observe:

> Based on the evidence of the case studies there would appear to be little enthusiasm in rural Nepal for contributing labour or cash as a basis of participation in project. Where participation in a project is based upon such voluntary contributions, then the participation is often weak. Similarly, we can see that mechanisms exist for the better off to avoid such contributions and thus throw the burden on to the poorest sections of a community. (p.166)

A wealthy elite came to dominate the Panchayat System in Nepal from the grass roots to the top political and bureaucratic levels. Raeper and Hoftune (1992:11) argue that instead of neutralising the political elite, the Panchayat System created an even more powerful elites. Along the same line, Khadka (1991:47) maintained that vested interest groups remained in the 'upper echelons' of Panchayat System. The benefit derived from the development activities, therefore, mostly went to the elites, making the rest of the people frustrated about their participation in development. As a result, development activities affecting the lives of people in general were assumed to be the responsibility of the government not of the people (APROSC, 1986: 11).

With the intensified multi-party movement at home[12] and the gradual downfall of communist regimes in Eastern Europe, Nepal saw the downfall of the Panchayat system in 1990 and immediately a multi-party system was restored. The major breakthrough of this change was the abolition of the King's absolute power previously accorded by the Panchayat Constitution of 1962. The new Constitution (HMG/N., 1990) thus redefined his position as the Constitutional Monarch.

Unlike the Panchayat Constitution described earlier, the new Constitution of Nepal did not heavily emphasise the importance of people's participation in development. If we compare both Constitutions, it is apparent that the importance of people's participation in development in the Panchayat Constitution is repeatedly emphasised right from the preamble section to the directive principles of the Panchayat Systems, Part 4, while in the new Constitution (HMG/N., 1990), only small mention is made, in Article 25 (4) of the people's participation and it is in the context of a commitment to decentralisation:

> The maintenance of the provision of the enjoyment of the benefits of democracy by involving the people, to the maximum possible extent, in the government through the medium of decentralisation... shall be the main responsibility of the state.[13](p.11)

In the aftermath of the reinstatement of the multi-party political system and the promulgation of a new constitution, a general election was held in May 1991, as a result

---

[12]Hutt (1994:29) states that the democratic movement was launched by an alliance between the Nepali Congress Party and the newly-formed United Left Front (Samyutka Bam Morcha, the ULF).
[13]This is a translated version of the Nepali text of the 1990 constitution.

of which the Nepali Congress Party [14] came to power and formed the government. The government then immediately prepared the Eighth Plan (1992-1997) with various policy measures for national development.

The plan adopted a policy of decentralisation as indicated in the new constitution and thereby provided local bodies with the authority to be directly involved in local development activities. Accordingly, various acts reinforcing local development activities such as the District Development Committee Act 1992, the Municipality Act 1992, and Village Development Committee Act 1992 were introduced and implemented (HMG/N., 1992a : 8).

The conceptual framework of the plan supported the notion of people's participation in development and affirmed the need to channel 'the enthusiasm and aspiration of the people brought about by political change to the mainstream of development' and to involve people in the identification, formulation and implementation of programs, and in the distribution of the benefits thereof on the basis of public participation (HMG/N., 1992a :13). In fact, concerning the planning process, the plan stated:

> In keeping with policies of democratic socialism, the formulation of plans will do away with the top down approach to give way to the bottom up approach. Until a practice of development for the people and by the people is realised, the mass of the population cannot possibly be engaged in development (MHG/N.,1992a :14).

Further, indicating the approaches already made by the government, the plan stated that:

> In order to create an atmosphere where the people are involved in development, the government has already authorised local bodies to choose, formulate and implement development projects, to allocate funds to various projects and to deliver benefits from the projects (HMG/N. 1992a :14).

Although, the Nepali Congress government presented itself as being committed to 'democratic socialism' aimed at 'improving the standard of living of deprived citizens through democratic processes'(HMG/N., 1992a : 12), it did not last long enough to carry out its proposed development efforts due to internal power struggles and political strife within the party. As a result, a mid-term election was announced and held in November, 1994, and the Communist Party of Nepal (United Marxist and Leninist,

---

[14] A major political party of Nepal which had a key role in overthrowing the Rana regime in 1951.

UML) for the first time in the history of Nepal had the opportunity to form a minority government, as the people did not give a clear mandate to any party to govern the country.

While the new communist government was trying to follow the Eighth Plan for the alleviation of poverty; it had added a new dimension to the current development approaches called 'Afno Gaau Affay Banau' ('Build Your Village by Yourself'). Under this plan, a village development fund of US $6000 was provided by the government to each village development committee[15], primarily to strengthen people's participation in local development. Thus, the main objective, as expressed in the program implementation manual (MOLD, 1995:2), confirmed that this program would help create a sense of mutual understanding, obligation and confidence in relation to local development among village people. However, this government also did not last long and was overthrown by a vote of no confidence in late 1995. A coalition government, consisting of Nepali Congress and 'Rastriya Prjatantra Party' (RPP) (in English, 'National Democratic Party')[16] was then formed to replace the communist government. Its development policy, as announced in September, 1995 saw 'villages as the focus of development' (Kathmandu Post[17], 1995). Again, in April, 1997, this coalition government was ousted by a vote of no confidence and was replaced with another coalition government: the communists and the RPP. With such frequent changes in government, it is apparent that Nepal, after the reinstatement of the multi-party system, has faced problems of political instability that have affected its program for national development. In this context, the following section discusses the evolution of communication and the current communication policy in the light of participatory development in Nepal.

The History of Communication

Story telling and relating experiences of the past have become a customary practice in Nepal, especially among villagers during the periods of free time. Rai (1987:149) refers to an example of the Dibya Upadesh (the Golden Policy Statements) of the 18th Century

---

[15]. There are in total 3995 village development committees in the country (CBS, 1993)

[16] It is a party formed by those devoted Panchayat politicians who tried their best to protect Panchayat until the last minute.

[17] A daily newspaper published in English language.

62

propounded by King Prithivi Narayan Shah, founder of Nepal, that clearly highlights the importance of communication in sustaining the nation. According to Rai, in his Dibya Upadesh, 'the King had asked his people to pass on what they had heard to their children so that the Kingdom may endure'.

Until the downfall, after more than a century of rule, of the autocratic Rana family regime in 1951, the Nepali national communication system was totally based upon group and one-to-one communication. The main reason for this was that the Rana family, through their handful of loyal servants, wanted to communicate with their country men and women in a group or through one-to-one communication so as to clearly disseminate the obligatory messages that were necessary to maintain their tyrannical regime. For group communication, the faithful servants of Rana used to mobilise a particular traditional person, known as Katuwal or Damai (an indigenous tailor and village musician by caste), in each village to be the channel of communication. Katuwal used to blow his Karnal (a traditional pipelike Nepali musical instrument) to gather the local villagers in one place, and the messages were then passed onto them by the Rana's faithful servants. Similarly, for any development work to be done in the village, the chief of the village, locally known as 'Mukhiya' or 'Jimmwal' or 'Thari', used to disseminate messages using the village Katuwal (Uprety,1990:20). Apart from the village Katuwal, the national newspaper 'Gorkhapatra', which was first published in 1901, also functioned as a vehicle for disseminating government notices and information to the people (Malla, 1983:69).

The gradual modernisation in communication systems in Nepal commenced only when the Rana regime was overthrown in 1951. Rai (1987:152) notes: 'From 1951 to 1960[18] a glimmer of the rationale of a national communications policy began to appear mainly in response to the revolutionary political process and the stirrings of the Nepali masses under the leadership of King Tribhuvan'. Rai notes that during the period of 1951 to 1960 interpersonal as well as mass communication started flourishing in Nepal with some

---

[18] 1951 to 1960 can be considered as an important period for the political development of Nepal. During this period, in 1951, Rana regime was over, and the introduction of multi-party system in the country took place. Finally in 1960, the multi-party system was replaced with Panchayat System.

communication policy orientations that helped establish important communication infrastructures, such as a national radio station, news agencies, a journalists association, a press commission, a film censorship board and a cinema hall.

During the Panchayat System (1960-1990) the first comprehensive 1971 National Communication Plan was promulgated with its overall objective of 'Communication for Development'. This plan clearly envisaged the necessity of respecting villagers' ideas on the development process through a 'judicious mixture of new and old ideas', and also stressed that 'activities which are related to mass communication should be people oriented' (Malla, 1983:72). During this period computerisation in the communication process, the use of satellite communication, and education and training facilities in journalism were introduced (Rai, 1987: 152-153). Similarly, during this period, a national television station, Nepal Television, was established. More importantly, national radio, Radio Nepal, was strengthened with powerful transmitters to achieve nationwide coverage (Malla,1983:70). At the same time, programs, especially on agriculture extension, health, literacy and women's development, were introduced, and it is reported that radio agriculture programs became very popular in the rural area (Bajracharya and Shrestha, 1981: 165).

Notwithstanding the progress that had been made in Nepal in the field of communication during the preceding few decades, some observers feared that the government media in Nepal, as in many other developing countries, were helping to maintain the status quo. In this respect Upadhyay (1981) asserts:

> The emphasis on preserving the heritage of the past particularly affects the government owned media. ... Features like talks, discussions, dramas and even songs carry very little that is stimulating to rouse the people to thought and action. The government owned broadcasting media... de-emphasise the representation of alternative ideas. (quoted in Malla,1983:76-77)

In an attempt to make the communication system of the country more effective and democratic, the newly-reinstated multi-party policy guaranteed the people's right to information through the Constitution of Nepal, 1990 (HMG/N., 1990). In 1992, a national communication policy was introduced. According to the policy documents (HMG/MOC,1993:2), the main objectives of the policy are: to realise people's right to

information; to make media efficient so as to make people aware; to activate media in protecting and consolidating the basic norms and values of the constitutional monarchy and multi-party democracy; to preserve national identity and significance and, finally, to secure people's participation, international co-operation and goodwill in overall national development.

In order to maintain the people's right to information, this policy ostensibly commits the government to making available to the public all kinds of information through the government and private sector media. A distinctive feature of the policy is the emphasis it gives to the private sector's involvement in media ownership and media production. It also specifically emphasises radio and television for dissemination of messages and information relating to agriculture, education, health, family planning, science and technology, and environmental protection. However, it does not spell out any approach to message design and dissemination.

Though the 1992 national communication policy document appears to enhance and reinforce the communication system in Nepal, it has nevertheless attracted criticism in regard to the people's right to information. A government-owned English daily, *The Rising Nepal,* says in an editorial that:

> Though the government has assigned spokespersons for each ministry to hand out information about the respective agencies to the press for quite some time now, [the grievances that the information could not pass onto the press and the spokespersons opted for evading the media enquires remained far from being addressed]. Just a month back the government spokespersons failed to attend a program which was meant to provide interaction among journalists and spokespersons. ...Moreover, as the people's right to information is associated with the task of the spokespersons, new legislation should be enacted to specify the modalities and procedures for the exercise of the right to information. (26 January 1994)

In September 1993, various media professionals, politicians and academics showed their concern over some issues concerning the 1992 national communication policy document in a talk program held in Kathmandu (*Kantipur,* 29, September, 1993). One of the participants clearly asserted that though the national communication policy, 1992, offers the people the right to information, actual government actions do not conform to the policy. Similarly, private sector involvement, as conceived by the national communication policy, is criticised as promoting cultural invasion. Thus, an editorial in

The Rising Nepal (20 January, 1994*)*, referring to private sector involvement in television, suggests that the government should regulate the programs aired by the private sector in order to save national integrity and the culture of the country.

Government, non-government and international organisations have been actively involved in development communication in Nepal since the Panchayat regime. Although there is no exhaustive information regarding development communication in Nepal, a recent study carried out by a research organisation called SEARCH[19] (1990) has indicated that there are currently seven government ministries active in development communication and education. These ministries are the Ministry of Agriculture, Ministry of Education, Ministry of Health, Ministry of Local Development, Ministry of Forest and Soil Conservation, Ministry of Labour and Social Welfare and Ministry of Communication. At the same time, the SEARCH study lists some 46 international non-government organisations (INGOs) and 57 local non-government organisations (NGOs) involved in development communication and education in Nepal. It should be noted that these figures do not represent the total number of INGOs and NGOs and the actual figures may now be even higher than these figures. For example, when SEARCH was undertaking their study, the new INGOs figures for 1990/91 were under preparation, but were estimated to be around 60 (SEARCH, 1990: Appendix II).

SEARCH (1990:13) reveals that though there are many differences among the various organisations involved in development communication activities in Nepal, all of them basically believe in community participation. It also indicates that in order to achieve a positive impact from the development communication and education, many organisations now have two-way communication approaches:

> ...Government ministries, and respective departments, projects, international non-government organisations (INGOs), autonomous research and consulting organisations such as SEARCH and Integrated Systems (IDS), and national and local non-government organisations (NGOs) and self-motivated and self-help groups have utilised multi-pronged approaches. These approaches are interpersonal communication through field-based middle-level staff or trainers themselves embracing a participatory approach of two-way communication and exchange, which is now gaining popularity in Nepal. These are being carried out with or without the parallel use and support of either the print media, posters or audio-visual media (SEARCH, 1990:1-2).

---

[19] Name in full form not stated in the report.

A point to note here is that the use of middle-level staff or trainers, especially in interpersonal communication at the grass roots level, is not a new dimension recently added to the field of development communication in Nepal. During the Panchayat regime it was a very common practice through which extension workers, field workers, local political leaders, social workers and volunteers were mobilised at the grass roots level in order to support the people's participation in national development.

Conclusion

Historically, the notion of participation in Nepal has special significance. Particularly during the Panchayat System, the participation of the people was emphasised in national development efforts. The bureaucrats, technocrats and politicians of that time seemed to commit themselves to the people's participation in development. But, many reports and case studies revealed that people at the grass roots level experienced participation during the Panchayat System merely as directives, orders or mandates for volunteer physical or financial contributions.

In comparison with the Panchayat constitution, the present multi-party constitution does not heavily emphasise the role of the people's participation in national development. However, in the Eighth Plan (1992-1997), the 1991 Nepali Congress government fully acknowledged the importance of the people's participation in development and aimed at involving people in the identification, formulation and implementation of the programs on the basis of public participation.

As far as communication development in Nepal is concerned, it would appear that the communication system has been greatly extended since the Panchayat period with the advent of sophisticated modes of communication, such as satellites, television, and computers. Similarly, the introduction of the 1992 communication policy by the Nepali Congress government promised the people's right to information. However, many critics note the absence of appropriate modalities and procedures in informing people concerning their development. The growing privatisation of the mass media is also perceived as creating problems associated with cultural invasion.

Over the years (including before and after the Panchayat System), despite the many problems and criticisms regarding the people's participation in development, there have been some initiatives in promoting the people's participation in their nutritional development in Nepal. Such initiatives appear to have been succeeded only in the implementation phase of the projects. An overview of some of the key nutrition projects is highlighted in the following chapter.

CHAPTER 6 : OVERVIEW OF SOME OF THE MAJOR NUTRITION PROJECTS AND THEIR COMMUNICATION STRATEGIES

The history of Nepali government nutrition programs dates back to 1975 when the first National Nutrition Survey was conducted with the assistance of the Centre for Disease Control, Atlanta, USA. The main aim of this survey was to establish 'statistically valid national data, representing both rural and urban populations of Nepal' (Adhikari, 1991: 1). Some important nutrition projects were initiated in the country with the commencement of the Fifth Plan, 1975-1980, which established a Nutrition Section in the health sector (Gautam et al., 1995:3). A brief review of some of the key nutrition and nutrition-related projects is made below, the focus being on their overall activities, communication strategies, and success. It should be noted that the information for each of the projects reviewed has been taken mainly from the available existing project documentation.

In the 1980-1985 Sixth Plan a multi-sectoral approach toward nutrition was adopted, under which programs were to focus on an increase in nutrient rich foods, improved food distribution, and a nutrition curriculum in training activities (Gautam et al.,1995:3). Similarly, the 1985-1990 Seventh Plan, 'continued [a] multi-sectoral approach focusing on agriculture, education, local development' (p.3). Since then, through the multi-sectoral efforts of the Ministry of Health (MOH), the Ministry of Education, Culture and Social Welfare (MOECSW), the Ministry of Local Development (MOLD), and the Ministry of Agriculture (MOA), the Government of Nepal (HMG/N.) has been committed to resolving the nutrition problems of the country. This commitment was even stronger in the 1992-1997 Eighth Plan (HMG/N., 1992b : 617-623 and 722-723), which has explicitly advocated policies on the alleviation of poverty, and food and nutrition.

At the same time, there are many national and international non-government organisations that have also been assisting in nutrition and food improvement. Prominent national non-government organisations involved in nutrition activities include the Family Planning Association of Nepal (FPAN), Social Service National Co-ordination Council (SSNCC)[1], and Nepal Netra Jyoti Sangh (NNJS). International Non-Government Organisations (INGOs) involved in health and nutrition are mainly the United Mission to Nepal (UMN), Save the Children Fund (UK and USA)[2], Worldview International Foundation (WIF), Red Berna and Save Foundation. In addition, there are also some international organisations and bilateral agencies which have been helping the government to resolve nutrition problems. These include the United Nations International Children's Emergency Fund (UNICEF), the Food and Agriculture Organisation of the United Nations (FAO), the World Health Organisation (WHO), the United Nations Development Program (UNDP), and the United States Agency of International Development (USAID).

In order to fulfil the government's 1992 commitment at the International Conference on Nutrition to eliminate hunger and to reduce all forms of malnutrition (FAO/WHO, 1992:1-6), and to help realise the planned nutritional improvement of the population (mentioned as one of the priority areas in the Eighth Plan[3]), the National Planning Commission (NPC) initiated the formulation of a National Plan of Action for Nutrition (NPAN, 1995). This plan of action identifies priority areas for addressing the nutritional needs of the country (Gautam et al., 1995: i). Previously, nutrition and nutrition-related projects tended to be designed and implemented on an ad hoc basis (Vaidya, Kafle,

---

[1] During the Panchayat period (1960-1990), SSNCC was a very powerful local non-government organisation under the Chairmanship of the Queen. It acted as the governing body to all the local and international non-government organisations. In effect, all the local and international non-government organisations were required to abide by its strict rules for running social and community development activities in Nepal. Although, during that time, many international non-government organisations opted to be involved in the social and community development of Nepal within these defined boundaries, the local non-government organisations, on the contrary, avoided involvement in it for fear of unnecessary harassment or trouble. FPAN, which is supported by the international family planning association, was the only major local non-government organisation operating during that time.

[2] There are two separate organisations of SCF, one of which comes from UK and the other from USA.
[3] Gautam et al. (1995) point out that for the first time in the 40 years of the planning process, the improvement of the nutritional status of the people is mentioned as one of the priority areas in the Eighth Plan.

Sthapit, and Shrestha, 1993: 4.10). With the inception of NPAN, the government aimed to co-ordinate future nutrition-related projects [4] at the national, regional or district levels.

The ministries of health, education, local development, and agriculture have particular roles in the promotion of nutrition activities in Nepal. These ministries, through their individual nutrition departments or units, design and develop their own nutrition projects, and are often supported with technical and financial assistance by the international organisations. In most cases, they are technically supported by the relevant specialised agencies of the United Nations (UN) such as the UNDP, FAO, UNICEF, and WHO in collaboration with the donor agency or donor country. One example of such a project was the WHO/UNICEF-supported *Joint Nutrition Support Program (JNSP)*, jointly implemented by the sectoral ministries of the government, such as agriculture, education, local development, and health, and co-ordinated by the National Nutrition Policy Co-ordination Council (NNPCC) of the National Planning Commission (NPC). The JNSP began in 1984 and terminated in 1988. In addition, there are currently four major nutrition projects: (a) Nutritious Food Program (b) National Vitamin A Program, (c) Production Credit for Rural Woman, and (d) Multi-sectoral Training in Nutrition for the Control of Vitamin A Deficiency. Among these projects, *the Nutritious Food Program* is run under Nepal Bal Sangathan (Nepal Children's Association) with the assistance of the World Food Program (WFP). *The National Vitamin A Program*, on the other hand, operates under the joint collaboration of the Ministry of Health and donor organisations such as the VITAL[5] and UNICEF. Similarly, *the Production Credit for Rural Women* is operational under the Ministry of Local Development with the financial and technical support of some donor countries and UNICEF, while *the Multi-sectoral Training in Nutrition for the Control of Vitamin A Deficiency* is implemented under the collaboration of the National Planning Commission and FAO.

---

[4] Nutrition projects in this context are those projects that are designed exclusively for nutrition activities whereas the nutrition-related projects are as those ones that are not nutrition projects 'per se' but are, in one way or the other, helpful in resolving nutrition-related problems.
[5] VITAL stands for Vitamin A Field Support Program conducted by International Science and Technology Institute Inc.

Only a few of the local and international non-government organisations are engaged in nutrition activities and these tend to be integrated with broader community development projects. For example, the Family Planning Association of Nepal (FPAN) and the Social Service National Co-ordination Council (SSNCC) are actively involved in nutrition and nutrition-related activities. However, except for *the Nutritious Food Program* of the SSNCC, all of their activities are integrated into their overall health, family planning and community development programs. It should be noted that *the Nutritious Food Program*, which has been operating for years with the assistance of the World Food Program (WFP), is the first non-integrated nutrition project for SSNCC.

As in non-government organisations such as FPAN and SSNCC, all the nutrition and nutrition-related activities being carried out by the international non-governmental organisations (INGOs) are integrated into their community development projects. For example, it is understood that the United Mission to Nepal (UMN) integrates its nutrition activities through its nutrition unit into its overall community development program. The main nutrition activities involved are strengthening nutrition capability development, raising nutrition awareness, encouraging nutrition rehabilitation centres, and providing nutrition concepts in all development activities. Similarly, Save the Children Fund (SCF, UK), in an effort to support the government and Nepali communities in their efforts to improve the lives of children, integrates nutrition activities into its health program. It is currently running a nutrition rehabilitation activity for second and third degree malnourished children in five mountainous districts of Nepal[6]. Likewise, Red Berna integrates nutrition components, especially those related to nutrition awareness, in all its community development projects[7]. In contrast, Worldview International Foundation (WIF), an international organisation for development support communication, concentrates especially on nutrition communication programs. It has recently completed a nutrition communication project, called *the Nutritional Blindness Prevention Pilot Project,* in one of the districts of Nepal.

---

[6] Based on an interview with one of the senior health assistants, SCF, UK.

[7] Based on an interview with a senior staff member, Red Berna.

The following sections provide brief overviews of some of the major past and present nutrition and nutrition-related projects in Nepal.

Nutritious Food Program

Project Background

The Nutritious Food Program is an on-going program that started operating in 1972. The main objective of the program is to resolve, to some extent, the nutrition problems of Nepal (SSNCC, 1988).

From 1972 to 1978, the program focused its activities on a Group Feeding Program, the beneficiaries of which were children below five years of age, lactating women with babies up to seven months of age, and pregnant mothers in the second trimester of their pregnancy. In 1978, in addition to group feeding, the program extended its food distribution activities to primary schools, child day care centres, and welfare organisations. Since 1990, it has been providing assistance for *the Basic Needs Support Program*[8] of the government in health, nutrition and education.

Program Coverage and Target Beneficiaries

The program operates in 31 out of a total of 75 districts of the country. Its main target beneficiaries currently include pregnant and lactating women, children, welfare organisations, and skills training centres.

Program Activities

The main activity of the program is to provide food assistance to the needy. In order to systematically distribute foods to the various needy groups, it operates through its different units: the Health and Nutrition Unit, the Primary and Technical Education Unit, the Welfare Organisations and Child Care Centres Unit, and the Women's Development Unit (SSNCC, 1988). For additional information refer Appendix 1.

---

[8]The Basic Needs Support Program was spelled out by HM King Birendra during the Panchayat Period. This program targeted the minimum level of requirements to be achieved by the end 2000 for satisfying basic needs such as food, clothing, health and shelter for all.

Communication Strategies

In order to achieve its objectives, the program has mobilised health post personnel, school teachers, and social workers in the program information dissemination activities (SSNCC, 1988).

All concerned health post personnel (those in-charge of health posts, nurses and health assistants), teachers and social workers are provided with training in the use of nutritious food, and nutrition-related education. These people, depending on where they work, educate the target beneficiaries through one-to-one communication, group discussion, demonstration[9], posters and pamphlets, flip charts etc. It should be noted that the program has utilised food distribution activities themselves as a useful means of disseminating nutrition and health information to needy people. All the information materials concerning the Nutritious Food Program activities are centrally designed. None of the intended beneficiaries are involved in information dissemination.

Program Evaluation

Based on the Social Service National Co-ordination Council (SNCC, 1988:17-18) and an unpublished summary of the progress evaluation report prepared by the NFP in 1995, the program has been positively assessed as being highly effective in food distribution activities to the various target beneficiaries, including those of the remote and food deficit areas. There is, however, no evaluation report indicating the impact of this program on the promotion of nutritional awareness and the status of its target beneficiaries.

Joint Nutrition Support Program

Project Background

The Joint Nutrition Support Program (JNSP) was started in Nepal in 1984 through a collaboration of WHO, UNICEF and Government. The main objectives of the program were to achieve a measurable reduction in infant and young child mortality, morbidity

---

[9] Demonstrations of the preparation of nutritious food.

74

and malnutrition; an improvement in maternal nutrition and a reduction in maternal anaemia; and a measurable reduction in iodine deficiency disorders and Vitamin A deficiency (JNSP,1988: 4). More importantly, this program also included some operational objectives, such as identifying replicable methodologies, 'achieving a genuine PHC [Public Health Care] approach, involving [complete, intense] community coverage and a high level of community awareness, motivation and commitment in planning and implementation to ensure a range of inter-sectoral inputs that answer the real needs of total human development' (JNSP, 1988:4). In order to achieve the program objectives, the JNSP adopted the following program approaches (JNSP: 1988):

Multi-sectoral approach

In view of the fact that the underlying causes of malnutrition are multi-dimensional, the program adopted a multi-sectoral approach providing intervention not only in health, but also in agriculture, education and women's development. The involvement of the agriculture sector was aimed particularly at increasing the production of nutritious foods for household consumption, while the involvement of the education sector was aimed at the education of children and women in nutrition. Similarly, the involvement of the women's development division of the local development ministry was focused on women's development to enhance women's capabilities, particularly in the field of income generation, as a way of promoting better nutrition and the health of the women and their children. For this purpose, the Production Credit for Rural Women (PCRW) program of the women's development division was included in this program.

Intensive nutrition-related intervention approach

The JNSP believed nutrition was the main factor in public health problems. Thus, it considered the 'nutrition factor' important in the realisation of Primary Health Care (PHC) and, as a result, it included education oriented towards pregnant women and the young.

Multi-level operational approach

JNSP implemented its program at three different operational levels: the central, district, and community levels. Thus, the institutional arrangements were based on these levels.

At the central level, the sectoral ministries controlled the activities of JNSP according to the decisions of the National Nutrition Policy Co-ordination Council (NNPCC) of the National Planning Commission (NPC). At the district level, a District Nutrition Committee (DNC) was instituted, and the District Nutrition Officer (DNS) of the MOH was the co-ordinator of all the JNSP activities carried out by the sectoral ministries concerned. At the community level, there were Ward Nutrition Committees (WNCs) to assist the Community Nutrition Workers (CNWs) who were volunteers under the technical supervision of the Health Post (HP).

To successfully implement this public health care approach to nutrition, the program sought to ensure local community participation. 'Community participation' was defined as:

> .. the process by which individuals and families assume responsibility for their own health and welfare and for those of the community, and develop the capacity to contribute to their own and their community's development; thereby people become more aware of their situation and motivated to solve their common problems (APROSC, 1986:42)

It was assumed that the community would take part in the identification of its problems and solutions through its active participation in all stages of the program, including project planning and implementation.

Inter-sectoral Co-ordination

In order to make better use of the resources and to avoid the duplication and overlap of the activities of all the sectoral ministries involved in the program, NNPCC was appointed for inter-sectoral co-ordination.

Project Coverage and Target Beneficiaries

The JNSP covered five districts of Nepal: Gorkha, Syangja, Nawalparasi, Sindhupalchwok and Makawanpur. Of these five districts, Nawalparasi was the only terai area (flat or plain topography)[10], while the others were mountain and hill areas.[11] The

---

[10] The terai area has a low, flat topography which extends from east to west along the southern side of the country bordering India. It includes most of the fertile land and dense forest area of the country (CBS: 1993)

76

target beneficiaries of the program were children and women, particularly infants/young children and nutritionally vulnerable pregnant women and lactating mothers.

Program Activities

Since the JNSP adopted a multi-sectoral approach to program development and implementation, the various sectoral ministries, such as health, agriculture, education and local development, were involved in the promotion of nutrition and nutrition-related activities (see Appendix 2 for a summary of the activities carried out by the various sectoral ministries). In addition, it proposed the involvement of the Small Farmer Development Program (SFDP) of the Agriculture Development Bank, Nepal, in women's development activities. However, the latter's involvement did not come about due to a lack of co-ordination and understanding among the concerned ministries and ADB/N (JNSP, 1988:54).

Communication Strategies

The communication strategies of all the sectors involved in JNSP were based on the training of field staff who were effectively responsible for communicating with the target community. For example, in regard to the health sector (MOH), District Nutrition Officers (DNOs), Health Post personnel[12], and Community Nutrition Workers (CNWs) were given training in nutrition and health (JNSP, 1988:16). In the health sector, the CNWs were the ultimate communicators of the program and responsible for disseminating program messages to the target community (JNSP, 1988: 18-11). In the agriculture sectors, extension workers, teachers and farmers who took part in the various program-related training courses, such as kitchen gardening, beekeeping, fish farming and poultry raising, were the people responsible for dissemination of the program messages at the community level. Similarly, in the education sector, teachers in primary

---

[11] The mountain area is defined as lying at an altitude varying form 4877 meters to 8848 meters above sea level. This region includes the world's highest peak Sagarmatha (Mount Everest), and covers one-third of the total land area of the country. The hill area, on the other hand, is located in the middle part of the country, and runs from east to west and lies between the altitudes of 610 meters and 4877 meters above sea level (CBS: 1993).

[12] The HP personnel include Health Assistants, Senior Auxiliary Health Workers, Auxiliary Health Workers and Auxiliary Nurse Midwives (ANM) etc.

schools, non-formal education and young women's education (in Nepali chelibeti siksā) were the people communicating with the target beneficiaries (JNSP, 1988:36).

For women's development, women workers and women volunteers were the communicators to the beneficiaries of the program. These workers and volunteers received training from the JNSP.

The main means of communication used in all the sectoral ministries for JNSP activities were interpersonal communication (one-to-one and group discussion), printed materials (posters and pamphlets), flip charts and radio.

Program Evaluation

An internal review report of the program's achievements was undertaken in 1988. The review report (JNSP, 1988:9-88) concluded that the program largely failed to achieve its objectives. The main reason for this failure was the sluggishness and the central control of program operations, that had a negative affect on the physical and financial targets and training activities of the program. Similarly, there was no sense of responsibility among the personnel of the different ministries involved in the JNSP activities. For example, at the regional and district level of the Ministry of Agriculture, JNSP was considered as a 'support program' and regional and district officers responsible to JNSP had very little sense of commitment and involvement in its activities. The district authorities and political leaders concerned were not well informed about the program activities. The report includes a significant observation that even the Local Development Officers, who were the focal points for the district development plan and program in each district under the Ministry of Local Development, did not seem to be fully familiar with the JNSP activities. In view of this, it is not surprising that the program beneficiaries were also found to be not very well informed about the program activities. For instance, in the Ministry of Health, the mothers, who were the beneficiaries of the JNSP program, did not understand the importance of the child growth chart provided by the CNWs and perceived the growth chart as providing easy access to immunisation and visits to the health post if their child got sick. Households did not value the voluntary contribution of CNWs as they thought that they were government-salaried employees. The evaluation

report contended that under such circumstances, the community support to and participation in the program seemed a farce (p.22). The evaluation report stated that all the ministries involved planned the JNSP activities centrally without taking into account the field level problems and priorities. Community participation, the report noted, was 'severely underdeveloped' due to the centrally planned activities.

Apart from the above major findings, the report commended the program's overall efforts in creating awareness about nutrition intervention in Nepal:

> If one has to highlight the contributions of this Project in Nepal, the single and the most important one would be that it has been able to enhance the awareness about the concept and problems of under-nutrition and the feasibility of programmatic intervention to remedy it. Until the inception of this Project, knowledge about nutrition was limited to a handful of professionals at the central level and it has not been attempted as a program of development at the national or at the district level. Considering this context, the fact that the Project attempted even the creation of grass-roots community workers, the CNWs, can be taken as a big leap forward in this field. The project has certainly contributed significantly to the building of a conducive atmosphere for a more systematic planning and expanded implementation of such programs in future at the central and more so, at the local level.(p.81)

Although this program was a prime-mover in the process of resolving nutrition problems in Nepal, it was not continued after 1988. The main reason for discontinuing it is unclear, although some senior government officials involved in this program indicated to the author of this thesis that the donor terminated the program on the basis of what the donor claimed was unsatisfactory performance.

Although this program appeared to be able to enhance awareness of the concept and problems of under-nutrition and the feasibility of an intervention program to remedy it, it failed to achieve its main objective of involving the people's participation in its activities by means of the so-called decentralised process of project management and administration[13]. As a result, in all four sectoral ministries involved in this program, the top-down flow of communication and information was predominant throughout the program's life, and this eventually paralysed its important Public Health Care (PHC)

---

[13] JNSP was carried out during the Panchayat period when Decentralisation was the motto for national development activities.

approach which was aimed at developing community awareness through people's participation.

Despite the JNSP's brief period of operation, it has helped Nepal develop a basic system for addressing the nutrition problems of the country. For example, a multi-sectoral approach to combating malnutrition has been the main strategy of the government ever since JNSP was introduced. According to the field observations of the author of this thesis, all the four sectoral ministries (MOH, MOA, MOE and MOLD) involved in JNSP have retained their individual nutrition units, as suggested by the JNSP. At the same time, all the high-level officials responsible for decision-making in each of the four ministries remain strongly committed to the concept of participatory nutrition communication as defined in the JNSP.

National Vitamin A Program

Program Background

The National Vitamin A Program (NVAP) is an on-going program. This program was set up in mid-April, 1993 as a joint initiative of USAID, UNICEF and the government of Nepal. This program implements a recommendation of the Vitamin A Child Survival Project (VACSP) - that is, that various intervention activities be carried out to control vitamin A deficiency in Nepal. VACSP was a three-year (1988-1991) research project and was developed, implemented and evaluated by the Department of Population Planning and International Health, University of Michigan. It made various field tests of nutrition intervention activities that included vitamin A capsule distribution, primary health care services, female literacy and nutrition education (Pant, 1991b : 26-27). It also developed various educational materials, especially posters, under the Nepal Netra Jyoti Sangh, the key organisation for blindness prevention in Nepal. It is significant to note that these posters are still being used by many national and international organisations involved in nutrition development in Nepal (see the sample posters listed in Appendix 3).

In line with government guidelines for the implementation of a national vitamin A deficiency control program in Nepal, the National Vitamin A Program has adopted a short-term objective of reducing child mortality, preventing xerophthalmia through diet supplements (mass distribution of vitamin A capsules) and achieving a reduction of vitamin A deficiency to such a level that it no longer constitutes a public health problem[14]. At the same time, as a long-term objective, the program focuses on replacing the diet supplement of vitamin A capsule by using nutrition education to bring about changes in the dietary behaviour of the target group.

Program Coverage and Target Beneficiaries

From its inception, the program has been operating in 8 terai (plain area) districts of Nepal. It has now been extended to another 4 districts of the terai. In other words, this program is now operating in 12 terai districts, namely Bara, Parsa, Rautahat, Mohattari, Dhanusa, Siraha, Saptari, Nawalparasi, Sarlahi, Morong, Sunsari, and Jhapa. The main reason for which this program focuses only on terai districts is that it had to address the high prevalence of vitamin A deficiency in terai areas immediately. This high prevalence of deficiency was unexpected since these districts produce plenty of green vegetables and yellow fruits, and are regarded as food surplus areas that historically supply foods to other food deficit areas of the country. The target beneficiaries of this program are children of 6 months to 5 years to whom the diet supplement of vitamin A capsules are given. At the same time, all the mothers of these children, as well as pregnant and lactating mothers, are the target beneficiaries of the nutrition education component of the program.

---

[14] Vitamin A deficiency, particularly xeropthalmia, is a major public health problem in Nepal (Shrestha and Hussain, 1993; Gautam, et.al., 1995). A national survey on xeropthalmia has reported an incidence of 1.3 percent for Bitot's spots and 0.6 percent for night blindness, both of which are manifestations of clinical vitamin A deficiency while in certain areas the incidence of Bitot's spots is as high as 2.1 percent (Hussain, Shrestha, 1993:34). In the central terai, the prevalence of Bitot's spots is recorded at 2.1 percent (Gautam, et.al, 1995:2). WIF/Nepal (1994:2), citing the findings of the Xeropthalmia Prevalence Survey of 1981, which indicated the Xeropthalmia prevalence rate as 3.12 percent in the hills and 3.02 percent in the country, argues strongly that eye problems are common in Nepal.

Program Activities

According to a senior official of the program, in his discussions with the author of this thesis, the main program activities are: (a) distribution of vitamin A capsules; (b) nutrition education; and (c) training of Volunteer Health Workers (VHWs), Community Health Volunteers (CHVs), Female Community Health Volunteers (FCHVs), school teachers and political leaders. A summary of the program activities is listed in Appendix 4.

Communication Strategies

In accordance with the guidelines set out by the Ministry of Health (1992) for the implementation of a national vitamin A deficiency control program in Nepal, this program is supposed to be carried out through the existing infrastructure of Public Health Care networks, utilising the District Public Health Office (DPHO), Health Post (HP), Sub-Health Post (SHP), Village Health Workers (VHWs) and Female Community Health Volunteers (FCHVs). However, the major activities of this program, such as vitamin A capsule distribution and nutrition education, are carried out mostly by the FCHVs alone[15]. Thus, information concerning vitamin A capsule distribution and nutrition is channelled primarily through the FCHVs in the target villages. These FCHVs are selected locally from among the village people and are given brief training that allows them to work at the ward[16] level under the 'Ilaka' (area[17]) Health Post. Information materials that are relevant to vitamin sources and vitamin A capsules are designed and developed at the central level. According to one of the senior staff members of the program, all the information materials are pre-tested before they are actually distributed in the field.

Most of the information materials prepared by the VACSP in the form of posters are still widely used. Generally, an information campaign is launched at central district and local levels, usually before the actual vitamin A capsule distribution takes place.

---

[15] Based on the author's field observations.
[16] Nine wards make up a VDCs.
[17] Turner (1996: 42) equates 'Ilaka' with 'territory' in the English language. However, area is appropriate in this context..

82

The modes of communication commonly used in this program are posters and pamphlets, radio, one-to-one communication, billboards, cinema, 'miking', 'nuatanki' and 'dholak beating'. 'Miking' is a very common way of disseminating information in terai districts. Usually, a man or woman, especially using a rickshaw or a three-wheeled passenger automobile, locally known as 'tempo', travels in and around the target areas and broadcasts information with the help of a megaphone or loud speaker. 'Nautanki', on the other hand, is a traditional form of terai street dance accompanied by songs or rhymes[18]. It is one of the very popular modes of communication in information dissemination in terai districts. Similarly, 'dholak beating' (drumming) is an important terai tradition of gathering people, especially in a public place, to disseminate information. A man or women beats his/her 'dholok', a traditional double sided drum, and tries to attract people's attention for verbal dissemination of information.

Program Evaluation

According to the program evaluation report[19], the program, as at October, 1993, is reported to have trained 12,838 people in capsule distribution and in vitamin A education techniques in eight terai districts of the country. The trainees included FCHVs, VHWs, farming leaders, Junior Technicians (JTs), Junior Technical Assistants (JTAs), school teachers and primary health workers of NGOs and INGOs. At the same time, 6595 FCHVs distributed approximately 848,000 capsules in eight districts.

This program was designed to last for 5 years and it was extended gradually to other parts of the country. However, the formal evaluation of this program was not made until the field work for this thesis was finished in 1994.

---

[18] To disseminate information or messages songs or rhymes (with music) are used. At the same time, these songs or rhymes are backed up by the gesticulations of the dancer to express the whole idea of the messages.
[19] A draft de-briefing note prepared for the vitamin A capsule distribution campaign from October 18 to 19, 1993 by the NVAP.

Worldview/Nutritional Blindness Prevention Pilot Project

Project Background

With a view to resolving nutrition-related eye problems in Nepal, the Worldview International Foundation (WIF), an international organisation for Development Support Communication, launched a 3-year Nutritional Blindness Prevention Pilot Project in one of the hilly districts of Nepal in August, 1990. This project ended in July 1993.

The main objective of the project was to reduce the rate of night blindness cases in the project areas from 1.7% to 1% or less by changing food habits through an increase in the cultivation of green vegetables and yellow fruits, and an increase in the consumption of them by children. It also aimed to produce a replicable model for future expansion of the project (WIF/Nepal, 1994:3). The specific objectives according to Worldview Nepal (WIF/Nepal, 1994:2) were to (a) increase the awareness of the target group about the cause of nutritional blindness; (b) educate and motivate the target population not only to grow Vitamin A-rich green vegetables and yellow fruits, but also to consume them at home; (c) educate the target population on how to prepare and cook vegetables properly to help preserve the vitamin content of the natural food; (d) educate the target population on basic personal hygiene; (e) promote the breast feeding of infants and children as long as possible to strengthen their immunity and the mothers' health[20]; (f) educate pre-natal women, mothers and guardians on the value of nutrition; (g) educate the target population on the causes of diarrhoea and dehydration as well as on methods of treating them; (h) educate the target population on the methods of prevention of measles and tuberculosis; and (i) develop a special mechanism to ensure the collection of data for an evaluation of the impact of the project activities at the household level.

---

[20] The meaning of this particular objective concerning breast feeding and mothers' health is not clear. One might have the impression, based on this objective, that prolonged breastfeeding strengthens maternal health. But the question is how? This was not spelt out in the document.

Project Coverage and Target Beneficiaries

The project covered two mid-hill Village Development Committees (VDCs), namely Khoplang and Mirkit of Gorkha district, 145 kilometres north west of the Kathmandu Valley.

The target beneficiaries of the project were, in particular, school children and women, and, in general, all the households covered by the project in the resolution of nutritional blindness problems. The total number of households covered by the project in Khoplang and Mirkot VDCs were 1,030 and 1,100 respectively.

Project Activities

The main activities included a baseline survey of the project areas (Khoplang and Mirkit); the recruitment of local women volunteers; the formation of mothers' groups; the organisation of training/workshops; the detection of nightblindness cases; kitchen gardening; school activities; video and radio programs; an exhibition; an eye camp; and a drinking water and irrigation program (Worldview Nepal, 1994) (see Appendix 5 for a summary of the project activities).

Communication Strategies

It would seem that the communication strategies of the project were based largely on the use of women volunteers, mothers' groups and project field staff (Worldview Nepal, 1994). All these people were used as a channel of project communication at the grass roots level. Thus, they were responsible for creating awareness, establishing mutual relationships, and disseminating project information to the target beneficiaries.

Women volunteers were responsible especially for organising mothers' groups and informing them of nutrition, cooking methods, childhood diseases and their prevention, and primary health care. The mothers' groups, on the other hand, were expected to spread the project's information in the villages, in line with the project activities.

Local project staff were involved in organising group meetings, training/workshops, kitchen gardening, school colloquies and debates (with the help of school teachers), and video screening.

It should be noted that the program considered the use of printed materials with written text to be inappropriate in the context of mass village illiteracy. Thus, it largely used audio-visual means of communication in the form of video films that contained educational materials pertaining to nutrition and health, such as oral rehydration therapy, immunisation and its impact on health, personal hygiene, sanitation, forestry, farming, and fruits and their utility. Similarly, it mobilised a popular local means of communication known as 'gaines' (traditional folk singers) to disseminate project information, especially about the use of yellow fruits and vegetables. 'Gaines' are village singers by virtue of their caste and profession and they go from door to door to entertain the people.

The means of communication used in the dissemination of project information to the target audiences were mainly one-to-one communication, group discussions, flip charts, calendars, posters, video, radio and practical demonstrations (e.g. kitchen gardening and cooking).

Project Evaluation

According to the progress report prepared by Worldview Nepal, the project was able to disseminate its information to the target households. The report acknowledges that the women volunteers, from the time they were appointed to the end of the project, constantly rendered their valuable services in creating awareness, establishing mutual relations, communicating project information, and distributing programs and posters among the target population of project areas (Worldview Nepal, 1994:4). A measurable achievement of this project is that the project detected and treated 333 night blindness cases during the project period (Worldview Nepal, 1994:5). Similarly, the report highlights the interesting observation that night blind children themselves began to prepare kitchen gardens of their own. This was mainly due to the concerted efforts of the women volunteers and field supervisors. The report also concluded that demonstration gardens and frequent colloquies and debates at schools enhanced the interest of students

in preparing home gardens and, as a result, 1032 students began the preparation of home gardens during the project period. According to the evaluation report, screening video films on the prevention of nutritional blindness and other related matters was very effective in raising the awareness of the target population. It was revealed that as many as 39,750 people watched the video program (Worldview Nepal, 1994:6), but no specific reason is provided by the evaluation report for its effectiveness.

An evaluation report prepared by a group of local consultants estimated that, due to the project's communication intervention, the actual nutritional blindness prevalence rate in the project areas may have fallen even lower than what was originally aimed for by the end of the project , that is, from 1.7% to 1%[21].

Production Credit for Rural Women

Program Background

In order to engender women's participation in development and also to empower them to improve their socio-economic conditions, the Women's Development Division (WDD) of the Ministry of Local Development (MOLD), in a joint collaboration with international technical and donor agencies[22], initiated a program called Production Credit for Rural Woman (PCRW) as early as the Panchayat period in 1982. This program is still operational in many parts of the country. It should be noted, as stated earlier, that this program was included in JNSP to support the JNSP's multi-sectoral approach to nutrition.

According to JNSP (1988: 44), PCRW helps village women take advantage of small scale credit from commercial banks for agricultural production, livestock, cottage industries and services. Similarly, the JNSP (1988) affirms that this project is effectively linked with literacy, community development, and child care and survival activities.

---

[21] The Report on the Evaluation of Nutritional Blindness Prevention Project was prepared by a group of consultants hired by the WIF in July, 1993. The group of consultants was headed by Dr. Sambhu Dhungana. According to the Project Co-ordinator, NBPPP, this report still remains an unofficial document for public use.

[22] The international technical and donor agencies are UNICEF, IFAD, UNFPA, USAID, FAO, WB, ADB, CIDA, EC, GTZ, SNV. The main technical agency is UNICEF.

According to one of the senior officials of the WDD in his personal discussions with the author of this thesis, maternal and child nutrition was also added to this program after the inception of JNSP in 1984.

The general objective of the PCRW was to motivate women in the overall development endeavour of the country. To achieve this, the specific objectives were to (a) work as a facilitator to link rural women with the inputs, expertise and services available to the governmental and non-governmental agencies associated with various development activities; (b) provide support and assistance to help women move towards self-reliance by initiating self-employment and income-generating activities; (c) organise a social and community development program aimed at wiping out backwardness, superstition and [uncherished traditional values][23] and illiteracy in order to help women develop self confidence and self-respect; (d) provide support and assistance to rural women in adopting technologies which save time and reduce drudgery so that they might use their time and labour in gainful activities; (e) maintain co-ordination between the women's development program and the development activities carried out by governmental and non-governmental agencies; and (f) help women develop the confidence and capacity to carry out activities for their own development and for the development of the environments they live in (WDD, 1993: 1-2).

Program Coverage and Target Beneficiaries

Until June, 1992, PCRW covered 49 out of 75 districts of the country. It was expected that in the fiscal year of 1992/93, 15 more districts of the country would be included in the program. And, it is also expected that the program will eventually cover the entire 75 districts. The target beneficiaries of the program are rural women who are currently living below the poverty line.[24]

---

[23] The definition of 'uncherished traditional values' is not made clear in the official document (WDD, 1993). According to a conversation with the senior WDD official, uncherished traditional values are those existing social values that hinder women from moving forward to realise their physical and mental development. An example of this may be the patriarchal social values of Nepal, where men are given the first priority in every aspect of family life. In family education, for instance, a boy is given the top priority over a girl to go to school.

[24] According to the discussion with the senior WDD official, the beneficiaries of PCRW are those village women whose income put them below the poverty line. An income below poverty line is estimated at NRs. (Nepali Rupees) 2,511/- (roughly $US 50 at current exchange rate).

Program Activities

The district and area offices of WDD carry out PCRW's activities. These activities are aimed at the overall development of rural women and mainly comprise self-employment and income generation, social and community development, non-formal functional education, appropriate technologies, local resource mobilisation, child development, and maternal and child nutrition.

In order to undertake the above activities, women's groups in each village are formed according to the women's priorities, interests, and functional activities. After the groups are formed, they are then encouraged to identify, prioritise, design and develop their projects. All these groups are assisted by the grass roots Women Workers (WWs) appointed by the WDD.

As a part of women's development, nutrition education, especially the kind oriented toward maternal and child nutrition, has become one of the major activities of PCRW ever since 1995, when a nutrition cell was first established in WDD to carry out JNSP's multi-sectoral nutrition activities in PCRW. WWs and WDOs are provided with basic nutrition training and then go to train others, especially the women's groups and people in child care centres.

Communication Strategies

Since the basic program strategy of PCRW is to stimulate focus groups (women's groups) in particular, and the community more generally, to carry out their own activities by themselves, the WWs who constantly work with them at a grass roots level in the villages can be considered as the main channel of communication for the program. These WWs work under a WDO who is their supervisor at the district level. Both WWs and WDOs are provided with appropriate training at the central level.

According to discussions between the author of this thesis and the WWs, the usual method of communicating nutrition information in terms of nutrition education is group discussions. For this, all the members of the group are invited to gather in one place to

89

discuss nutrition. Similarly, home visits at least four to five times a year are also made to discuss nutrition and nutritional problems with mothers. In order to illustrate the problems and their solutions during the group discussions and home visits, posters, pamphlets and flip charts are normally used. It was observed by the author that all the posters, pamphlets and flip charts used in the program were borrowed from other projects. Mothers are also encouraged to listen to the weekly radio program sponsored and developed by the WDD at the central level, which sometimes contains educational information about nutrition. According to one of the senior officials of WDD, the nutrition information is mostly focused on vitamin A.

Program Evaluation

According to WDD (1993), the target beneficiaries have already gained some remarkable tangible benefits of the program. According to figures given by WDD (1993), 3,603 women's groups (16,255 rural women) had received collateral-free credit services amounting to NRs 45.75 million from the priority sector credit scheme by the end of June 1992. These loans have been utilised in income-generating activities. Similarly, a total of 51,890 rural people, of which 93% were rural women, have been trained in improved management practices and technical skills related to self-employment, environmental conservation and regeneration, appropriate technology, literacy skills, health and environmental sanitation, population education and family welfare. The WDD (1993) also reported that at the end of June 1992, 12,547 people received training on nutrition, including health and sanitation. However, the report does not say anything about the behavioural change of the target audiences.

Multi-sectoral Training in Nutrition for the Control of Vitamin A Deficiency

Project Background

With the financial assistance of the Netherlands Government, and with the FAO as the executing agency, Multi-sectoral Training in Nutrition for the Control of Vitamin A

Deficiency in Nepal was implemented in 1991[25]. The duration of this project was initially for a period of three years.

Based on the government's policy to control and/or prevent Vitamin A deficiency by the year 2000 to such an extent that it would no longer be a significant public health concern, this multi-sectoral training program aims to contribute to the improvement of nutrition; to prevent vitamin A deficiency and nutritional blindness; and to reduce child morbidity and mortality in Nepal through teaching and training (Shrestha and Hussain, 1993). According to Shrestha and Hussain (1993), the specific objectives for achieving the main goals of this project are to: (a) strengthen the teaching capability in nutrition and the prevention of vitamin A deficiency of the trainers of the field extension agents of the Ministries of Agriculture, Education, Health and Local Development, as well as of primary and secondary school teachers of the Ministry of Education; (b) strengthen the knowledge of school children of nutrition; (c) provide field extension agents from the four ministries (MOA, MOH, MOE, and MOLD) with the knowledge and skills to contribute to improved nutrition and the prevention of vitamin A deficiency in the respective communities where they work; (d) support the development and production of teaching materials as required by each sector for the training of trainers and extension agents; and (e) upgrade the teaching facilities of training centres for each of the four sectors (ministries) to allow improved quality of training.

Project Coverage and Target Beneficiaries

According to senior project staff, this project initially covered three districts, namely Siraha, Lamjung and Nuwakot. The target beneficiaries include school teachers, students, trainers and field extension workers who will inform the local communities of each district about how they can prevent malnutrition and vitamin A deficiency.

Project Activities

The main activities of the project are to conduct sectoral training, and to develop curriculum and training materials. Within the sectoral training activities, training on food

---

[25] Information based on the field notes and project brief prepared for the NNPCC meeting of July, 1991.

and nutrition is provided to government personnel who are involved in nutrition in sectoral ministries, such as health, agriculture, education and local development. Similarly, curriculum and training/teaching materials (e.g. audio-visual aids) are developed for the project's own training purposes as well as for use by educational institutions, such as schools and universities (see Appendix 6 for a summary of the project activities).

Communication Strategies

The main communication strategy of this project for communicating with the people at a grass roots level is to, first, create nutrition awareness among the government officials who are responsible for development of the district and village level. Government officials, such as district officers of the sectoral ministries, health workers, women workers, extension workers and facilitators, are first trained to communicate with the community in the food and nutrition-related information. Similarly, local people, for example, school and university students and farming leaders are used to disseminate food and nutrition information at the local level.

The inclusion of food and nutrition topics in the curricula of adult education, primary and secondary schools, and in some university courses is the other strategy of communication used to foster better dietary and nutrition practices in the community.

Project Evaluation

Although the formal evaluation of the impact of the project has not yet been undertaken, the notable achievements of this project as reported by Shrestha and Hussain (1993) are primarily: (1) the training of sectoral ministerial staff and staff of the university ; and (2) the development of training materials, posters and pamphlets.

It was reported that up until 1993, 2320 people had been trained. Of these, 398 people (agriculture officers including JTs and JTAs, and farming leaders) were from the Ministry of Agriculture, 1380 (primary and secondary school teachers, trainers, facilitators) from the Ministry of Education, 162 (master trainers, trainers, paramedics, village health

workers, community health workers) from the Ministry of Health, 244 (women development officers and women workers) from the Ministry of Local Development, and 136 (teachers) from the Tribhuvan University. During the same period, various training manuals, textbooks on nutrition (including Vitamin A) for school children in 1-5 grades, food composition tables, posters and booklets were published through the sectoral ministries and university.

This project emerges basically as a training program for the trainers in all the sectors involved in vitamin A deficiency control and appears to be a step forward in creating a systematic network of trained manpower in the field of nutrition. By virtue of this program, it can be expected that, at a grass roots level, villagers will ultimately receive good nutrition knowledge from trained people as opposed to the untrained individuals commonly assigned to village nutrition education in Nepal. In the JNSP project, the involvement of untrained staff was a frequently-reported problem (JNSP, 1988:16). Currently, there are very few trained people in the field of nutrition education in Nepal. This has become a great problem for the effective and efficient running of nutrition programs in the country (Gautam el. al., 1995: ii).

Similarities and Differences Among the Projects Reviewed

Some of the key similarities and differences among the projects reviewed are presented in Table 6-1. Except for the Nutritious Food Program (NFP) and the Joint Nutrition Support Program (JNSP), all the projects reviewed were fully oriented towards the resolution of vitamin A deficiency problems in Nepal. In the case of the NFP, the program focused its activities entirely on nutritious food distribution in various parts of the country while the JNSP aimed to develop a multi-sectoral approach to establishing a national network on nutrition activities by mobilising the sectoral ministries responsible for agriculture, health, education and local development.

Although all of the projects reviewed share the common goal of resolving nutrition problems, they have different specific objectives and activities targeted at different groups. For example, the Multi-sectoral Training Program targeted students, teachers

Table 6-1 : Summary of the Major Nutrition Projects Reviewed

Name of Program/ Project	Program/ Project Coverage and Main Focus Area	Project Target Group (s)	Main Project Activities	Main Project Communicators and Modes of Communication used in the Field	People's Participation and Communication Strategies	Program Impact on Nutrition
Nutritious Food Program (1972 - to present day)	31 Districts[26]. Resolution of existing nutrition problems e.g. Protein Energy Malnutrition.	Pregnant and lactating women, children, welfare organisations, and skills training centres.	Nutritious food distribution, and nutrition education oriented toward lactating women and children.	Main communicators: Health post officials. Main modes of communication: one-to-one, group discussions, cooking demonstrations, posters/ pamphlets, flip charts.	Local people involved only in the program's delivery of goods and services. Communication strategies based on one-way dissemination of pre-designed messages.	Due to its frequently changing food distribution strategies, there are no records of its impact on nutrition. However, it has been found effective in food distribution to its various target groups.
Joint Nutrition Support Program (1984-1988)	5 Districts. Improvement of infant and maternal nutrition status.	Children and women (Particularly infant/young children and pregnant and lactating women)	Development of a multi-sectoral approach to nutrition; capacity-building of staff members of the various sectoral ministries involved in the multi-sectoral approach, and inclusion of people's participation in the PHC approach to nutrition.	Main communicators: field staff members of all the sectoral ministries involved in the multi-sectoral approach (e.g. agriculture, health, education and local development). Main modes of communication: one-to-one & group discussions, posters and pamphlets, flip charts, and radio.	No people's participation in the planning and preparation of the project activities. Communication based on one-way pre-designed information.	Despite the multi-sectoral approach to nutrition, all the sectoral ministries involved not functioned well as expected. Thus, people were not well informed about the program and very few people participated at the partial level (e.g. in training and project delivery). Also, it would appear that the program beneficiaries were people for whom it was not intended.
National Vitamin 'A' Program (1993 - to present day)	12 Terai Districts[27]. Vitamin A deficiency control.	Children of 6 months to 5 years, and pregnant and lactating mothers.	Distribution of vitamin A capsules, nutrition education, and training of people involved in carrying out the program.	Main communicators: Female community health volunteers, HP staff, teachers/students, and social workers. Main modes of communication: one-to-one, posters/ pamphlets, and radio.	Local village women's involvement in project information dissemination. Communication based on one-way pre-designed messages.	No formative evaluation was made until 1994 except for some on the numbers of people trained and vitamin A capsules distributed.

---

[26] Figures included up to 1994.
[27] Figures included up to 1994.

Name of Program/ Project	Program/ Project Coverage and Main Focus Area	Project Target Group (s)	Main Project Activities	Main Project Communicators and Modes of Communication used in the Field	People's Participation and Communication strategies	Program Impact on Nutrition
Worldview/ Nutritional Blindness Prevention Pilot Project (1990-1993)	1 District (in 2 VDCs). Vitamin A deficiency control.	All households in general, and school children and women in particular.	Formation of mothers' groups, training /workshops for people involved in program implementation, kitchen gardening, and school activities.	Main communicators: Women volunteers, mothers' groups, and school teachers and students. Main modes of communication: one-to-one and group discussion, radio, posters and pamphlets, audio tapes, video and folk singers.	Local village women's participation in information dissemination. Communication strategy based on centrally-designed information.	It was believed that the rate of night blindness was reduced from 1.7% to 1% among school children.
Production Credit for Rural Women (1982 - to present day)	49 Districts[28]. Vitamin A deficiency control.	Rural women below the poverty line.	Income generation, non-formal functional education, mobilisation of local resources, child development and mother and child nutrition.	Main communicators: Women workers (Govt. field workers), and women's groups. Main modes of communication: one-to-one and group discussion, radio, and posters and pamphlets.	Local women's participation in discussions concerning the group activities supported by the project. Communication strategy based on centrally-designed information.	Up until 1993, the program was found to be effective in providing some benefits to its beneficiaries, such as the distribution of loans, implementation of skills development training, literacy and family welfare.
Multi-sectoral Training in Nutrition for the Control of Vitamin A Deficiency (1991-1994)[29]	3 Districts. Training on Vitamin A deficiency control.	School and university teachers and students; and government field extension workers.	Training in food and nutrition, and nutrition curriculum and materials development, especially oriented toward vitamin A problems.	The main communicators: Trainers for trainers. Main modes of communication: Group discussions, posters/ pamphlets and text books.	Pre-designed information disseminated by the trainers.	Until 1993, the project trained a large number of staff from the sectoral ministries, schools and university, and also developed various training manuals, posters, pamphlets and booklets for grass roots level nutrition communication.

[28] Figures included up to 1994.
[29] This project was initially designed for a period of 3 years.

and government officials to build up a pool of trained people and appropriate training aids and materials for nutrition development in the country.

The main communicators in all the projects, except for the Worldview/Nutritional Blindness project, were government personnel, such as field workers/extension workers (men and women), who were assigned to various district field offices. Such field workers/extension workers were mainly agriculture extension workers, health post staff, and local development field workers. In contrast, in the Worldview/Nutritional Blindness project, the local project staff members and women volunteers were the main program communicators. It should be noted that the National Vitamin A Program, like the Worldview/Nutritional Blindness project, also recruited and used some local women volunteers to communicate with villagers. The most common modes of communication in all the projects were one-to-one and group discussions, posters and pamphlets and radio. The Worldview/Nutritional Blindness was the only project that, in addition to the modes of communication mentioned above, also used audio tapes, video and folk media in its information dissemination activities. In all the projects, the information to be disseminated to the target audiences was centrally designed and developed. For example, though the target women's groups of Production Credit for Rural Women (PCRW) were encouraged to discuss their individual project activities within their groups, the information affecting their activities and development were centrally designed and developed by the project itself.

All the projects reviewed, in one way or another, seem to have made a contribution to the alleviation of hunger and malnutrition in the country. For example, the NFP, which eventually was converted to a program for food distribution for alleviating hunger or for subsidising food to needy institutions, rather than using foods in conjunction with nutrition education, has been evaluated as being effective in food distribution to its various target groups. It is true that hunger is the main cause of malnutrition, but the supply of food is not a solution unless the beneficiaries are well aware of the availability and utility of nutritious foods. Many critics believe that 'give-away techniques' are not suitable for resolving nutrition problems, and they also assert that such techniques seldom reach the neediest section of the population (Berg, 1973: 161).

While the JNSP was an important landmark in the history of nutrition development activities in Nepal because it established nutrition cells (units) in different sectoral ministries such as agriculture, education, and local development, it was, nevertheless, considered as not having achieved its objectives and was terminated after a few years. However, the nutrition cells (units) are still operational and assist in the development of multi-sectoral approaches to dealing with the malnutrition problems of the country. In addition, and more importantly, the JNSP was the only program that aimed at engendering local community participation in all stages of the program processes, including project planning and implementation.

Compared to other projects involved in combating vitamin A deficiency, the National Vitamin A Program (NVAP) is very important because of its wide national coverage. The Worldview/Nutritional Blindness project, on the other hand, being a pilot project related to vitamin A, was more limited in scope, covering only two village development committees. However, it is believed that this project was important in reducing night blindness in its project areas. While it is acknowledged that the Production Credit for Rural Women (PCRW) has helped rural women, particularly in skills development through training, literacy and family welfare, there is still no data and information on how this program is helping to fight malnutrition problems, such as vitamin A deficiency disorders.

Conclusion

Following the Fifth Plan, various national development plans gave priority to nutrition and emphasised a more 'multi-sectoral approach'. This approach was further re-defined and strengthened by the introduction of the *Joint Nutrition Support Program* (JNSP) in 1984. Among the projects reviewed, the JNSP can be considered as the prime-mover of nutrition development efforts in Nepal. It would appear that this program has provided the basis for a functional system to tackle the nutrition problems of the country. The sectoral ministries involved in agriculture, health, education and local development have

started to become engaged in nutrition and nutrition-related activities in various capacities in line with the multi-sectoral approach set up by the JNSP.

The respective project evaluation reports indicate almost nothing concerning the impact of the projects reviewed on the nutrition of the target beneficiaries. The ways of evaluating each individual project seem biased towards interpretations that fulfil the needs and objectives of donor agencies. It was, therefore, difficult to get a real sense of the impact of any given project on the resolution of nutrition problems from these evaluations.

Though the reviews of these projects do not specifically suggest the mobilisation of the target beneficiaries in all phases of the communication processes (design, development, dissemination and evaluation), the target audiences' participation for the success of the projects seems particularly important in the implementation phase. In order to investigate the notion of participation and to evaluate people's understanding of participatory approaches in various projects, the author of this thesis conducted field research in several regions where some of these projects reviewed were operated, and the results are presented in the chapters which follow.

In order to carry out the field research, objectives had to be set and hypotheses developed, together with appropriate research methodologies and data-analysis measures. The next chapter provides a full account of the research objectives, hypotheses, methodologies and data analysis measures.

CHAPTER 7 : FIELD RESEARCH OBJECTIVES AND METHODOLOGIES

The ensuing sections discuss the aims and hypotheses of the research, the selection of projects and districts, the selection of survey households and sample size, the research tools and respondents, the qualitative and quantitative data-analysis measures, and the demographic information on the survey districts, household sample populations, including their major similarities and differences, and the focus group design.

Research Aims and Hypotheses

The general aim of this study is to investigate participatory and non-participatory modes of nutrition communication in a village-based developing country, using Nepal as a case study.

The specific aims, required for achieving the general aim, are as follows:

1)   to investigate the existing nutrition communication policies, systems and strategies employed in Nepal.

2)   to examine and assess the major nutrition communication projects in Nepal in the light of the use of participatory and non-participatory approaches mobilising target audiences to support the nutrition projects;

3)   to ascertain which nutritional campaign media (whether technology-based or non-technology-based) are the most appropriate in relation to participatory or non-participatory approaches to nutrition communication;

4)   to assess people's attitudes, feelings, and beliefs in relation to participatory and non-participatory nutrition communication;

5)   to identify the modes of nutrition communication which are more likely to empower people to secure better nutrition and health.

The central thesis of this study is that, in the context of a developing society, participatory modes of communication are more likely to empower people to secure better nutrition and health. Other hypotheses relating to this main thesis are:

a) Participatory modes of communication are likely to be achieved if the communication process involved in nutrition projects establishes two-way horizontal relationships between project communicators and target audiences.

b) Participatory modes of nutrition communication are likely to be effective if the target audiences are included in communication planning, development, implementation and evaluation.

Identification of Survey Projects and Districts

In identifying the projects and districts to be studied, consideration was given to the representation of all the ecological regions of Nepal, that is, mountain (high hill)[1] , hill and terai belt (plain areas) (see Appendix 7). In reality, however, it was difficult to represent all regions due to the fact that Nepal has only a few major nutrition-related projects, and most of those are implemented in an 'ad hoc' way and do not cover all parts of the country. In some parts of the country, only a few micro-level projects linked to broader health, education and local development projects are to be found. Thus, due to the small number of relevant major nutritional projects, it was not possible to make a random selection of all locations.

The Worldview/Nutritional Blindness Prevention Pilot Project implemented in Gorkha district was selected as representative of nutritional projects in the hill region. In the terai region, an on-going major project, the National Vitamin A Program in the Nawalparasi district, was chosen. In the mountain region, it was more difficult to find any suitable projects as development projects related to nutrition are virtually non-existent there. However, the Rasnalu Village Development Committee (VDC)[2] of Ramechhap district, which had a nutrition-related component in the Production Credit for Rural Women program, was finally

---

[1] The terai belt is the low flat land areas (plain areas) of Nepal that run from east to west along the southern side of the country. Hill areas, on the other hand, are situated in the middle of the country with varying altitudes of 610 to 4877 meters above sea level, while mountain areas lie in the northern part. It is in the mountain areas that the highest peak of the world, 'Sagarmatha' or 'Mount Everest' is found (CBS, 1993: i-ii).

[2] VDCs are the development units of a district.

chosen as a nutrition project in a mountain region. It should be noted that while not all the parts of the Ramechhap district fall within the mountain region, Rasnalu VDC itself, the chosen research site, is within the mountain region, and it has the characteristic of high topography and remoteness that are found in other mountain areas.

In the Gorkha district, two village development committees (VDCs) namely Khoplang and Mirkot, covered by the Nutrition Blindness project as target areas, were selected for a sample survey. In contrast, for the Nawalparasi district, all the 77 VDCs were selected as survey sites since the Vitamin A Program covered the whole area of the district. In Ramechhap, all nine wards of Rasnalu VDC covered by the Production Credit for Rural Women program were included in the sample survey .

Selection of Survey Households and Sample Size

67 households in each district, totalling 201 households in all three districts, were selected for the survey interviews. Only those households with a pre-school child or children 5 years or under were selected. Since, as explained above, there were differences in the sample survey districts in terms of individual project coverage, the following principles were used for the selection of household samples:

a) Sample selection was based on a simple random sampling[3].

b) In making a random household selection in an individual district as a whole, all the Village Development Committees (VDCs) contained in the district were considered, and a maximum of three VDCs were selected. For example, in Nawalparasi district, where the sample project covered the entire district, all the 77 VDCs were included in the simple random sample selection and only three VDCs were then selected. On the other hand, if it was not the whole district but only one or two individual VDCs from which the household samples were to be drawn due to the limited coverage of the sample project, all the village units, such as the total wards in each individual VDC[4], were included in the selection of sample households.

---

[3] Simple random sample is a probability sample that gives each and every household, individual or subject in the population 'an equal chance of being drawn into the sample' (Downie, and Health, 1984:134).
[4] Each individual VDC has 9 wards.

101

For instance, in Gorkha and Ramechhap districts, unlike in Nawalparasi, each project selected for the survey interviews did not cover all the areas of the district, but only a limited number of VDCs. In this case, all the ward units (ward numbers) of each VDC covered by the project were considered for random selection of household samples.

c) In drawing a simple random sample of households from each sample VDC of a survey district, a list of names of villagers with their contact addresses, such as the ward numbers provided by the local development authorities, was used, regardless of the villagers' caste, creed, religion, ethnicity and income.

d) Before making sample household selection, consultations were held with the chairman of the District Development Committee (DDC) or Village Development Committee (VDC).

e) The random sample of households was further stratified to ensure adequate representation of nutritionally vulnerable groups, such as women and landless migrants. Thus, in each household, the respondent's wife was also interviewed. Similarly, in VDCs or wards where landless migrants were present, these were also included in the selection of household samples.

f) In order to have a proportionate distribution of the selection of household samples in two or more VDCs included in the survey districts, such as Nawalparasi and Gorkha, the following formula was used:

$$H_1 = \frac{h}{N} n \ldots\ldots\ldots\ldots\ldots\ldots \text{(1), where}$$

H_1= Number of households to be surveyed in a particular VDC

h = Total number of households contained in the particular VDC from which the number of households to be surveyed (H_1) is to be derived.

N= Total number of households in all VDCs included for sample survey in a particular district.

n = Actual number of households to be surveyed in each district

Research Tools and Respondents

This study used a combination of the following quantitative and qualitative research tools in the collection of field data and information:

- *Field Survey Research :* It is believed that field survey research helps to seek 'an understanding of what causes some phenomenon by looking at variation in that variable across cases, and looking for other characteristics which are systematically linked with it' (De Vaus,1991:5).

- *Focus Group Discussion:* It is 'a form of qualitative research for obtaining information about the feelings and opinions of small groups of participants about a specific issue or topic' (Basch, 1987 quoted in Schechter, Vanchieri and Crofton, 1990:253-254).

As both of the above tools may complement each other in data analysis, the household survey and focus group discussions in each sample survey district are analysed together, using both quantitative and qualitative interpretations and explanations.

For the field survey interviews, questionnaires were developed after the selection of survey sites and the first field visit of the author's. Finally, there were three separate sets of questionnaires one each for:

1. households;
2. government and non-government official; and,
3. community leaders (local political leaders, school teachers and local volunteers and project workers).

All the questionnaires were designed initially in English and then translated into Nepali for pre-testing and the final survey. They were pre-tested and revised accordingly before the final field survey took place from December 1993 to May 1994.

In the questionnaire for households, many of the questions were directed particularly towards the main theme of this research, such as the questions on the respondent's personal

knowledge of the food items promoted by the project, his/her participatory experience in the project activities, his/her experience in the modes of communication used by the project, perceptions and attitudes towards people's participation and appropriate modes of communication for better nutrition (see Appendix 8). Similarly, the questionnaires for government and non-government officials were focused on the investigation of the respondents' perceptions regarding the importance of nutrition in national development and of the participatory approach to nutrition communication in Nepal (see Appendix 9). The questionnaires for community leaders were concerned with the impact of the sample project on the villagers, who were the beneficiaries of it, and the respondents' perception about participatory and non-participatory modes of nutrition communication (see Appendix 10).

As far as the household field survey respondents were concerned, both males and females who were responsible for a household food and nutrition management and child care were interviewed in each household. Thus, there were 67 male and 67 female respondents in each survey district, Nawalparasi, Gorkha and Ramechhap, giving a total of 402 household survey respondents. Similarly, the respondents from each government and non-government organisation were taken mostly from the divisions or departments or branches or units responsible for nutrition development in Nepal (see Appendix 11). There were a total of 20 interviewees involved in the interviews (see Appendix 12). The community leaders interviewed all came from local institutions within the survey VDC and wards (see Appendix 13). These interviewees were involved in the sample project in various capacities, such as field workers, grass roots communicators and trainees. The number of these interviewees interviewed in each survey district was not pre-determined and was based on those members of each group who were approachable and available for interviews during the field questionnaire survey. A total of 20 people were involved in the interviews in all three districts surveyed (see Appendix 14).

The focus group discussions with village participants were related to the problems, issues and solutions of participatory and non-participatory nutrition communication. In each survey district, the focus group discussion was carried out after the completion of the household field survey. The expected number of participants in the discussions in each survey district was 10 to 15.

104

Apart from the field survey and focus group discussions, field notes on relevant observations, such as the points discussed informally with villagers and community leaders, were also used as the research tools for this study. Other forms of recording data, including video, photographs and tape recordings, were also used in the study. It should be noted that the interviews with the personnel of government and non-government organisations were audiotaped with the permission of the interviewees. Among the government interviewees, three people asked that the questionnaires be sent out to them for written answers as they believed that they could not readily spare the time for a personal interview.

Quantitative and Qualitative Data Analysis and Measurements

Quantitative and qualitative methods of data and information analysis were employed for numerical and non-numerical data and information processing. For the quantitative analysis, particularly the analysis of the household surveys, the windows-based computer program, SPSS (Statistical Package for Social Scientists), was used and, where applicable, statistical inferences are based on chi-square and rank order correlation tests.

For the qualitative analysis of the data and information arising out of the focus group discussions, interviews with government and non-government personnel and community leaders, a computer software package, NUD•IST (Non-numerical Unstructured Data Indexing Searching and Theorising), was used (QSR NUD•IST,1994). This software was used largely for systematically coding and indexing the data and information in order to perform descriptive and qualitative analysis.

For the quantitative data analysis of the field survey data collection, a number of measures were developed to note the responses of the sample population on key questions relevant to the projects. In developing such measures, ordinal scales reflecting the individual responses on the rank basis from the highest to the lowest were used in most cases. For analysis purposes, all the data thus ranked and ordered were assigned numerical values, such as 1 for the highest rank, 2 for the middle and so on.

A list of measures developed for each key question and the rank order is briefly outlined below.

- *Level of familiarity with the project:* All the answers to the question (refer to Appendix 8, Part B, question 24) concerning level of familiarity with the project surveyed were grouped into three main categories - highly familiar (know exactly what it is all about); reasonably familiar (know generally what it is all about); and not familiar (not familiar at all).

- *Level of people's participation in the project:* As with the level of familiarity, the level of people's participation in the project, as indicated by the respondents' answers to the relevant question (refer to Appendix 8, Part B, question 28), was also regrouped into various categories - full participation (taking part in all stages of project design, development, implementation and evaluation); partial participation (taking part in some stage of the project, usually at the implementation or beneficiary level); and no participation (no participation in any stage).

- *Level of the respondents' exposure to communication media :* A classification system indicating high, medium, low and none (no exposure at all) was designed to assess the level of respondents' exposure to project communication media (refer question 32 in Appendix 8, Part B). This classification system was based on the number of different media each respondent claimed to have been exposed to. Thus, those who answered they had had exposure to five or more types of project media were considered as highly exposed to project communication media and were placed into the 'high' category. Similarly, people who reported they had been exposed to 3 to 4, and 1 to 2 communication media were placed into 'medium' and 'low' categories respectively. Those not exposed to any form of communication media were assigned to the 'none' category.

- *Level of education:* For assessing the educational attainment of the survey respondents in accordance with question 57 (Appendix 8, Part C), university education was categorised as the highest level of education followed by high/secondary schools, and

primary school education. The 'None' category was assigned to those respondents who reportedly had no knowledge of reading and writing.

- *Level of knowledge acquired*: In order to assess the level of knowledge acquired from the project by each survey respondent, the level of understanding of each individual respondent of the key concepts of the main project information for the resolution of the particular nutrition problem in each district surveyed was selected as the main criterion of measurement. As the themes and information of the projects in all of the three districts surveyed were largely focused on vitamin A deficiency, the assessment of the level of individual respondent's knowledge was based on his/her level of understanding of the use of green leafy vegetables and yellow fruits (refer to questions 9 and 10, Appendix 8, Part A). To this end, the respondents' level of understanding of this issue was categorised broadly into four categories - good, satisfactory, poor, and none. Good understanding or knowledge was assumed if the answer/s to the question was/were very close to the main concept of the information. For example, 'to eat green leafy vegetables or yellow fruits for securing vitamin A necessary for maintaining good eyes', was considered an answer very close to the concepts of the information that advocated the use of green leafy vegetables and yellow fruits in all the three districts surveyed. Similarly, an answer that was not very close, but approximated the broad thrust of the concept or meaning of the information was considered as a satisfactory one. For example, the answer such as 'eating green leafy vegetables or yellow fruits for health' was categorised as satisfactory knowledge. Conversely, any irrelevant answer to the question, for example, 'eating green leafy or yellow fruits for 'cooling body' was considered as poor knowledge. Classified as 'no knowledge' were those answers expressed such comments as, for example, 'no idea about it, or can't say anything'.

- *Frequency of intake:* Assessment of how frequently the respondents ate both green leafy vegetables and yellow fruits (frequency of intake) was based on the levels for an entire household so as to eliminate discrepancies in the reports of intake made separately by the male and female respondents of each survey household. For assessment of household levels, only the responses of female respondents were taken into account as

females are culturally and traditionally responsible for household food preparation and distribution in Nepal. Thus, it is they who are the relevant people as far as household food intake information is concerned, and not male counterparts, who make very little contribution to food preparation and distribution in the household.

In the process of assessing frequency of intake of both green leafy vegetables and yellow fruits (refer to questions 10 &11, Appendix 8, Part A), a scale ranging from daily intake as the highest, to a weekly or less frequent intake as the lowest was used. In the case of the frequency of intake of yellow fruits, the data analysed were subject to the additional factor of the seasonal availability of the fruits, as the majority of people indicated that they ate yellow and other fruits quite frequently when they were in season.

It should be noted here that, while making correlation analyses of the level of intake of both green leafy vegetables and yellow fruits with other variables, intervening variables, such as the level of knowledge, the level of education, the level of participation, and the level of communication modes the respondents were exposed to, were used, and differences between male and female respondents analysed.

- *Modes of communication preferences:* Survey respondents' preferred modes of communication (refer to question 34 and 35, Appendix 8, Part B) were ranked in order of preference - first, second, third, fourth, and fifth. These ranks were developed to ascertain the most common preferences and the reasons for them.

Apart from the above measures, the respondents' level of agreement or disagreement with certain specific pre-designed statements pertaining to participatory communication (refer to question 49, Appendix 8, Part C) was measured according to the five-point Likert scale. Similarly, the respondents' views regarding other specific questions, such as the need and reasons for consultations with them in project development and implementation (refer to questions 51, 53, 54, and 56, Appendix 8, Part C), were also assessed according to the number of respondents to a particular answer. In this case, it was assumed that the higher the number, the better the result for supporting the particular

answer to the question. It should be noted that the perceived meaning of participatory nutrition communication by villagers was discussed only with the focus group participants.

Use of statistical correlations: As stated above, statistical inferences of field survey data were made using correlation tests that help assess the strength or direction of relationships and associations between the two variables (Sanders, Murph, and Eng, 1980:339, Downie and Health, 1984: 93, and Monette, Sullivan, and Dejong, 1990:410; Rowntree,1987:164). Two types of correlation, namely Spearman Rank-Order Coefficient (ρ) and Gamma Correlation (γ) were used[5]. The variables to which such correlation tests were applied include : the level of familiarity, the level of participation, the level of education, the level of modes of communication the respondents exposed to, the level of knowledge of green leafy vegetables and yellow fruits, and the frequency of intake of them.

It should be noted that the Spearman Rank Order Correlation was used only with those variables that were not dichotomous and were a question of rank order. For dichotomous variables the Gamma correlation method (γ) was used to test the relationship between one variable and another. For example, the variable, 'participation', had only two values: 'partial participation' and 'no participation'; thus, in this case, it was considered as a dichotomous nominal variable, and Gamma correlations were used to test its relationship with another variable. De Vaus (1991:171) notes:

---

[5]It is believed that the Spearman Rank-Order Correlation Coefficient is 'the most widely used of the rank correlational methods' (Downie and Health, 1984:111), while the Gamma is 'the most frequently used measure of ordered cross-tabular association'(Bohrnstedt, and Knoke,1988:313), But unlike the Spearman Rank Order Correlation, the Gamma 'does not take into account any of the tied scores' and 'tends to overstate the strength of the relationship' (Monette, Sullivan, and DeJong,1990:412). However, like the Spearman Rank Order Correlation, its relationships or associations range between + 1.00 and - 1.00 with zero indicating no relationship (Bohrnstedt and Knoke, 1988: 313). In this study, both the Spearman Rank Order Correlation, r or ρ (rho) and the Gamma Correlation or γ (gamma) were used to indicate the strength and direction of relationships between the variables tested. They do not, however, necessarily imply any causal connection between the variables tested (Rowntree, 1987:172; Rees,1991: 143). In this study, the results of both the Spearman Rank Order Correlation, r or ρ (rho) and the Gamma correlation or γ (gamma) were interpreted on the basis of the guidelines indicated by Rowntree (p.170) as follows:

     0.0 to 0.2 very weak, negligible
     0.2 to 0.4 weak, low
     0.4 to 0.7 moderate
     0.5 to 0.9 strong, high, marked
     0.9 to 1.0 very strong, very high

If one variable has only two categories we can ignore its level of measurement and let the other variable determine the choice of the co-efficient. For example, if a dichotomous nominal level variable (e.g. gender) is crosstabulated with an ordinal level variable, we can treat them both as ordinal and select the appropriate statistics (gamma). In other words we can treat a dichotomous variables as being at the same level of measurement as the variable with which it is crosstabulated and select correlation co-efficients accordingly.

In interpreting the results of the Spearman Rank Order and Gamma correlations, correlation coefficient significance was tested at significance level ≤ 0.05 based on a two-tailed test[6]. A two-tailed test was used to know 'simply whether or not a population parameter differs significantly from an observed sample statistic (Reid, 1987: 102). In addition to this, some assumptions - such as the bigger the size of the coefficient, the less likely it is to have occurred by chance; and the more pairs of values in the sample, the more likely a similar correlation coefficient in other samples (and in the population as a whole) (Rowntree, 1987:164-166) - were made to interpret the correlation results. For ranking the preferred modes of communication, as indicated by survey respondents, Kendall's Coefficient of Concordance (W) was used in this study.

Use of nodes: For the analysis of the qualitative data relating to the focus group discussions, interviews with government and non-government personnel and community leaders, various nodes were developed using the computer software package NUD•IST, 1994. Nodes are an important means of qualitative data analysis as they are 'the ways of storing ideas and exploring documents, finding material in any combination of categories, expressing questions and holding the results of searches'(QSR NUD•IST, 7-2:1994). For example, while doing the data analysis of interviews with government and non-government officials, 'nutrition development' was considered as a node, and any view or idea which came from raw data

---

[6]The Spearman Rank Order Correlation significance was based on SPSS calculation while the Gamma Correlation significance was computed with Microsoft Excel in order to derive z value.
For z value computation the following formula, as suggested by Ott, Mendenhall and Larson (1978: 363-370), was used.

$$\text{Test statistics } z = \gamma' \sqrt{\frac{N_s + N_r}{n(1 - \gamma'^2)}}$$

γ' = computed value of Gamma.
N_s = number of concordant pairs of observations (ordering is the same on both variables).
N_r = number of discordant pairs of observations (ordering is reversed for the two variables).
n = number of cases

(e.g. an interviewee's textual answer), was, if considered relevant, stored as a category on it for data analysis and interpretation.

Limitations of the Data Analysis

In the analysis of the data, there were some obvious limitations. For example, in regard to the analysis of a project's communication, the level of communication the respondents were exposed to was based only on the number of project communication media actually reported by the respondents. In this case, therefore, the data is constrained by the degree to which the respondents were able to recollect the number of project media they were exposed to. Similarly, for the analysis of the impact of communication on the respondents' level of knowledge of the foods promoted by each individual sample project, there was no basis for comparing the respondents' current and prior knowledge. Only the current level of knowledge was measured. No dietary survey[7] to assess the actual frequency of intake was carried out due to time and financial constraints. The survey relied only on the respondents' reports for this information.

Use of Secondary Data

Secondary data, such as information about communication theory, policies, programs, and factual information on the specific projects surveyed, were collected either from : libraries, in the form of books, reports, journals, CD ROMs; relevant government, non-government and international organisations; personal interviews; and the Internet.

Delineation of Operational Definitions and Terminologies

Apart from the conventional meanings of terms used in the study of communication, some operational definitions of important terms frequently used in analysing the field data and elsewhere in the thesis were made in order to highlight the exact meanings assigned to them in the context of this thesis. Such definitions are listed in the glossary.

---

[7] A dietary survey is designed to assess the food eaten by a people or community over a period of time and can be assessed by weighing and measuring every thing consumed at each meal. A recall method is also used by asking respondents what he/she ate the day before the survey or on a particular day (Davidson, Passmore, Brock, and Truswell, (1979: 474-475)

111

Demographic Information on Survey Districts

Table 7-1 which follows summarises the demographic characteristics of the three survey districts: Nawalparasi, Gorkha, and Ramechhap.

Nawalparasi

Nawalparasi is one of the plain districts of Nepal close to the Indian border (see Appendix 15). It is one of the major food production districts of the Western Development Region[8] of Nepal and covers a land area of 2,162 square kilometres. Of the total population

Table 7-1 : Demographic Information on Survey Districts

District	Ecological Belt	Population (1991 Census)	Literacy (%)	Mainstay	Total Number of VDCs
Nawalparasi	Terai (Plain Area)	436,217	40.0	Agriculture	77
Gorkha	Hill	252,524	43..3	Agriculture	51
Ramechhap	High Hill	188,064	30.0	Agriculture	55

of 436,217, 81.8 % are estimated as being 6 years of age and over (CBS, 1993:7). The ratio between male and female rates of literacy is estimated at be 2:1 (CBS, 1993: 14)[9]. This district produces substantial amounts of surplus foods for sale to food-deficit areas of the country.

Gorkha

Gorkha is one of the hilly districts situated almost in the middle part of Nepal in the Western Development Region (see map in Appendix 15). It covers a land area of 3,610 square kilometres (CBS, 1993:6). It is a historically famous district that is held in high regard because of its successful reunification of petty states into the nation, Nepal. It is also famous

---

[8] Administratively Nepal has been 'divided into 75 districts. The districts have been regrouped into five development regions to promote all-round development of the country' (CBS, 1993: ii). Such development regions are: Eastern Development Region; Central Development Region; Western Development Region; Mid Western Development Region; and Far Western Development Region.

[9] The literacy rate among males and females for all the districts surveyed is calculated on the basis of the reported number of literate and illiterate males and females population only. Thus the number of male and female population who did not report either is excluded on calculation.

as the home state of Gorkha soldiers who enjoy an international reputation for their courage and resilience (District Development Committee, 1991:2).

It is estimated that of the total population of 252,524, 82.6 % are 6 years of age and over (CBS, 1993: 6 &13). The ratio between male and female rates of literacy is about 2:1. Though the main source of income of Gorkha district is agriculture, it also produces medicinal herbs in the upper part of this district (District Development Committee, 1991:3).

Ramechhap

Ramechhap is one of the districts located in the Central Development Region of Nepal (see Appendix 15). It is a hilly district and covers around 1546 square kilometres of land areas (CBS, 1993: 6). Of the total population, estimated to be 188,064 according to the 1991 Census, 82 % are 6 years of age and over. The ratio between male and female rates of literacy is almost 4:1 (CBS, 1993: 6 &12). In addition to agriculture, medicinal herbs are also a good source of income for the people of Ramechhap, especially for those who live in the upper mountain areas (WDD/FAO, 1994:11).

Household Sample Population: Similarities and Differences

Out of the 77 VDCs of Nawalparasi district, only three VDCs, namely Pali, Manari and Nayabelhani, were chosen for survey interviews. Of these, Nayahelhani has a high concentration of landless migrants and was included deliberately for that reason, while Pali and Manari were chosen randomly from the remaining 76 VDCs of the district[10].

In order to have a proportionate distribution of household samples for all the VDCs selected for survey interviews, the formula outlined earlier was used. Based on this formula, in Nawalparasi district, 9, 16 and 42 households were selected for the survey in Pali, Manari and

---

[10] The survey team went first to the Nawalparasi district. As a matter of courtesy, as well as being a means of explaining the intentions of the survey in the district, the team met first the Chairman of the Nawalparsi District Development Committee. During the meeting, the Chairman insisted that the team include in the survey only particular indigenous villagers that were, according to him, very poor. It might be the case that he wanted the team to internalise the reality of the nature and dimension of the poverty affecting nutrition. However, as the survey team had different objectives to achieve, it followed the principle of random sampling procedures in selection of survey sites and households.

Nayabelhani VDCs respectively[11]. Accordingly, the same formula was followed for surveying the VDCs of Gorkha district, namely Mirkot and Khoplang. As a result, 35 and 32 households respectively were selected from the total number of 1100 and 1030 households of these two VDCs.

During the selection of 35 households from Mirkot VDC, the VDC chairman, some ward representatives and social workers previously involved in the project activities strongly suggested that the survey team include Ward 5 and Ward 8. In the light of the village situation and local experience, they believed that these two Wards were the best survey sites for cross-sectional representation of all ethnic groups, including the landless migrants of the Christian religion who had recently migrated to the district. It was also noted that, except for these two VDCs, there were no other VDCs with landless migrant groups in the whole Gorkha district, and that a random selection might jeopardise the representation of these migrants in the survey interviews. Thus, ward 5 and 8 were deliberately included in the survey. On the other hand, in Khoplang, 32 households were selected randomly from amongst all the wards of the VDC.

---

[11] A working example of calculation for deriving the number of households to be surveyed in Nawalparasi district is highlighted as follows:

Formula

$$H_1 = \frac{h}{N} n \quad \ldots\ldots\ldots\ldots\ldots (1), \text{where}$$

H_1 = Number of households to be surveyed in a particular VDC

h = Total number of households contained in the particular VDC from which the number of households to be surveyed (H_1) is to be derived.

N= Total number of households in all VDCs included for a sample survey in a particular district.

n = Actual number of households to be surveyed in each district

Base data

Total number of VDCs chosen in Nawalparasi district: 3 (Pali, Manari , and Nayabelhani).

Total number of households in each VDC according to the VDC office: Pali, 96; Manari, 176; and Nayabelhani, 448

Total number of households in all the survey VDCs (Pali, Manari and Nayabelhani): 720.

By substituting the above data to the formula, for example, in the case of Pali VDC, the number of households to be surveyed (H_1) is calculated as:

$$H_1 = \frac{96}{726} 67 = 8.85 \text{ (approximately 9 households)}$$

Using the same formula with different data, there are 16 and 42 households to be surveyed in Manari and Nayabelhani VDC respectively.

In Ramechhap district, the household sample selection procedure was quite simple as this district did not have two or more VDCs involved in the project which had been selected for the survey interviews. Thus, all 814 households of a total of 9 wards of Rasnalu VDC were part of the simple random household selection.

As a result of the above procedure, 67 households in each sample district were selected, giving a total of 201 households for all three survey districts. Similarly, there was a total of 402 respondents, comprising two respondents, one male and one female, from each sample household who were directly or indirectly responsible for the preparation and distribution of food in the household.

In order to highlight demographic information about the actual respondents interviewed during the field questionnaire survey, some important demographic aspects, concerning this study, such as the age of respondent, education level, marital status, number of children, occupation, and the household's communication appliances are enumerated in Table 7-1. Some salient features of the demographic information given in this table, which shows the similarities and differences among the survey districts, are summarised as follows.

Age:
First of all, it is interesting to note from Table 7-2 that there is a similarity in the age profile of the respondents from Nawalparasi and Gorkha districts. Both districts have a comparatively high percentage (72.5% and 68.6% respectively) of respondents under 35 in the survey. Ramechhap significantly differs from these two in that just over half (50.7%) the respondents are 35 or older.

Sex:
The sample was stratified by gender to ensure equal gender representation, with both husband and wife in each household being interviewed.

Table 7-2: Demographic Information on Household Sample Population Surveyed[12]

	Nawalparasi (%) n = 134	Gorkha (%) n = 134	Ramechhap (%) n = 134	All Districts (%) n = 402
Age:				
Less than 25	17.2	32.8	17.2	22.4
25-29	28.4	20.1	14.9	21.1
30-34	26.9	15.7	17.2	19.9
35-39	9.7	14.9	24.6	16.4
40 & Over	17.9	16.4	26.1	20.1
Sex:				
Male	50	50	50	50
Female	50	50	50	50
Caste:				
Brahmin	18`.7	18.7	0.7	12.7
Chhetry	8.2	16.4	10.4	11.7
Baishya	60.4	59.0	86.6	68.7
Shuddra	9.0	3.7	2.2	5.0
Other	3.7	2.3	0	2.0
Religion:				
Hindu	95.5	52.2	68.7	72.1
Buddhist	2.2	0	31.3	11.2
Islam	2.2	0	0	0.7
Christian	0	47.8	0	15.9
Occupation:				
Professional/Technical	6.0	8.2	0.7	5.0
Administrative/Clerical	2.3	0.7	0.7	1.2
Business workers	8.3	2.2	0.7	3.7
Farm workers	48.9	79.1	86.6	71.6
Production Labourers	9.0	0.7	1.5	3.7
Other	25.6	9.0	9.7	14.7
Education:				
University level	6.7	3.7	0.7	3.7
High school/Sec. School	17.2	7.5	3.0	9.2
Primary/Elementary	30.6	23.9	23.1	25.9
No education	45.5	64.9	73.1	61.2
Marital status:				
Married	98.5	100	99.3	99.3
Other	1.5	0	0.7	0.7
Number of children from 0 to 5 years:				
0 to 1yr.	47.0	61.2	40.3	49.5
2-5 yr.	53.0	38.8	59.7	50.4
House structure:				
Stone/Brick	62.7	24.6	99.3	62.1
Wooden	37.3	75.4	0.7	37.8
Household Commn. Appliances:				
Radio	52.2	54.4	52.2	53.0
Television	9.0	0.7	0.7	3.5

---

[12] Information based on the field survey data.

Caste:[13]

In all the survey districts, the Baishya caste makes up the largest percentage of the survey population, recording the highest proportion (86.6%) being in Ramechhap and the lowest in Nawalparasi (60.4%) and Gorkha, (59.0%). Although there are very few Brahmins (the priest and guru caste) in Ramechhap (0.7%), the Chhetry (the ruling and warrior caste) and Brahmin together are the next most represented, after Baishya, in the survey population: they account for about 26.9%, 35.1%, and 11.1% in Nawalparasi, Gorkha and Ramechhap respectively. In comparison, Shuddra (untouchables) and others (unstated castes) respectively accounted for a very low percentages of the survey population in all the survey districts. Given the high percentage of Baishya in the survey population of all the districts surveyed, it would appear that all of the areas surveyed in each district have a large Baishya population[14].

Religion:

Hinduism has traditionally been the main religion of Nepal. 85.5% of the population is Hindu, 7.8% Buddhist, 3.5% Muslim and 2.2% others (CBS, 1993). However, in the survey interview sample, there is a higher than average proportion of Buddhists in Ramechhap (31.3%). This is due to the fact that in Rasnalu VDC, which is the focal area of Ramechhap in this study, there is a large number of Sunuwar[15] people, who are generally Buddists. Similarly, the other most notable difference from national trends is the very large proportion of Christians (47.8%) in the Gorkha sample. The main reason for this is that Mikot, one of the two survey areas selected in Gorkha, is heavily populated by landless migrants from different parts of Nepal. These migrants were recently converted to Christianity by the Christian Missionaries and resettled in Gorkha.

---

[13] Caste is based on a four-fold classification of Hindu society such - Tagadhari, Matawali, Pani na calne, and untouchables. Brahmin and Chhetry castes system belong to the Tagadhari category, who wear sacred thread. Baishya caste comprises Matwali and Pani na calne (alcohol-drinking and low service tribal groups from whom water cannot be accepted by people of higher castes). In contrast, untouchables belong to the Suddra caste (Sharma, 1978: 3-4).

[14] Except for Gorkha, Baishya population is the highest in all survey areas followed by Brahmin, Chhetry, Suddra and others (CBS files, Population Census, 1991). In Gorkha, however, sample population of Baishya appeared to be dominant due to the purposive sampling that included landless migrants who were mostly Baishyas.

[15] Sunuwar is an ethnic group in Rasnalu VDC that constitutes 31.5% of the total VDC population of 3833 (CBS files-Population Census-1991.

Occupation:

As Nepal itself is an agricultural country, agriculture is the main occupation in all the districts surveyed. However, in Nawalparasi, the percentage of people involved in agriculture (farm work) is only 48.9%, which is significantly lower than that of Gorkha and Ramechhap (79.1 and 86.6 % respectively). In contrast, the percentage of people involved in other occupations in Nawalparasi, such as casual and seasonal labour, street hawking and porterage, is 25.6%, which is significantly higher than that of Gorkha and Ramechhap. One of the main reasons for this may be that Nawalparasi is one of the main districts for the resettlement of landless people in Nepal, with Naya Belhani VDC having a particularly large concentration of landless migrants.

Education:

Among all the three districts surveyed, the respondents of Nawalparasi are found to be more educated than those of Gorkha and Ramechhap in that a comparatively lower proportion of people have no education (45.5%) and a higher proportion have secondary and higher education (23.9%). Ramechhap has the lowest proportion of people with secondary and higher education (3.7%), and only comparatively few people have even primary education (23.1%). This means that only a quarter of the Ramechhap sample have some level of education.

Marital Status:

Almost all of the people of the sample population are married, except for a few cases where couples have voluntarily separated in Nawalparasi and Ramechhap, accounting for about 1.5% and .7% of the sample population respectively.

Number of children from 0 to 5 years old:

Households in Ramechhap have a higher proportion (59.7%) of children aged from 2 to 5 years followed by Nawalparasi (53%). In contrast, households in Gorkha (61.2%) have a higher proportion of children in the youngest age range (0-1 year).

House structure:

In Rasnalu, most residents have stone houses with slate roofs. One the other hand, in Nawalparasi and Gorkha, many respondents live in wooden houses with straw roofs. In Gorkha, three quarters of the sample group live in wooden houses, while just over a quarter and half of the population do in Nawalparasi. In Nepal, a timber house with a straw roof is traditionally considered a temporary house.

Household communication appliances:

Over half the respondents in each district reported that they owned a radio. However, virtually none of the respondents owned a television, other than in Nawalparasi, where 9% of the respondents reported that they owned television sets.

Although there is no comprehensive and concrete national study of household ownership of radios in Nepal, an 'ad hoc' nationwide survey study in 1988, carried out by the Centre for Economic Development and Administration (CEDA)[16], suggested that 'about one-third of the households in Nepal possessed radio sets' (New Era, 1993:10). However, the latest data indicates that almost 90% of households own radio sets (CBS, 1994). With regard to television ownership, it is estimated that there is around one television per 355 people in Nepal (Asiaweek,1996:60). Television ownership is, therefore, far lower than radio ownership. One of the main reasons for this is the comparatively recent arrival of television in Nepal. Television transmission only began on 29 December 1985, whereas radio broadcasting first started over 45 years ago.[17] Currently, radio has a nationwide coverage of 100 % while national television (Nepal Television) estimates its coverage to be only about 34 % at 1994 (NTV, 1994). Many people can afford the cost of a radio but television sets are still beyond the means of most rural people[18].

---

[16] CEDA is a research body of the Tribhuvan University, Nepal.

[17] According to Nepal Television (NTV), a test program was initiated in January 1984. Almost a year later on 29, December, 1985, a two-hour daily evening program, including 10 minutes of news, started to go to air officially. Conversely, radio in Nepal began operating with the establishment of Radio Nepal in 1951 (New Era, 1993:1)

[18]Though many cannot afford to buy their own television sets, some people living close to the Indian border are in a better position to buy cheap televisions in the neighbouring Indian market where black and white

All the field areas surveyed would appear to share certain common problems, such as high illiteracy, dependence solely on agriculture, and lack of access to information. Ramechhap, however, appears to be particularly disadvantaged by its very high illiteracy levels, lower educational levels and almost complete dependence on agriculture.

Focus Group Design

With the support of each Village Development Committee Chairman, and the help of social workers in each district, interested village men and women were invited to participate in focus group discussions (see photographs in Appendix 16). In each district, there were more participants than were invited. In Nawalparasi there were 21 participants, comprising 11 women and 10 men, while in Gorkha, there were 31 participants with 12 women and 19 men. Similarly, there were 51 participants in Ramechhap, a very large number, of which 28 were women and 23 were men. One of the main reasons for such large numbers participating was that this was, for many, the first opportunity for them to express their feelings and concerns to outside people about nutrition projects in their areas. It should be noted that, in all three districts, the focus group participants comprised men and women who directly and indirectly participated in the project. In Ramechhap, men were not directly involved in the Women's Development nutrition program, but they participated in the focus group as indirect participants or supporters of the program.

The focus group participants were 20 - 60 years old with the exception of Gorkha, where some young girls below 20 also took part. In all the focus group discussions, a guideline questionnaire was used (see Appendix 17) to help stimulate discussion among the participants. The results of the focus group discussions, as has been stated earlier, are integrated with the household survey data of each district surveyed.

---

televisions of various local brands and quality are available at affordable prices. It is evident from the experience of many respondents from Nawalparasi that people who save money to buy either a radio or a television take advantage of the Indian border market to avoid high prices in Nepal. People who live far from the Indian border, such as the people of Gorkha and Ramechhap, have to depend on local Nepali markets. As a result, very few people can afford to buy a television.

The ensuing chapter analyses the survey data of Nawalparasi district, where vitamin A deficiency was identified by the National Vitamin A Program as the major nutritional problem, especially among children, despite the fact that, because it is part of the fertile and productive terai areas (plain areas) of Nepal, this district can potentially produce sufficient vitamin A-rich vegetables and fruits for all its inhabitants.

CHAPTER 8 : NAWALPARASI DISTRICT- NATIONAL VITAMIN A PROGRAM

As stated in chapter 7, Nawalparasi was the first district to be studied. The household survey began with consultations with the Pali Village Development Committee (VDC), near the Indian border, followed by the Manari and Nayabelhani VDCs.

Nawalparasi district was among the first eight target districts selected for nutritional intervention by the National Vitamin A Program (NVAP) in 1993. The first week long vitamin A campaign was held in this district in mid-October, 1993. In each VDC area, a Female Community Health Volunteer (FCHV) was assigned to distribute vitamin A capsules and deliver 'vitamin A nutrition messages' (MOH, 1993:5). Similarly, local school teachers, community health volunteers and political leaders received training in vitamin A from the program.

The first section of this chapter deals with the analysis of the data from the household survey and focus group discussions in Nawalparasi district. Subsequent section focus on the analysis of the data from community leaders (local political leaders, school teachers and women volunteers) involved in the National Vitamin A Program.

Familiarity with, and Participation in, the Program

Despite the fact that Nawalparasi was a significant target area for the NVAP, 86.6% of the 134 survey respondents reported that they were completely unfamiliar with the program (Table 8-1). 8.2% of the respondents had what has been defined as 'reasonable' familiarity and were able to explain what the program was generally all about. Many of these respondents believed that the program was just concerned with the distribution of vitamin A. The other 5.2 % of the respondents were found to be 'highly' familiar with the program and were able to state that the program was for vitamin A distribution as

Table 8-1 : Program Familiarity and Participation in Nawalparasi

Level of familiarity (n = 134) *Frequency (%)*			Level of participation (n = 134) *Frequency (%)*	
High	Reasonable	None	Partial	None
7 (5.2)	11 (8.2)	116 (86.6)	5 (3.7)	129 (96.3)

as well as for educating village women on appropriate use of green vegetables and yellow fruits.

The level of participation in the program was even lower. Despite the fact that 13.4% of the respondents had some familiarity with the program, only 3.7% had participated in the program and this was only at the level that has been categorised as 'partial' participation. This partial participation involved benefiting in a tangible way from the program's assistance in the implementation phase of the program which was, in this case, the receipt of vitamin A capsules for their children. The remaining 9.7% of the respondents familiar with the program reported that they did not want to participate in the delivery of vitamin A as they were not fully assured of its usefulness. This may be an indication that village people are sceptical of new cultural values unless they are fully convinced of their benefits.

It was surprising to note that most of the participants of the focus group discussions also indicated their unfamiliarity with the program. In answer to the question as to why many of participants were not familiar with the program, a majority of the participants claimed that 'nobody from the program came to approach them'. One of the male participants angrily stated that instead of making people familiar with the program, the program was creating confusion among the villagers. He recalled and related an incident that had occurred a short time earlier in Ward 8:

> .. just a few months before this survey, I was as usual returning to my home from my work at around six p.m . Shortly before reaching my village, I saw some people gathering in one Chautary (public place). I then out of my curiosity joined the gathering and asked what was happening there. With great surprise, I finally came to know that all of them who were gathered there expected to see the vitamin A

123

program people who were supposed to come there and distribute money to provide assistance to the poor children. However, at the end of the day, on the contrary, their hopes were shattered by the program people who instead of distributing money just informed them about the date of vitamin A capsule distribution to the needy children. What an incredible mess in the project information system !

This incident suggests problems in program communication among the villagers, no matter whether this particular incident was caused unintentionally by the program itself or by someone unrelated to the project activities or team.

All of the 13.4% of respondents to the survey who reported being familiar with the program had been exposed to some levels of program communication. 11.9% of the respondents had been exposed to a low level of program communication and 1.5% to a medium level (Table 8-2). The most common source of communication mentioned by many respondents was the wall bulletin (poster-like printed material) that had occasionally been seen stuck up on the wall as information to all the village people about the vitamin A distribution schedule (Appendix 18). It should be highlighted here that of the 13.4% of respondents familiar with the program, more than half has no formal education and could not read or write.

Although the number of respondents familiar with the program was very small, an attempt to investigate the relationship between this and other variables, such as the level of participation, level of education, and level of communication the respondents were exposed to, revealed that there was a significantly high correlation between the level of familiarity and the level of communication the respondents were exposed to (ρ .99 at the significance level .00) and the level of participation (γ .95) (Table 8-2). At the same time, there is virtually no significant correlation with the level of education. In other words, the level of communication the respondents were exposed to and their

Table 8-2 : Level of Familiarity By Level of Participation, Education, and Communication in Nawalparasi

Level of familiarity	Level of participation *Frequency (%)*		Level of education *Frequency (%)*				Level of communication exposed to *Frequency (%)*			
	Partial	None	University	High School/Secondary	Primary/Elementary	None	High	Medium	Low	None
High	2 (1.5)	5 (3.7)	0	3 (2.2)	2 (1.5)	2 (1.5)	0	0	7 (5.2)	0
Reasonable	3 (2.2)	8 (6.0)	2 (1.5)	0	4 (3.0)	5 (3.7)	0	2 (1.5)	9 (6.7)	0
None	0	116 (86.6)	7 (5.2)	20 (14.9)	35 (26.1)	54 (40.3)	0	0	0	116 (86.6)
n	134		134				134			
Correlations										
Rho (ρ)	-		0.06				0.99			
Gamma (γ)	0.95		-				-			

participation in the program are very strongly related to the level of familiarity, whereas the level of education is not significant and is not related to the level of familiarity with the program.

The five (3.7%) respondents who had 'partial' participation in the program were almost all educated and exposed to what has been described as 'medium' and 'low' levels of program communication (Table 8-3). A Gamma correlation test suggests that there is a very high significant correlation between the level of participation and level of communication the respondents were exposed to (γ .99), but no significant correlation between the level of participation and the level of education (γ 54).

It was evident from the focus group discussions that the low level of participation in the program was largely due to a lack of communication with the villagers. Many focus group participants stated that they had not known anything about the activities of the program and that the program had done nothing for their village. They further stated that due to a lack of information dissemination many people did not get the benefit of vitamin A distribution.

Lack of information was a problem for many villagers; only those who managed to get information by some means had a chance of getting the benefits of vitamin A distribution, as one female participant commented:

> In the last Kartik, 2050[1] (October-November, 1993), vitamin A was distributed for
> children. I was, by chance, very lucky to know about it from someone whom I met
> at the local market while shopping. Otherwise, I would've missed it, for there was
> no information at all in my village about it.

The participants of the focus group interview unanimously agreed that they had not yet experienced any information flow down to the village about the distribution of vitamin A capsules. Despite this, it should be noted that many of them nonetheless possessed an awareness of the importance of green leafy vegetables and yellow fruits. A point of view expressed by one of the male participants, but shared by all in the focus group, is an

---

[1] Nepali calendar year.

Table 8-3 : Level of Participation By Education, and Communication in Nawalparasi

Level of participation	Level of education Frequency (%)				Level of communication exposed to Frequency (%)			
	University	High School/Secondary	Primary/Elementary	None	High	Medium	Low	None
Partial	1 (0.7)	2 (1.5)	1 (0.7)	1 (0.7)	0	1 (0.7)	4 (3.0)	0
None	8 (6.0)	21 (15.7)	40 (29.9)	60 (44.8)	0	1 (0.7)	12 (9.0)	116 (86.6)
n	134				134			
Correlations								
Gamma (γ)	0.54				0.99			

127

example of this awareness : 'Nobody has come to the village yet to tell us something about our health. But we have heard from the radio that we should eat carrots, papayas, and other yellow fruits and green leafy vegetables for our eyes'.

It would appear from the above statement that the villagers are, to some extent, exposed to radio information. Such exposure could lead to a knowledge gain in nutrition, but may be insufficient to bring about changes in eating behaviour.

Knowledge of the Program's Nutritional Information

Despite the fact that most respondents were unfamiliar with, and did not participate in the program, which focused its campaign mainly on the promotion of green leafy vegetables and yellow fruits, as many as 56 % of the respondents demonstrated a good level of knowledge about green leafy vegetables (refer Table 8-4). A further 18.7 % demonstrated what has been described as 'satisfactory' knowledge. This means that almost three-quarters of the total number of respondents had either good or satisfactory knowledge about green leafy vegetables.

Table 8-4 : Knowledge of the Nutritional Value of Food in Nawalparasi

	Level of knowledge (n = 134) Frequency (%)			
Food	Good	Satisfactory	Poor	None
Green leafy vegetables	75 (56.0)	25 (18.7)	17 (12.7)	17 (12.7)
Yellow fruits	37 (27.6)	37 (27.6)	21 (15.7)	39 (29.1)

In order to see the relationship between the level of knowledge about green leafy vegetables and the level of participation, level of education and level of communication the respondents were exposed to, correlations were made. The results in Table 8-5 clearly suggest that there is no significant correlation with the level of participation (γ .57) and with the level of communication the respondents were exposed to, but a low, significant correlation with the level of education (ρ .29 at the significance level .001). It seems reasonable to say that, in comparison with other variables, the reported

128

Table 8-5 : Level of Knowledge (Green Leafy Vegetables) By Level of Participation, Education, and Communication in Nawalparasi

Level of Knowledge	Level of participation Frequency (%)		Level of education Frequency (%)				Level of communication exposed to Frequency (%)			
	Partial	None	University	High School/ Secondary	Primary/ Elementary	None	High	Medium	Low	None
Good	4 (3.0)	71 (53.0)	9 (6.7)	14 (10.5)	26 (19.4)	26 (19.4)	0	1 (0.7)	9 (6.7)	65 (48.5)
Satisfactory	1 (0.7)	24 (17.9)	0	6 (4.5)	7 (5.2)	12 (9.0)	0	0	3 (2.2)	22 (16.4)
Poor	0	17 (12.7)	0	3 (2.2)	2 (1.5)	12 (9.0)	0	0	1 (0.7)	16 (11.9)
None	0	17 (12.7)	0	0	6 (4.5)	11 (8.2)	0	1 (0.7)	3 (2.2)	13 (9.7)
n	134		134				134			
Correlations										
Rho (ρ)	-		0.29				-0.03			
Gamma (γ)	0.57		-				-			

level of knowledge of green leafy vegetables is, to some extent, explained by the level of education.

The level of knowledge about yellow fruits was markedly lower than for green leafy vegetables. Only 27.6 % of the respondents demonstrated good knowledge and the same proportion demonstrated satisfactory knowledge (see Table 8-4). Field observations confirmed that the majority of people emphasised the importance of green leafy vegetables more than yellow fruits when discussing the health of their children. The reason for this could be that vegetables are traditionally a part of the daily meal of many Nepali people, while fruits are eaten only occasionally when they are available. Reminding us of the tradition of eating green leafy vegetables, one of the participants of the focus group stated:

> The traditional belief is not that it contains vitamins necessary for our body but that we should eat it frequently as it is a part of our daily meal. It is our traditional custom; therefore, though most of us do not know about its importance, nobody has to tell us or insist on us eating it.

Reading between the lines in the above statements, one might raise the question as to why vegetables traditionally are part of the daily meal? In fact, this question was raised during the focus group discussion. According to the majority of participants, their meal is assumed to be incomplete without some vegetables. Thus, a meal set for lunch or dinner without any vegetables, specifically green leafy ones (locally known as 'saag paat'), is regarded as a poor meal. This tradition, however, was viewed by many participants as based largely on the taste factor of food: 'vegetables add taste to meals'. It may be argued that the traditional use of vegetables in daily meals might not have been related simply to the question of adding taste to meals, but might have something to do with securing a balanced diet necessary for maintaining good health. This is evident if one carefully examines the components of the average traditional Nepali meal for lunch or dinner in which there is a nutritionally balanced diet of rice or rice substitute for energy, a bowl of lentil soup (locally known as 'daal') for protein, some vegetables ('saag/paat' or substitute) for vitamins, and a little pickle ('achar'), basically considered as an appetiser, but which contains some micronutrients and vitamins.

In order to identify factors leading to good and satisfactory knowledge of yellow fruits, correlations were made between the level of knowledge of yellow fruits and key variables, such as the level of participation, level of education, and level of communication the respondents were exposed to (Table 8-6). However, as with the correlation results for green leafy vegetables, there are no significant correlations with either variables except for education (p .29 at the significance level .001).

Apart from the significant correlations with the level of education, which were observed, there may be other factors which relate to the fairly good and satisfactory level of knowledge of both green leafy vegetables and yellow fruits demonstrated by the majority of respondents. One of the factors could well be the respondents' exposure to radio information, as indicated by the focus group participants above. It should be pointed out that in Nepal, many government sectoral ministries connected with agriculture, health, education and local development and responsible for nutrition activities, broadcast nutrition programs on the radio, either on a weekly or a fortnightly basis. For example, the Ministry of Agriculture broadcasts nutrition-related information fortnightly under the agriculture information program, and the Ministry of Local Development under its women development program. In addition to this, some villagers of Nawalparasi manage to view Nepali and Indian television programs that frequently incorporate information on nutrition and health.

School children might also be the other possible source of knowledge about these foods since teaching nutrition in schools in Nawalparasi is a part of the program brief. The program has trained some school teachers in the program areas who are supposed to teach the importance of vitamin A under the school health and nutrition curriculum. When the author of this thesis was in Nawalparasi, one of the schools in the survey areas requested that he talk about vitamin A to its Year Nine students, thus indicating a level of interest in nutrition and health within the school. While talking to approximately fifty students, he discovered that most of the students had a good understanding of the

Table 8-6 : Level of Knowledge (Yellow Fruits) By Level of Participation, Education and Communication in Nawalparasi

Level of Knowledge	Level of participation Frequency (%)		Level of education Frequency (%)				Level of communication exposed to Frequency (%)			
	Partial	None	University	High School/ Secondary	Primary/ Elementary	None	High	Medium	Low	None
Good	1 (0.7)	36 (26.9)	5 (3.7)	9 (6.7)	16 (11.9)	7 (5.2)	0	0	4 (3.0)	33 (24.6)
Satisfactory	0	37 (27.6)	2 (1.5)	6 (4.5)	11 (8.2)	18 (13.4)	0	0	5 (3.7)	32 (23.9)
Poor	0	21 (15.7)	0	3 (2.2)	3 (2.2)	15 (11.2)	0	0	1 (0.7)	20 (14.9)
None	4 (3.0)	35 (26.1)	2 (1.5)	5 (3.7)	11 (8.2)	21 (15.7)	0	2 (1.5)	6 (4.5)	31 (23.1)
n	134		134				134			
Correlations										
Rho (ρ)	-		0.29				-0.09			
Gamma (γ)	-0.60		-				-			

importance of green and dark leafy vegetables and yellow fruits, but did not have many ideas as to how to deal with the problems of vitamin A deficiency. When the author suggested that the students could utilise locally available vitamin A-rich, wild, green leafy vegetables, such as stinging nettle ('urtica dioca'), in an emergency, almost all of them reacted negatively, as though it was a disgusting idea. In fact, wild vegetables, especially stinging nettle, are considered as an inferior food in Nepal and are eaten only by very poor people. This is a very striking example of a misconception about the locally available resources that could be altered if school children and their parents or relatives were able to reconsider their attitudes through dialogue and discussion.

It should be noted that in focus group discussions, a majority of participants (male and female) agreed that some of the wild vegetables, such as mushrooms, amaranths ('amaranthus leucocarpus'), pigweeds ('amaranthus vididis'), stinging nettles ('urtica dioca'), and garlic pear ('crataeva religiosa') could be eaten in a case of necessity. But, on the other hand, they indicated that these food resources are viewed as inferior by influential high-caste and rich people, as a result of which a majority of villagers avoid these foods. Brahmins (priests), for example, generally consider mushrooms, stinging nettles and other wild plants as inferior foods. However, one of the Brahmin participants thought that such views were based upon traditional and religious practices that were gradually changing with the pace of modernity.

The way in which the focus group people of different castes and creeds openly discussed the village problems demonstrated how a two-way exchange of views among people can help them re-evaluate traditions and practices for their own benefit.

Reported Frequency of Intake of the Foods Promoted by the Program

Almost all the respondents from the Nawalparasi district reported eating green vegetables regularly. 49.3 % of the respondents, a little less than half the sample survey population, mentioned that they eat green leafy vegetables more than once a week, while

46.3% reported eating them daily and the remaining 4.5 % weekly or less (see Table 8-7). However, the methods used for cooking vegetables that the respondents reported would appear to reduce their nutritive value. For example, the green vegetables are chopped up and then steamed. When they are half steamed, they are squeezed to drain all the water out of them, and once they are dry and free of water, they are fried with oil and spices. With this method, nutrients such as vitamin A are lost, because when leaves are bruised, pounded or chopped, their cell structures become damaged and enzymes that destroy vitamins are released. In addition vitamin A is oxidised in the presence of

Table 8-7 : Frequency of Eating Behaviour in Nawalparasi

	Frequency of eating (n = 67) Frequency (%)		
Food	Daily	More than once a week	Weekly or less
Green leafy vegetables	31 (46.3)	33 (49.3)	3 (4.5)
Yellow fruits	7 (10.4)	31 (46.3)	29 (43.3)

oxygen if subjected to high temperatures (Davidson, Passmore, Brock and Truswell, 1979: 212-213). When the research team of this thesis was in Nawalparasi, it was observed on many occasions that the vegetable served to the team at lunch and dinner was cooked in the way described above: squeezed and fried. The result is tasty, but the level of nutrient retention is probably low.

It would appear that traditional eating practices are still dominant. As a focus group participant affirmed: 'Nobody has to teach the villagers to eat fruits and vegetables as they eat them during their seasons according to traditional practices'. This suggests that, to achieve the level of understanding necessary to improve the nutritional gains of foods, in-depth discussions for exploring and evaluating traditional realities and practices may be necessary.

Yellow fruits are subject to seasonal availability. Since many mangoes and papayas are grown in the summer in the terai belt, Nawalparasi enjoys a good harvest of them and people can consume them as they are available. Thus, 10.4% of the respondents indicated that they eat yellow fruits daily and 46.3% that they eat them more than once a week in season (see Table 8-7 above).

In order to assess the relationships of eating frequency of both green leafy vegetables and yellow fruits with other variables, such as the level of knowledge, level of participation, level of education, and level of communication the respondents were exposed to, statistical correlations were made for each gender. However, except for a significant, but weak, correlation between the level of education and frequency of yellow fruit intake among male respondents (p .34 at significance level .006) (see Table 8-8), there are no significant correlations observed in all the variables tested (see Appendix 19 to 21). These findings suggest that the program's efforts in securing people's participation and exposing them to program communication have no clear relationship with the reported levels of intake of green leafy vegetables and yellow fruits. Similarly, these findings also suggest that there is no direct relationship of male or female respondents between their reported level of knowledge and their actual behavioural practices.

Perceptions of, and Attitudes towards, Participatory and Non-participatory Nutrition Communication

A small proportion - 7.4 % of the respondents - reported that they had some participatory experience under the Panchayat regime (see Table 8-9). However, most of them reported that their participation consisted of a physical contribution to local development works, such as building roads, trails, and panchayat houses. They indicated that they were never asked to take part in program design, development, management and evaluation.

Although the majority of the respondents (92.5 %) had never had any participatory experience, virtually all of them (85.8%) thought that they should be consulted on the

Table 8-8 : Frequency of Yellow Fruit Intake By Level of Knowledge, Participation, Education, and Communication in Nawalparasi (Male Respondents)

Frequency of yellow fruit intake	Level of knowledge Frequency (%)				Level of participation Frequency (%)		Level of education Frequency (%)				Level of communication exposed to Frequency (%)			
	Good	Satisfactory	Poor	None	Partial	None	University	High School/ Secondary	Primary/ Elementary	None	High	Medium	Low	None
Daily	2 (3.0)	1 (1.5)	0	4 (6.0)	2 (3.0)	5 (7.5)	1 (1.5)	4 (6.0)	2 (3.0)	0	0	0	2 (3.0)	5 (7.5)
More than once a week	12 (17.9)	9 (13.4)	1 (1.5)	9 (13.4)	0	31 (46.3)	4 (6.0)	9 (13.4)	12 (17.9)	6 (9.0)	0	1 (1.5)	3 (4.5)	27 (40.3)
Weekly or less	7 (10.4)	9 (13.4)	0	13 (19.4)	2 (3.0)	27 (40.3)	2 (3.0)	3 (4.5)	15 (22.4)	9 (13.4)	0	1 (1.5)	5 (7.5)	23 (34.3)
n	67				67		67				67			
Correlation														
Rho (ρ)	.08				-		.34				-.02			
Gamma (γ)	-				.23		-				-			

136

process of development projects that affected them (see Table 8-10). Most of them believed that consultations can help villagers to interact with the development project and know its aims and potential benefits for the villagers. A majority - 64.3% of the respondents - stated that they would like to interact with the project people to discuss village problems and issues. The remaining respondents asserted that they would like to know the aims and intentions of the project. In the focus group discussion, one of the participants commented: '..before the implementation of the project we should be given an opportunity to know what the incoming project is all about so that we have a say in the proper implementation of the project'. Similarly, many focus group participants, especially women, asserted that they should be consulted before the implementation of any nutrition project as they strongly believe that they are the main people responsible for household nutrition. Thus, they indicated that if after consultations they find the project feasible for them, they may well be ready to give their valuable time to project activities. As one women put it:

> We need to be gathered for a group discussion to discuss the proposed project, and once we are determined or have decided to go ahead with the project we should be given two to three weeks training on the project activities, but the training should

Table 8-9 : Participatory Experience in Nawalparasi

Participatory Experience (n = 134) Frequency (%)	
Yes	No
10 (7.4)	124 (92.6)

Table 8-10 : Views Regarding Consultation in Nawalparasi

Need for consultation (n = 134) Frequency (%)		Reasons for consultation* (n = 115) Frequency (%)	
Yes	No	To have interaction	To know the program's intentions
115 (85.8)	19 (14.2)	74 (64.3)	41 (35.7)

* Number representing those respondents who favoured consultations

137

not be longer than two to four hours a week to avoid interruption of our domestic work. After training, the project has to give a certain area to each trained participant to work on for the project. These trained participants should work as volunteers.

One of the focus group participants, who considers nutrition projects essentially as educational, strongly implied that knowledge dissemination is a monopolistic process; rather it should involve the other end of the process: '..spreading knowledge should not be limited to 'ek-horo bichär' ('one-sided thought or judgement')[2]. We should try to actively involve the other end in this process'.

Although 14.2 % did not believe they needed to be consulted, it is interesting to note that all of the 134 respondents interviewed strongly held that the usual method of dissemination of information in their village by the government and non-government organisations in regard to food, nutrition, health and other activities, was entirely based on a one-way process, directly from program staff to villagers and did not at all consider the villagers' input in the design and dissemination of information, either through consultations or meetings or discussions. As Table 8-11 indicates, 75.7 % of the

Table 8-11 : Preferred Methods of Consultation in Nawalparasi

Preferred methods of consultation* (n = 115) Frequency (%)			
Being invited to a group meeting	Being a member of a consultative committee	Having interpersonal discussions	Consulting with someone who puts forward the views of the villagers
87 (75.7)	5 (4.3)	22 (19.1)	1 (0.9)

* Number representing those respondents who favoured consultations

respondents who believed in consultation or participation preferred group meetings, while 19.1 % preferred interpersonal discussions. Very few respondents favoured the other two options: being included as a member of consultative committee (4.3%); or being consulted through someone who puts the views of the villagers (0.9%).

---

[2] 'Ek-horo bichär' in English is 'one-sided thought or judgment', which has been described by Turner (1996: 58 & 440) as one -dimensional or obstinate thought or judgment.

138

In regard to the design and dissemination of nutrition and health information, all of those respondents (85.8%) who believed in consultations, unanimously agreed with statement B (see Table 8-12), that local people's opinion and participation should be included in the design and dissemination of health and nutrition information, as local people are the experts in local conditions and traditional practices. On the other hand, those who did not believe in consultation (14.2%) agreed with statement A, that health and nutrition

Table 8-12 : Views Regarding the Design, Development and Dissemination of Information in Nawalparasi

Views regarding the design, development & dissemination of information (n = 134) *Frequency (%)*	
Statement A Health and nutrition information should be designed and disseminated by the experts alone as the local people do not have any expertise in this field	Statement B Local people's opinion and participation should be included in the design and dissemination of information as I believe that the local people are also experts in the local conditions and traditional practices
19 (14.2)	115 (85.8)

information should be designed and disseminated by experts as the local people do not have any expertise in this field.

The survey participants were asked to respond to various other statements dealing with expert help in resolving village nutrition problems. The results are summarised in Table 8-13. Almost 93% of the respondents agreed with Statement A, that suggests some expert help is needed to resolve village problems. An apparently contradictory response has been given in Statement B, where a large proportion (82.1%) of the respondents reported their agreement with this statement, which presents the view that experts alone can bring about changes to the village. When asked to clarify their responses, the main answer was: 'we definitely need to participate in nutrition programs, but without experts we cannot expect any changes in our villages as most of us are not educated and we are unskilled in food and nutrition-related problems'. This answer is further supported by overall disagreement, expressed by a majority - 60.5 % of respondents - with Statement

C, that villagers can bring about changes by themselves. However, a large number of respondents (77.6 %) supported Statement D, that they can engage in dialogue with the nutrition experts/workers in bringing about change in their villages. In essence, it would

Table 8-13 : Views Regarding Expert Help in the Resolution of Nutrition Problems in Nawalparasi

(n = 134) Frequency (%)			
Statements	Agree	Neutral	Disagree
Statement A The village communities simply need help in resolving the problem, with some suggestions and information from experts.	124 (92.6)	4 (3.0)	6 (4.4)
Statement B Experts alone can bring about changes in the villages.	110 (82.1)	4 (3.0)	20 (15.0)
Statement C Villagers can bring about changes by themselves.	47 (35.1)	6 (4.5)	81 (60.5)
Statement D Villagers can engage in dialogues with nutrition experts or workers in bringing about changes.	104 (77.6)	10 (7.5)	20 (15.0)

appear that the villagers definitely prefer to participate in the nutrition project, but they are sceptical about their capacity to act independently (for example, without the help of experts/specialists) and thus prefer dialogues/discussions for such help. It is evident, as Servaes (1996a:105) has also noted, that participation does not mean that the role of experts/specialists in the development process is ignored.

Appropriate Modes of Communication

In relation to the question concerning what modes or media of communication are preferred and considered important for facilitating the participation of the villagers in the nutrition program, approximately two-thirds (63.4%) of the respondents gave an opinion. The remaining one-third (36.6 %) did not want to answer the question as they were not sure of what to say.

It can be seen from Table 8-14 that of those who answered the questions, 58.8 % of respondents gave first preference to interpersonal communication, especially one-to-one. Video was also given first preference by 35.3 % of the respondents. Very few

140

people gave their first preference to radio, printed materials (posters and pamphlets), folk media and other forms of communication.

In order to come up with an overall result for the preferences indicated by the respondents' answer, Kendall's Coefficient of Concordance (W) was used to calculate the mean rank of preferences. As a result of these calculations, interpersonal communication is ranked first (mean rank 1.62) and video, second (mean rank 2.28) - these two forms of communication being clearly preferred to the other options (see Table 8-14).

Table 8-14 : Modes of Communication in Order of Preference in Nawalparasi

Comm. modes	Preference (n = 85) Frequency (%)					
	1st	2nd	3rd	4th	5th	Mean Rank*
Interpersonal	50 (58.8)	22 (25.9)	9 (10.6)	3 (3.5)	1 (1.2)	1.62
Video	30 (35.3)	23 (27.1)	14 (16.5)	14 (16.5)	4 (4.7)	2.28
Radio	2 (2.4)	15 (17.6)	30 (35.3)	27 (31.8)	11 (12.9)	3.35
Printed Materials	1 (1.2)	10 (11.8)	15 (17.6)	21 (24.7)	38 (44.7)	4.00
Folk Media & Others	2 (2.4)	15 (17.6)	17 (20.0)	20 (23.5)	31 (36.5)	3.74

(*Rank: 1 = 1st preference, 2 = 2nd preference, 3 = 3rd preference, 4 = 4th preference, 5 = 5th preference)

Table 8-15 highlights some common reasons given by the respondents for their preferences of the modes of communication. For example, interpersonal communication is seen as an easy means of exchanging ideas, while video is regarded as a means of actually seeing things so as to understand them easily.

In the focus group discussions, many participants indicated that video was their preferred mode of participatory communication. Many believed video to be an appropriate medium because of the mass illiteracy that prevailed in the villages: 'Video may be

appropriate as everybody can see it and understand it accordingly. This will enormously help those people who are uneducated and cannot read written information'. Some of the participants indicated that video makes communication participatory by including people doing role plays in the design and dissemination of information: 'Perhaps video drama involving people doing role-plays would be the best way for information to be designed and disseminated in the village context'. One of the participants, referring to role play, asserted that video may be helpful in breaking down deeply-held superstitions:

> We have many such health problems in the villages that are believed to have been inflicted purely by bad eyes or evil spirits. Problems common to children are mainly an apathetic and whining condition, night blindness, and loss of weight and big tummy etc. Actually, these problems are not created by bad eyes or evil spirits. But, many children lose their lives every year due to the blind faith of their parents. These parents do not understand, for example, that simply adding water on rice in a cooking pot does not itself cook the rice unless heat is penetrated from the bottom of the pot to the rice. It is also true with health problems, because without disease nobody will be sick, just as without any heat, rice will not cook. Therefore, to fight sickness there is an urgent need to educate villagers, and the integration of local forms of media, such as witch doctors, folk songs and dances, to video can be beneficial in addressing the local problems traditionally associated with superstitions.

Table 8-15 : Reasons for Preferred Modes of Communication in Nawalparasi

Reasons	Communication modes (n = 85) Frequency (%)				
	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5
Discussion and exchange of ideas possible	39 (78.0)	0 (0)	0 (0)	0 (0)	0 (0)
Actual things can be seen	0 (0)	26 (86.7)	0 (0)	0 (0)	0 (0)
Easy access to information	0 (0)	0 (0)	1 (50.0)	0 (0)	0 (0)
Attractive and entertaining	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
Easy to understand	11 (22.0)	4 (13.3)	0 (0)	0 (0)	0 (0)
Pictures and cartoons attractive	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)
Other reasons	0 (0)	0 (0)	1 (50.0)	0 (0)	0 (0)

Mode 1 = Interpersonal (One-to-one/Group discussions) Mode 2 = Video Mode 3 = Radio Mode 4 = Printed Materials
Mode 5 = Folk Media & Others

A case study of one of the health posts situated in the Sindhupalchowk district (hilly district) of Nepal also suggested that superstition was the main problem in village health

development. Maskey, in his case study (1988:133), stated that villagers believe, 'sickness is caused by evil spirits'.

A majority of focus group participants preferred group discussion as one of the best means of stimulating reciprocal conversations ('Dohoro bät-chit') through which villagers can know what is needed and what is being done by the project. Similarly, many participants believed that group discussions help eliminate 'sweet speeches' (rhetorical speeches), and 'ek-horo bichär' ('one-way thoughts/judgements') or one-way communication. The majority of participants believed that it is not possible or feasible to go door to door around the villagers' houses, but that it is feasible to hold group discussions.

The limitations of other media were highlighted. For example, posters and pamphlets were perceived as being useful only to literate people, and radio was regarded as a good source of information, but was considered to be less effective in providing practical demonstrations in comparison with video.

Perceived Meaning of Participatory Nutrition Communication

The meaning of participatory nutrition communication was investigated only with the focus group participants. All the participants of the focus group discussion viewed participatory nutrition communication essentially as interesting activities that involve 'Dohoro bät-chit', ('transactional conversation'). Many of them further qualified 'reciprocal conversation' as, primarily, 'dialogues' or the development of 'mutual understanding'. In this sense, one male participant warned:

> Nobody should come to this village just with sweet speeches (rhetorical speeches), because they do not help resolve our problems. In other words, any organisation, be it government, international or local, who is interested in helping us, has to come to us with interesting activities that can create reciprocal conversations such as group discussions between ourselves and the organisation. Such discussions may help us to build up confidence in working together with the organisation.

The opinion expressed in the above statement was fully shared by all of the focus group participants, and it was indicated that the on-going vitamin A program lacked such participatory conversations or discussions to stimulate village participation.

Analysis of Data from Community Leaders

Most of the local community leaders strongly believed that Female Community Health Volunteers (FCHVs) were the main communicators for disseminating the program's information and bringing about the villagers' participation in the program's activities. It was indicated that, although all the community leaders had received training in vitamin A, many of them did not directly participate in the program's message dissemination at the household level. Despite the fact that the program involved many activities in relation to the promotion of vitamin A-rich foods, six out of nine community leaders saw the program as confined mainly to the distribution of vitamin A capsules. These six community leaders contended that the distribution was based solely on the communication efforts of the FCHVs, who could not properly disseminate the vitamin A distribution message to all the intended program beneficiaries. One of the school teachers lamented:

> Only a small note containing some information on vitamin A distribution is handed over to female volunteers [by the program] who often do not pass it on to the villagers. Hence, villagers have information problems in regard to their participation in vitamin A distribution and consumption.

It is worth mentioning here that, according to field interviews conducted by the author, the program's activities were totally designed and developed by a handful of program staff located at the centre in Kathmandu who, with the help of the FCHWs, implemented the vitamin A supplement program in the target districts.

To investigate the main reasons for which the program was thought not to be successful in informing people, the author held discussions with the FCHVs who worked as program communicators at the grass roots village level. Three FCHVs assigned to their respective survey areas reported that there was a lack of financial incentive to compensate for the valuable time they spent in communicating with the village mothers. They said that they could not do much for the program as most of their time was committed to those activities that directly or indirectly provided economic or financial benefits that sustained their families. They believed that, if the program wished to carry out its activities efficiently, they should be paid for their assigned tasks. Similarly, they considered that the training that they received from the program was insufficient for

144

communicating nutrition knowledge to the village people effectively. Highlighting the dimension of the program's communication problems in the villages, one of the FCHVs said that: 'Before I attended the training session, I didn't know anything about the program. This was due to a lack of information and publicity'.

The above discussions clearly suggested that, though there were several people connected with the program, such as local political leaders and school teachers, the program information dissemination in the target areas was assumed to be the responsibility solely of the FCHVs. Thus, their responses and actions appear to have been the decisive factor in the program's success. It would appear that local political leaders and school teachers, who are the opinion leaders as well as community leaders in the village contexts, were not mobilised at a grass roots level to facilitate communication and remained inactive participants in the program's communication process.

The process of selection of FCVs appears to have given rise to some controversy. A point to note here, which arises from the author's field observations, is that some villagers reported that, initially, there was a rumour that all FCHVs would be remunerated and in some cases this was perceived as having influenced the selection of FCVs. In one of the villages, for example, a FCHV who was totally incompetent as well as inefficient in disseminating program information, was considered to have been selected for the job on the basis of favouritism alone on the part of the Health Post in-charge who initially thought that the position of FCHV would be remunerated.

Despite the fact that the majority of households and focus group participants reported that the program was not able to inform the villagers, all three of the women interviewees who worked as FCHVs found the program's approaches useful in stimulating the villagers:

> People have learnt about foods that are useful in preventing eye problems. They have been participating in vitamin A distribution and green vegetable awareness programs. ..Now the villagers have learnt to cook vegetables properly and also let their children have the vitamin A capsules distributed by the project.

However, two of them indicated that the program information was often not understood by the villagers: 'it [the program] was quite stimulating, but some people did not seem to understand the program posters and pamphlets'. They also reported that, 'though some mothers were trained [by the program], they did not share their knowledge with others'. The remaining six community leaders (three political leaders and three other school teachers) contended that the program approaches were not stimulating at all and therefore had no significant impact on the villagers' lives. A political leader concluded, 'Nothing was learnt by villagers'.

The use of posters and pamphlets in the program, as reported by the FCHVs above, would appear to have been somewhat problematic, as one local politician attached to the program stated:

> We have not used posters and pamphlets. But we have used information notes to inform the villager. We stick them on the wall for public information. I cannot exactly talk about its clarity, but I think villagers can understand it as it is written in the local Maithali[3] language.

In fact when the author of this thesis was in one of the village health posts, he was shown some pictorial posters (see Appendix 22) and was told by the Health Post In-charge that they were meant for village communication about the vitamin A program. This means that though some posters were available for program information dissemination, this was not made known to everyone, such as the politician above who indicated his lack of knowledge about the program posters.

In regard to the clarity of the female volunteers' verbal information dissemination (one-to-one discussions), many program volunteers felt that they did their best to make the project information clear: 'We have put a lot of effort to communicate with the mothers'. On the other hand, one of the political leaders commented, 'They were not effective at all in their effort because they did not cover the intended target villagers and send the program's information through that way'.

---

[3] Maithali is a local dialect spoken mostly in the Terai belt (plains region) of Nepal bordering with India.

All the community leaders unanimously agreed that consultation with the villagers was an important factor in effective nutrition communication. In line with this view, one political leader asserted that: 'Consultations can help achieve fruitful conclusions that facilitate the design and dissemination of effective nutrition communication'. Another community leader, a school teacher, indicated that the local villagers were a potential source of local information. He commented that 'the project would be more effective if villagers were consulted in the design and dissemination of information because they are familiar with the local problems and the village situation'. Similarly, it was also felt by many community leaders that 'in order not to give different meaning to the reality of their lives, we should consult the villagers in the nutrition communication process'.

Consultation with the villagers was seen by some community leaders as allowing villagers' views to be heard: 'consultation helps acknowledge the villagers' voices' (school teacher). Some community leaders interpreted consultation with the villagers as a means of gaining their participation in the project: 'It [consultation] can give the villagers the impression that they are also involved in the design and dissemination of information for their own benefit, so that they will feel obliged and behave accordingly'. Some community leaders asserted that relevant message design and dissemination is possible only by consultation with the villagers: 'it [consultation with the villagers] helps develop information in a language or particular formats that can easily be understood by all villagers'.

Five community leaders indicated that inviting the villagers to a group meeting is the best way of consulting them, while three community leaders believed that involving them in interpersonal discussions is the best. Conversely, the remaining community leaders implied that making villagers members of a consultative committee is the best way of consulting with them.

As far as comparative forms of communication media are concerned, none of the community leaders believed that they had sufficient exposure to multiple communication media in the Vitamin A Program 'to make comparisons about their relative importance'.

Nonetheless, they perceived some modes of communication to be appropriate to village nutrition communication and put them in order of preference (see Table 8-16).

Table 8-16 : Appropriate Media for Communicating with Village People

Community leaders	Media of Preference*				
(n=9)	First	Second	Third	Fourth	Fifth
A	VD	IP	PM	FM&O	RD
B	VD	IP	RD	PM	FM&O
C	IP	RD	PM	FM&O	VD
D	VD	FM&O	RD	PM	IP
E	IP	PM	FM&O	VD	RD
F	VD	PM	IP	RD	FM&O
G	VD	IP	PM	RD	FM&O
H	VD	PM	FM&O	IP	RD
I	VD	PM	IP	FM&O	RD

*Media Abbreviation: IP = Interpersonal, VD= Video, RD = Radio, PM= Printed Materials, and FM&O = Folk Media and Others

On the basis of the above figures, a statistical calculation for computing mean ranks of all the preferred media was carried out using Kendall's Coefficient of Concordance (Kendall's W). These calculations give the following mean ranks (see Table 8-17).

Table 8-17 : Mean Ranks of Preferred Media

Mean Rank	Communication Media
1.78	Video
2.56	Interpersonal
2.78	Printed Materials
3.89	Folk Media & Others
4.00	Radio

From the above table we can note that video was the most preferred medium of communication followed by interpersonal communication and printed materials (posters and pamphlets). As far as interpersonal communication is concerned, it should be noted that most community leaders preferred group discussion rather than one-to-one communication. Although the main reasons for preferring a particular medium were not explained by every community leader, a few of the reasons for giving first preference to video and interpersonal communication are summarised below.

Video is basically considered as a means of facilitating the learning process through the visual presentation of explanations based on real-life situations. As one of the FCHVs commented, 'It can highlight real-life stories in learning process'. In the same way, some community leaders believe video provides a powerful means of visualising as well as

understanding things under discussion: 'Actual things can be seen and understood', and it acts as a universal medium of communication: 'An effective medium for everyone including the uneducated'. The entertaining role of video was also considered by many community leaders. One community leader asserted, 'the villagers do not have access to many forms of entertainment, so information provided through this entertaining medium would be very effective'.

In regard to interpersonal communication, most of the community leaders saw group discussions as an important means of exchanging ideas and information in a group setting. Many believed that 'information dissemination in a group setting, especially with visual modes of communication, such as video, is an appropriate way of communicating with villagers'. Apparently, many believed that group discussions can avoid the 'time consuming' process (going door-to-door) of one-to- one communication.

It was believed that posters and pamphlets can provide effective visual demonstrations of nutrition problems and solutions if they are supported with attractive pictures. Similarly, their effectiveness is considered to be closely related to their ubiquity, as one of the community leaders contended, 'They [posters and pamphlets] can be seen everywhere once you are out of your house'. The community leaders believed that posters and pamphlets were a good source of information as they could be seen and read as well as being comprehended by those who are uneducated. Many community leaders believed that radio was the easiest way of gaining information, but considered it as 'a one-way means of communication'. Some of the community leaders believed folk media (folk song and dance) and other modes of communication, such as the use of school students, and 'miking' to be useful to the village context.

A majority of community leaders considered that participatory modes of nutrition communication were those that involved discussions between the project staff and villagers. For example, one of the community leaders stated, 'Any media or mode that can enhance discussions can be said to be participatory.' Similarly, another argued that 'Any mode that can assemble people and stimulate discussion can be called participatory', and 'Nutrition communication which is developed by consulting and

discussing with the people can be considered participatory.' Some community leaders emphasised that discussions which emerged from a two-way mode or medium of communication were participatory. For example, group discussions are viewed as participatory communication when everybody can exchange their ideas within the available of time.

As far as non-participatory nutrition communication is concerned, a majority of community leaders considered that modes of communication which do not involve discussions are non-participatory. Similarly, communication formulated without any discussion is considered to be non-participatory.

Conclusion

It is difficult to draw conclusions about the impact of the modes of communication used in the National Vitamin A Program on the resolution of vitamin A deficiency problems in Nawalparasi district because of the very low number of respondents who reported their participation in the program. On the basis of the available data from the randomly drawn sample, it would appear that the program was not capable of communicating with a large number of the village people despite its great importance, especially for the lives of growing children.

On the basis of reports the from focus group participants and community leaders, it would appear that there were communication breakdowns between the program workers and the villagers and, therefore, a large proportion of villagers did not know about the program's activities. The Female Community Health Volunteers (FCHVs), who were the grass roots communicators, also admitted that they could not work properly for the program due to the lack of financial incentives and proper knowledge about the program information. Yet, in the program target areas, these FCHVs were perceived as the only grass roots level communicators and also as the only people to blame for the program's inefficiency in informing all of its target village population. In this sense, except for the role of the FCHVs, this program in Nawalparasi was not able to fully mobilise the local people's participation, even in the program implementation phase (the information dissemination phase).

Despite the partial participation of a few respondents in the program, three-quarters of the total number of respondents indicated either good or satisfactory knowledge of green leafy vegetables and just over half the respondents had a similar knowledge level of yellow fruits. It should be noted, however, that those respondents who had experienced partial participation in the program did not indicate any strong association between their participation in the program and their reported level of knowledge of green leafy vegetables and yellow fruits. Further, all of the respondents who reported they had a good or satisfactory knowledge of both green leafy vegetables and yellow fruits did not demonstrate any strong, positive relation between their knowledge and their actual frequency of intake.

On the basis of what emerged from the focus group discussions, it would seem that fruits are not so important traditionally, but that vegetables are an 'important part of daily meals'. Traditionally, vegetables are regarded as 'adding taste to meals'. In effect, people eat vegetables for this reason, rather than because of any knowledge they have acquired. Clearly, in this case, people do not translate their acquired knowledge into behavioural practices unless their traditional beliefs are reviewed and altered through the people's own initiatives.

Many of the household respondents, the participants of the focus group, and community leaders strongly believed in participation and asserted that the existing method of communication was largely one-way. Of those respondents who favoured greater participation, the majority preferred group discussions as an effective means of consulting the villagers. Many household respondents gave first priority to interpersonal, one-to-one communication, followed by video, as a means of information dissemination in villages. This contrasted with the focus group and community leaders who considered video followed by interpersonal communication, particularly group discussions, as the most effective means of nutrition communication. Such a contrast in preferences between the household respondents and the focus group and community leaders can be related to a field observation by the author of this thesis : all of the field survey respondents (household respondents) reflected the expectation that they should be the prime

151

beneficiaries of the project, thus, they preferred facilitators or communicators to come to their houses and discuss project information individually with them in one-to-one interactions which would improve their understanding and the clarity of the information.

For the majority of the focus group participants and community leaders, participatory nutrition communication was viewed essentially as a means of stimulating dialogue, discussion and mutual understanding that could bring about villagers participation in the program. The Vitamin A Program lacked participatory approaches that would stimulate the villagers' involvement.

The following chapter analyses the data and information of Gorkha district, which is located in the hilly region.

CHAPTER 9 : GORKHA DISTRICT - WORLDVIEW/NUTRITIONAL BLINDNESS PREVENTION PILOT PROJECT[1]

The first part of this chapter discusses the data for household survey interviews and focus group discussions carried out in Gorkha. The ensuing section presents the results of interviews with community leaders (local political leaders, school teachers and women volunteers) who were connected with the project, in this case, the Worldview/Nutritional Blindness Prevention Pilot Project (NBPPP).

As stated in chapter 6, the NBPPP was a 3-year pilot project in nutrition communication carried out in two Village Development Committee (VDC) areas, Khoplang and Mirkot, in Gorkha district. Its main focus was on night blindness problems among village children. The project recruited, in total, fourteen local women volunteers, whose work was distributed equally among the villages of Khoplang and Mirkot VDCs in disseminating project information. It should be noted that the project covered 96 and 94 villages in Khoplang and Mirkot VDCs respectively (WIF/Nepal (1994:13). Similarly, mothers' groups and community leaders were also involved in the project activities.

Familiarity with, and Participation in, the Project

Out of 134 respondents, 68.7% reported that they had a 'high' level of familiarity with the project, while 6.7% of the respondents reported they had 'reasonable' familiarity. In contrast, 24.6% of the respondents said they had no familiarity with the project (see Table 9-1). Most of the two-thirds (68.7%) of respondents who had a 'high' level of familiarity described the project as generally oriented towards the alleviation of night blindness in children, whereas most of those who were classified as having 'reasonable'

---

[1] The name of this project with Worldview slash Nutritional Blindness Prevention Pilot Project signifies that the project was sponsored by the Worldview International Foundation.

familiarity believed that the project was for maintaining gardens and growing green leafy vegetables and yellow fruits for the protection of their eyesight.

Table 9-1 : Project Familiarity and Participation in Gorkha

Level of familiarity (n = 134) Frequency (%)			Level of participation (n = 134) Frequency (%)	
High	Reasonable	None	Partial	None
92 (68.7)	9 (6.7)	33 (24.6)	99 (73.9)	35 (26.1)

The proportion of respondents participating in the project was not much lower (73.9%) than the level of familiarity; all of them fell into the category of 'partial' participation. The remaining 26.1% of the respondents had not participated in the project.

Those respondents who had not participated in the project indicated that they were either very busy with their own household affairs or were not approached by the project for their participation. However, in the focus group interview, many participants gave different reason for not participating in the project. For example, one respondent in the focus group asserted:

> Though the project tried to impart knowledge about green vegetables and yellow fruits, the way it was working was not good enough to stimulate participation in the project activities. The main problem was that those women and men who received training from the project on the recommendation of the female volunteers did not share their knowledge with oth r fellow villagers. Actually, they were sent to the training so that they would impart their knowledge to the villagers when they come back home. But it did not happen. They could not be bothered sharing the knowledge they received from the training.

The above statement suggests that there was a problem of knowledge and information-sharing in the project. Many focus group participants remarked on this situation as an inhibiting factor to people's participation in the project. One of the participants added that the training program of the project was a waste of time: 'those who received training just ate up the training allowance and that was only the fulfilment of their vested interest, which refers to their monetary interest'.

Conforming to this view, one of the village social workers who worked as a member of the project staff during the project's implementation stated:

> Every month we conducted training at the project field office and provided training to the village participants on the recommendation of the women volunteers assigned to each village. In many cases it was observed that only a very few of those who got training actually practised at home and shared it outside with others while a majority did not even bother to retain their acquired knowledge for their own use.

On the other hand, a male participant, who happened to be one of the recipients of the training commented:

> It is true that we received training and acquired new knowledge, but it is not that we did not try to share our knowledge with others. Everybody would agree that we are also a part of this village life, that we also have many commitments to maintain our lives like other villagers. Thus, we do not have sufficient time to go to each person's house to share our knowledge. Instead why don't people who wish to acquire knowledge come to our home and ask us to share our knowledge with them? I think it is the rational way in that it saves us time and energy in going to each individual's house while it is not a big deal for someone from a household to spend some time and energy with us.

But many other participants did not share this view and responded: 'If you cannot go to each individual house, why don't you ask the villagers to be assembled in a group to listen to you?'

Another expressed the importance of the willingness of those who had received training to pass on their knowledge, saying:

> Look, its your willingness to share your knowledge, not the time, that is the main factor. I have seen someone who received training like you who did not share his knowledge, not even with his wife. As a result, one time, he almost lost his child. The story is that though he knew how to make a solution of salt, sugar and water, he never ever passed on this knowledge, not even to his wife. One day his child had severe diarrhoea when he was not at home. His wife suffered a lot trying to keep the child alive as she did not know anything about the rehydration process and had to seek help from others.

In the face of this criticism, the participant who had received training defended his position as follows:

> ..they (fellow villagers) considered us all the time as advantaged persons who got salary and allowances from the project all the time. Thus, many envied us. It should be noted that we did lots of substantial jobs. For example, we weighed children, distributed seeds and seedlings. But, believe me, no one appreciated our job. They simply got things from us, but did not use them. Many, for instance, did not use the distributed seeds and seedlings. When asked why, they had always an excuse, such as no water for using seeds and seedlings etc. They always brought forth problems, but never took advice for solutions.

As for consultations with us, they (fellow villagers) definitely do come to us if they feel they can get something (tangible) from us. As a matter of fact, they do not want to put any effort into doing anything at all other than getting something freely. Look at this village, we have plenty of unused government land. Nobody bothered growing vegetables on it. They envy me because I have been using a small portion of this land and growing some vegetables that fulfil the requirements of my family diet. Why do they envy me, why don't they do as I am doing? It is ridiculous, isn't it?

Among the participants, one female and one male saw the above story as closely relating to the existing condition of 'lack of awareness on the part of the villagers'. At the same time, one female participant emphasised the need for knowledge-sharing as: 'We should learn that we should share our knowledge with other villagers so that information can travel across the village. It is not justifiable that we get training and training allowances, but do not share our knowledge with others'. The majority of the participants supported this view, seeing knowledge-sharing as essential to participatory nutrition communication in their villages.

All the respondents who reported being familiar with the project had been exposed to some levels of project communication. Of the total number of respondents, 49.3% had been exposed to a high level of project communication, 20.1% to a medium level and the remaining 5.9% to a low level (see Table 9-2). The most common forms of communication mentioned by the respondents were one-to-one communication, printed materials (posters and pamphlets, and flip charts), video, radio and practical demonstrations (kitchen gardening). Some examples of posters and flip charts were provided to the research team and examples of photographs are provided in Appendix 23.

Correlations were made to explore some of the main factors which relate to the respondents' familiarity with the project (see Table 9-2). These revealed that there is a very strong and significant positive correlation with the level of participation (γ .99) and also with the level of communication the respondents were exposed to (ρ .75 at the significance level .00). Conversely, there is no significant correlation with the level of education. These findings suggest that the level of communication the respondents

Table 9-2 : Level of Familiarity By Level of Participation, Education, and Communication in Gorkha

Level of familiarity	Level of participation Frequency (%)		Level of education Frequency (%)				Level of communication exposed to Frequency (%)			
	Partial	None	University	High School/ Secondary	Primary/ Elementary	None	High	Medium	Low	None
High	91 (67.9)	1 (0.7)	4 (3.0)	6 (4.5)	20 (14.9)	62 (46.3)	60 (44.8)	26 (19.4)	6 (4.5)	0
Reasonable	8 (6.0)	1 (0.7)	0	2 (1.5)	4 (3.0)	3 (2.2)	6 (4.5)	1 (0.7)	2 (1.5)	0
None	0	33 (24.6)	1 (0.7)	2 (1.5)	8 (6.0)	22 (16.4)	0	0	0	33 (24.6)
n	134		134				134			
Correlations										
Rho (ρ)	-		-0.04				0.75			
Gamma (γ)	0.99		-				-			

were exposed to and their participation in the project are among the factors which explain most strongly the level of familiarity.

As has been stated above, the respondents' participation was at the 'partial' level, so 73.9% of respondents were involved only in the stage of receiving nutrition education and the delivery component of the project (for example, the supply of vegetables and fruit seeds, seedlings and water). Among those involved in the delivery, just under half have no formal education.

As has been noted, there is a very strong, positive correlation between the level of participation and the level of familiarity with the project. In addition, despite the non-significant correlation with the level of education, the level of participation has a very strong significant positive correlation with the level of communication (γ 0.98) (see Table 9-3). This suggests that, in Gorkha, regardless of an individual's level of education, exposure to project communication may, among other things, have helped the respondents to have access to project participation ('partial' participation) and thereby gain familiarity with the project activities.

Knowledge of the Project's Nutritional Information

A fairly large proportion of respondents (67.2%) demonstrated a good knowledge of green leafy vegetables (see Table 9-4), and a further 13.4% of respondents demonstrated 'satisfactory' knowledge.

In an attempt to understand what were the variables that might be associated with such a high proportion (80.6%) of 'high' and 'satisfactory' levels of knowledge among the respondents, some correlations were made. The findings in Table 9-5 suggest some significant, but very weak, positive associations with the level of communication the respondents were exposed to (ρ .17 at the significance level .05) and no significant associations with the level of participation and level of education.

Table 9-3 : Level of Participation By Level of Education, and Communication in Gorkha

Level of participation	Level of education Frequency (%)				Level of communication exposed to Frequency (%)			
	University	High School/Secondary	Primary/Elementary	None	High	Medium	Low	None
Partial	4 (3.0)	7 (5.2)	23 (17.2)	65 (48.5)	65 (48.5)	27 (20.1)	7 (5.2)	0
None	1 (0.7)	3 (2.2)	9 (6.7)	22 (16.4)	1 (0.7)	0	1 (0.7)	33 (24.6)
n	134				134			
Correlations								
Rho (ρ)	-				-			
Gamma (γ)	-0.05				0.98			

159

Table 9-4 : Knowledge of the Nutritional Value of Food in Gorkha

	Level of knowledge (n = 134) Frequency (%)			
Food	Good	Satisfactory	Poor	None
Green leafy vegetables	90 (67.2)	18 (13.4)	19 (14.2)	7 (5.2)
Yellow fruits	58 (43.3)	25 (18.7)	31 (23.1)	20 (14.9)

A comparatively smaller proportion of respondents reported that they had a good knowledge of yellow fruits. Only 43.3% of the respondents demonstrated good knowledge, and a further 18.7% had 'satisfactory' knowledge (see Table 9-4). It was noted in the field observations that the majority of the people were more interested in green leafy vegetables than yellow fruits. In focus group discussions also the participants seldom referred to yellow fruits while talking about sources of vitamin A.

When discussing the project, they mostly referred to green leafy vegetables, for example, one participant stated, 'Now we know the importance of green vegetables, however, the villagers cannot grow them sufficiently due to a lack of water'. Another stated that 'The project was good in that it taught us to consume green vegetables regularly to protect our eyes, which we did not know before'. Neither examples mentioned yellow fruits.

In fact, unless they were otherwise reminded of yellow fruits, the focus group participants tended to mention only green leafy vegetables. The reason may be that, as in other parts of the country, vegetables are the most common foods in their daily meals whereas fruits are uncommon.

Since as many as 62% of the respondents reported having what has been defined as a 'good' and 'satisfactory' level of knowledge in regard to yellow fruits, correlations were made to determine if any associations could be there with other key variables (see Table 9-6). A weak, but significant, association was observed with the level of

Table 9-5 : Level of Knowledge (Green Leafy Vegetables) By Level of Participation, Education, and Communication in Gorkha

Level of Knowledge	Level of participation Frequency (%)		Level of education Frequency (%)				Level of communication exposed to Frequency (%)			
	Partial	None	University	High School/Secondary	Primary/Elementary	None	High	Medium	Low	None
Good	72 (53.7)	18 (13.4)	3 (2.2)	9 (6.7)	22 (16.4)	56 (41.8)	50 (37.3)	17 (12.7)	6 (4.5)	17 (12.7)
Satisfactory	8 (6.0)	10 (7.5)	0	1 (0.7)	7 (5.2)	10 (7.5)	6 (4.5)	2 (1.5)	1 (0.7)	9 (6.7)
Poor	14 (10.5)	5 (3.7)	1 (0.7)	0	2 (1.5)	16 (11.9)	6 (4.5)	7 (5.2)	1 (0.7)	5 (3.7)
None	5 (3.7)	2 (1.5)	1 (0.7)	0	1 (0.7)	5 (3.7)	4 (3.0)	1 (0.7)	0	2 (1.5)
n	134		134				134			
Correlations										
Rho (ρ)	-		0.11				0.17			
Gamma (γ)	0.30		-				-			

communication the respondents were exposed to (p.21 at the significance level .02), but there was no significant association with either the level of education or participation. This finding is very similar to those concerning the respondents' knowledge of green leafy vegetables where the level of communication the respondents were exposed to has some association with the level of knowledge.

Apart from the variables tested above, there are other factors associated with the reported level of 'good' and 'satisfactory' knowledge of both green vegetables and yellow fruits. These include information obtained from radio broadcasts on nutritional health matters and knowledge brought home from school and social conversations (exchange of information).

Reported Frequency of Intake of the Foods Promoted by the Project

A large proportion of respondents (80.6%) reported that they eat green leafy vegetables daily while the remaining 19.4% ate them more than once a week (see Table 9-7). In contrast, only 25.4% of respondents reported that they consume yellow fruits daily when in season, while the remaining 74.6%, a large proportion of respondents, indicated that they do not eat yellow fruits daily even when they are in season. Many of these respondents explained that their households lacked fruit trees and that they have to depend on local buying. This is impossible for many poor households. They added that poor villagers eat yellow or any kind of fruits only when relatives or neighbours share their garden fruits with them, and this does not happen often. Explaining the poverty of many households, one of the senior local political leaders who was present in the focus group discussions said:

> ...Forget about vegetables, fruits and meat eating, they (poor villagers) cannot even afford to eat enough rice to fill their empty stomachs. Some of them when they go to the jungle to fetch firewood collect wild vegetables like garlic pears, stinging nettles, and some fruits, roots and tubers if they are lucky.

In order to compare the gender aspects of the responses on the frequency of intake of both green leafy vegetables and yellow fruits with other variables - the level of knowledge, level of participation, level of education and level of communication the

162

Table 9-6 : Level of Knowledge (Yellow Fruits) By Level of Participation, Education, and Communication in Gorkha

Level of Knowledge	Level of participation Frequency (%)		Level of education Frequency (%)				Level of communication exposed to Frequency (%)			
	Partial	None	University	High School/ Secondary	Primary/ Elementary	None	High	Medium	Low	None
Good	50 (37.3)	8 (6.0)	0	8 (6.0)	14 (10.5)	36 (26.9)	36 (26.9)	10 (7.5)	5 (3.7)	7 (5.2)
Satisfactory	15 (11.2)	10 (7.5)	2 (1.5)	2 (1.5)	11 (8.2)	10 (7.5)	11 (8.2)	2 (1.5)	3 (2.2)	9 (6.7)
Poor	20 (14.9)	11 (8.2)	1 (0.7)	0	1 (0.7)	29 (21.6)	9 (6.7)	11 (8.2)	0	11 (8.2)
None	14 (10.5)	6 (4.5)	2 (1.5)	0	6 (4.5)	12 (9.0)	10 (7.5)	4 (3.0)	0	6 (4.5)
n	134		134				134			
Correlations										
Rho (ρ)	-		0.11				0.21			
Gamma (γ)	0.32		-				-			

163

Table 9-7 : Frequency of Eating Behaviour in Gorkha

	Frequency of eating (n = 67) *Frequency (%)*		
Food	Daily	More than once a week	Weekly or less
Green leafy vegetables	54 (80.6)	13 (19.4)	0
Yellow fruits	17 (25.4)	28 (41.8)	22 (32.8)

respondents were exposed to - correlation tests were made. However, all the correlation results did not prove to be significant (see Appendix Table 24 to 27).

As mentioned above, there was a large number of respondents who were fairly knowledgeable about the importance of green leafy vegetables and yellow fruits. Surprisingly, however, their eating behaviour did not appear to correspond to their reported level of knowledge of the importance of both green leafy vegetables and yellow fruits. Commenting on this, one of the participants of the focus group discussions maintained, 'The project has taught us the importance of green vegetables. But many of us still do not eat them but sell them for money'. Another participant added:

> On many occasions, I have advised my fellow villagers not to sell green leafy vegetables and use them for their own consumption, but they do not listen to me......they would rather exchange them for cigarettes or alcohol. They don't give a damn about their heath.

This suggests that simply providing the target population with knowledge about food does not itself necessarily change the people's nutrition behaviour. It further suggests that, although an improvement in people's economic status is needed to secure better nutritional health, many poor people tend to use their available financial resources on non-essential commodities, such as cigarettes or alcohol. In order to change such behaviour, an effective communication strategy may be needed that would enable them to realise the importance of the proper use of available resources for their nutritional health.

In the focus group discussions, some of the participants indicated that the villagers' scepticism was one of the factors that inhibited behavioural change. They considered that the level of information or knowledge provided by the project to the villagers was not sufficient to change their behaviours. One female participant stated, 'Although we know we must eat green leafy vegetables and yellow fruits regularly to protect our eyes, many of us still do not know why this is so?'. This view suggests that the villagers are not satisfied with the project information. They want to know more about the use of green leafy vegetables and yellow fruits. This concern may have some connection with the views expressed by McAnany (1980:11) who believes that poor people are always sceptical of external help. For this reason, they do not readily absorb information unless they are fully convinced.

Perceptions of, and Attitudes towards, Participatory and Non-participatory Nutrition Communication

A small number of respondents (7.4%) reported that they had had some participatory experience during the Panchayat regime (see Table 9-8). This experience consisted, however, of compulsory physical labour in the implementation phase of the local development projects. None of the respondents reported having had any participatory experience in the design, development and evaluation of the project.

Table 9-8 : Participatory Experience in Gorkha

Participatory Experience (n = 134) Frequency (%)	
Yes	No
10 (7.4)	124 (92.6)

A large number of respondents (92.6%) reported that they had never had a voluntary or compulsory participatory experience in their lives. Despite this, 88.1% of respondents thought that they should be consulted in the process of their development (see Table 9-

9). Of those respondents supporting the need for consultation, 53.4% stated that they prefer consultation because it enables them to know the intention of the project and what it does for the people. In a narrow sense, this may simply be for many people a one-way notion of understanding the project objectives or activities. However, according to the

Table 9-9 : Views Regarding Consultation in Gorkha

Need for consultation (n = 134) *Frequency* *(%)*		Reasons for consultation* (n = 118) *Frequency* *(%)*	
Yes	No	To have interaction	To know the project's intentions
118 (88.1)	16 (11.9)	55 (46.6)	63 (53.4)

* Number representing those respondents who favoured consultations

survey respondents, this kind of understanding can help initiate discussion or dialogue with the project. Similarly, 46.6% of the respondents expressed the view that interaction should be established between the project staff and the villagers so that they could jointly discuss problems and issues concerning their villages. Although 11.9% of the respondents did not believe they needed to be consulted, all of the 134 respondents indicated strongly that the usual method of dissemination of information in their village by the government and non-government organisations was top down, from the project offices to the villagers.

Table 9-10 : Preferred Methods of Consultation in Gorkha

Preferred methods of consultation* (n = 118) *Frequency* *(%)*			
Being invited to a group meeting	Being a member of a consultative committee	Having interpersonal discussions	Consulting with someone who puts forward the views of the villagers
95 (80.5)	6 (5.1)	11 (9.3)	6 (5.1)

* Number representing those respondents who favoured consultations

80.5% of those who believed in consultation or participation (see Table 9-10) preferred to be invited to a group meeting while a further 9.3 % preferred interpersonal discussions.

All of the 88.1% of respondents who believed in consultation agreed unanimously with Statement B, that their opinion and participation should be included in the design and dissemination of health and nutrition information as they are the experts in the local conditions and traditional practices (see Table 9-11).

In relation to expert help in resolving village nutrition problems, the survey respondents' answers to the various statements are summarised in Table 9-12. As shown in the table, almost all the respondents (96.3%) supported Statement A, that they need some experts' help and suggestions. Paradoxically, however, except for 17.2% of the respondents, a majority (80.6%) agreed with Statement B, that experts alone can bring changes to the village. Conversely, more than half the respondents (56%) supported Statement C, that

Table 9-11 : Views Regarding the Design, Development and Dissemination of Information in Gorkha

Views regarding the design, development & dissemination of information (n = 134) Frequency (%)	
Statement A Health and nutrition information should be designed and disseminated by the experts alone as the local people do not have any expertise in this field	**Statement B** Local people's opinion and participation should be included in the design and dissemination of information as I believe that the local people are also experts in the local conditions and traditional practices
16 (11.9)	118 (88.1)

villagers can bring changes by themselves, while 43.3% did not believe this was possible. The contradiction in the respondents' views may , however, be related to three important points: (a) the villagers are energetic and willing to help themselves; (b) yet they are uncertain about the magnitude of their capacity to help themselves; and (c) therefore, they need some experts help or participation. In essence, the contradiction implies that the villagers definitely believe that they have a responsibility for dealing with their own

village nutrition problems. However, they do not fully believe in their capacity to handle nutrition problems independently and perceive a need for expert help and suggestions.

In the focus group discussions as well, many participants emphasised the importance of external help. They believed that nutrition was a technical matter; that, therefore, they could not handle it unless some expert help were provided. But they strongly asserted

Table 9-12 : Views Regarding Expert Help in the Resolution of Nutrition Problems in Gorkha

(n = 134) Frequency (%)			
Statements	Agree	Neutral	Disagree
Statement A The village communities simply need help in resolving the problem, with some suggestions and information from experts.	129 (96.3)	1 (0.7)	4 (3.0)
Statement B Experts alone can bring about changes in the villages.	108 (80.6)	3 (2.2)	23 (17.2)
Statement C Villagers can bring about changes by themselves.	75 (56.0)	1 (0.7)	58 (43.2)
Statement D Villagers can engage in dialogues with nutrition experts or workers in bringing about changes.	129 (96.3)	1 (0.7)	4 (3..0)

that such help should not ignore the 'mutual understanding' that exits between experts and the villagers:

> We definitely need help, but any help should be in co-ordination with the villagers. This means the experts should tell us what they are going to do for us and, at the same time, they should listen to us what we say and w'.at we feel about them and expect of them. This will help us exchange ideas and feelings that are necessary for reaching any conclusions. This is needed since only mutual co-operation and the exchange of ideas can lead us to success. This is true, just as we all know that every little drop of water makes an ocean.

The above views illustrate the participants' preference for co-operation between those who give external help and themselves. As for the villagers' capacity for entering into dialogue with the experts, a majority of villagers (96.3%) supported Statement D, that they can engage in dialogue with the experts.

Appropriate Modes of Communication

On the question of what modes of communication are the most important for facilitating the participation of the villagers in nutrition projects, 54.6% said their first preference was for interpersonal communication (on a one-to-one basis), while a further 41.5% of respondents preferred video. Kendall's Coefficient of Concordance (W) was used and a mean rank of preferences was derived from the order of preference (see Table 9-13). According to the table, interpersonal communication (one-to-one) (mean rank 1.58) and video (mean rank 1.92) rank as the most preferred modes of communication.

Table 9-13 : Modes of Communication in Order of Preference in Gorkha

Comm. Modes	Preference (n = 130) Frequency (%)					
	1st	2nd	3rd	4th	5th	Mean Rank*
Interpersonal	71 (54.6)	47 (36.2)	9 (6.9)	2 (1.5)	1 (0.8)	1.58
Video	54 (41.5)	44 (33.8)	22 (16.9)	9 (6.9)	1 (0.8)	1.92
Radio	2 (1.5)	9 (6.9)	21 (16.2)	54 (41.5)	44 (33.8)	3.99
Printed Materials	3 (2.3)	18 (13.8)	39 (30.0)	44 (33.8)	26 (20.0)	3.55
Folk Media & Others	0 (0)	12 (9.2)	39 (30.0)	21 (16.2)	58 (44.6)	4.96

(*Rank: 1 = 1st preference, 2 = 2nd preference, 3 = 3rd preference, 4 = 4th preference, 5 = 5th preference)

The respondents, referring to their first preference, indicated that interpersonal communication, especially one-to-one communication, facilitates individual discussions that lead to an easy understanding and exchange of ideas, while video is regarded as a means of providing visual explanations, knowledge and information. On the other hand, no one stated any preference for folk media (Table 9-14). The main reason for this was that the folk singers (locally known as 'gaines') used by the project were not greatly appreciated by the target audiences. According to this author's field observations, the use of 'gaines' was very effective in creating an interest in the target audiences in listening to the 'gaines' songs about project information in folk song style. But since 'gaines' are village entertainers, who go from door to door to entertain people, they ask

the audiences to give them money or food, and this was viewed by the audiences as an additional burden imposed on them by the project. It was reported that although the 'gaines' were provided with sufficient remuneration, they still asked for money or food from the audiences, despite warnings not to do so by the project staff. This is an example of how centrally-designed projects or planning may not work properly. Had consultation with the local village people and the 'gaines' taken place before the design and development of the nutrition communication project, this kind of problem might not have occurred in the project implementation phase.

Table 9-14 : Reasons for Preferred Modes of Communication in Gorkha

	Communication modes (n = 130) Frequency (%)				
Reasons	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5
Discussion and exchange of ideas possible	30 (42.3)	0 (0)	0 (0)	0 (0)	0 (0)
Actual things can be seen	0 (0)	51 (94.4)	0 (0)	0 (0)	0 (0)
Easy access to information	0 (0)	0 (0)	2 (100)	0 (0)	0 (0)
Attractive and entertaining	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Easy to understand	38 (53.5)	3 (5.6)	0 (0)	0 (0)	0 (0)
Pictures and cartoons attractive	0 (0)	0 (0)	0 (0)	3 (100)	0 (0)
Other reasons	3 (4.2)	0 (0)	0 (0)	0 (0)	0 (0)

Mode 1 = Interpersonal (One-to-one/Group discussions) Mode 2 = Video Mode 3 = Radio Mode 4 = Printed Materials
Mode 5 = Folk Media & Others

A clear difference in the preference for certain modes of communication was observed in the focus group as compared to the preferences of the household survey respondents. Video was preferred as a suitable mode of nutrition communication by all of the focus group participants. It should be noted that most of the participants were well aware of the use of video in the night blindness project. Many considered that video would be much more effective in nutrition communication if it were supported by group discussions. They believe that video provides real visual examples to reinforce group discussions: 'A combination of video and group meetings is an appropriate way of informing people, because discussions can be reinforced by examples from the video'.

Although the majority of household respondents gave their first preference to interpersonal, one-to-one communication, video, in most villages, would appear to be a strong drawcard. For example, when the team for the fieldwork for this research study went to the various wards of Gorkha to undertake a survey, they were accompanied by a social worker who had actually operated a video program for the night blindness project. Due to this social worker's presence in the research team, many local people gathered in the evenings in front of the house where the research team was staying in anticipation of a video viewing. It was hard to convince them that the field research team was not there for a video screening. Recollecting his past experience of showing videos in villages, the social worker who worked as a video operator for the night blindness project (NBPPP), commented:

> Many villagers just came to watch videos for entertainment. But entertainment was not the main objective of the project. It was mainly for clarifying the project's information to the villagers. Meanwhile, many so-called knowledgeable and powerful members of the villages tried to disturb the project and disregard its activities. Thus, audiences' participation in the video program in many instances was not very satisfactory. The main reason was that many poor villagers did not dare to go against the wishes of these so-called knowledgeable and powerful villagers who were the permanent residents of their villages while the night blindness project was there only for a limited period of two years. Even now, here in this focus group discussion, nobody dares to criticise the attitude of the village people who tried to disturb the project . Therefore, as long as the villagers do hesitate and do not speak together to encounter these situations, for whatever reason, this village will not experience any development.

A majority of the focus group participants did not make any comments on the above view, but one of the top local political leaders immediately showed his disagreement:

> I do not share at all this view that there will be no development. I do not believe that all the knowledgeable members of this village are anti-development. We should not come to conclusions like this but rather discuss it together.

As for other modes of communication, many focus group participants believed one-to-one communication was 'not feasible as it involves lots of time and money'. Similarly, some of the participants considered posters and pamphlets as 'impractical as non-literate people cannot read the written contents.' On the other hand, some considered that 'they are useful as they can be read to non-literate people either by a literate member of the household or friend'. Many disliked the use of radio and asserted, 'we cannot participate directly in radio, hence no participation is possible'. In essence, the majority of the focus

group participants strongly supported a combination of video and group discussions as the most important modes of participatory communication for nutrition.

Perceived Meaning of Participatory Nutrition Communication

In an attempt to understand the villagers' perception of participatory nutrition communication, the focus group participants were encouraged to express their understanding of the notion of participatory nutrition communication. One of the local political leaders who participated in the focus group stated that any nutrition campaign or project that comes through the village development committee (VDC) for villagers can be considered as participatory nutrition communication, but it may not function well if it goes directly to villagers. A contrasting view from others in the group was that nutrition communication could be considered participatory only when it comes directly to village people and involves them in an 'exchange of ideas and feelings', 'mutual co-operation', 'mutual understanding', and 'joint efforts' with the project people.

Analysis of Data from Community Leaders

A majority of community leaders indicated that women community volunteers and mothers' groups were the communicators who were responsible for communicating the project information to the villagers. In regard to this, one community leader noted that:

> Women volunteer workers were recruited and trained to promote health information and encourage people's participation. Task committees, such as the mother's groups, were formed, which held regular discussions and meetings involving many women.

A majority of the community leaders considered that the project communication approaches had had a positive impact. One of the women volunteers asserted, 'People now understand how to cook and utilise green vegetables properly'. According to another women volunteer 'People used to participate in project activities and attended the mass meetings whenever they were called. They were very eager to learn'. Some community leaders even mentioned the media that they felt were particularly effective in stimulating people: 'Video was very effective in teaching villagers'. One of the community leaders (school teacher) suggested, ' People could learn from posters and see the actual things on video. This process gave them an opportunity to understand the

concepts explained by the community workers. People seemed very interested and were eager to learn'. Besides video and posters, a political leader mentioned the agriculture show: 'The agriculture fair/show also encouraged the villagers to plant vegetables and fruits'.

One of the community leaders (political leaders) affirmed that the mothers' groups who were trained by the project for project information dissemination were not very effective and the community leader in question attributed this to a lack of financial incentive within the project: '..the members of such groups [mothers' group] were supposed to visit different households. However, as the members of the mother's groups were not paid by the project, their activities started to subside slowly'. As all the community leaders mentioned the importance of the involvement of trained mothers' groups in the dissemination of information regarding nutrition at the village level, it is likely that any problems concerning them would have had a negative impact on the project.

Most of the community leaders believed that the project information was understandable to villagers and some held strong convictions about this. One community leader (a woman volunteer) asserted, 'People had definitely understood the information. If they hadn't understood, they wouldn't have been seeking advice from us'.

For some community leaders, the villagers' understanding of the project information was attributed to the use of multiple media: 'Yes, they [messages] were quite clear, especially the combination of group discussion and video'. Another community leader (a woman volunteer) stated: 'The important points discussed in one-to-one communication were highlighted and explained by video, which was very effective'.

The combination of different media in nutrition communication was highly valued by five out of six community leaders. They believed that a combination of video and group discussion helped to clarify the content of the project information for the village audiences:

> Video was the most influential medium. However, since two-way communication was not possible with video, many people found it hard to understand the information. In such cases, community workers used to explain and sometimes also

173

demonstrate problems and issues which caused confusion. This approach made the information very clear and informative for the villagers.

Some community leaders believed that printed materials, such as calendars and posters were not very useful in informing village people: 'The pictures in calendars were hard to understand. The posters were understood only when they were explained in detail by the project staff'. Some of the community leaders mentioned the use of audio cassettes containing jingles and believed that they were interesting and influential. One community leader contended, 'People liked the songs [jingles] and received useful information'.

All the community leaders unanimously agreed that the villagers be consulted in message design and dissemination. The main benefits of consultation, according to most of the community leaders, were that it made the project more effective: 'A project will prove beneficial if local people's opinions and suggestions are included in the design and development of information'. Similarly, the identification of real situations and problems also seems to be essential for the project's effectiveness: 'If the villagers are consulted, a more effective project suitable to the local environment can be developed'. Some community leaders assumed that there would be a problem with the villagers' understanding of the information if they were not consulted beforehand: 'If the villagers are not consulted, they will not be interested in the project activities because they will not be able to understand the message'. One of the female community leaders put forward the view that since women are responsible for household nutrition, they especially should be involved in consultations. Similarly, one community leader warned that 'the project will create confusion or scepticism among villages if they are not consulted in the processes of the project, in its design, implementation, and termination'. It might be relevant to mention here that, in 1993, when the author of this thesis went for the first field trip to Gorkha, the night blindness project (NBPPP) had recently ended its activities and had not consulted or notified the target villagers. During that time, there was much uncertainty in the target villages (Khoplang and Mirkot). As one village women said:

> ...we had seeds and seedlings for making vegetable and fruit gardens. When the project left without anybody's informing us, we had practically nothing in our gardens. Although (pointing out a man who was present at the tea shop with the author and was previously involved in the NBPPP) this man did not give a damn about me, I was still interested in the NBPPP activities. As a result, I managed to grow many vegetables and fruits, and also produced some seeds by myself. I'm

here now on the way to my relative's house to give away some seeds I have. Look at these seeds I have (showing seeds to this author). ...Though the project didn't approach us to get our ideas on how the project should go, it was really good to have it here in our village. But unfortunately it is gone. Where is it gone? Why is it gone? I don't know .. why? ... I wished it was still there in our village.

The above statement suggests that the village people were neither consulted on the project's functioning nor informed about its termination. From the author's discussions with the senior project staff of the NBPPP, it would appear that the people did not participate in, and were not consulted about the project design and development, but the project did involve local people, such as women volunteers, mothers groups, teachers, local leaders and folk singers, in the implementation phase.

Almost all the community leaders, six out of a total of seven, believed that inviting villagers to a group meeting was the best way of consultation with villagers. In contrast, the remaining community leader considered that consultation with a village representative was the best way of consulting with the villagers.

According to their project experiences as well as their perceptions, all of the community leaders had preferences for certain modes of communication as appropriate to village nutrition communication (see Table 9-15).

Table 9-15 : Appropriate Media for Communicating with Village People

Community leaders	Media of Preference*				
(n=7)	First	Second	Third	Fourth	Fifth
A	VD	IP	PM	RD	FM&O
B	FM&O	IP	PM	VD	RD
C	IP	PM	VD	FM&O	RD
D	IP	VD	PM	FM&O	RD
E	VD	PM	IP	RD	FM&O
F	VD	IP	PM	RD	FM&O
G	IP	VD	RD	PM	FM&O

*Media Abbreviation: IP = Interpersonal, VD= Video, RD = Radio, PM= Printed Materials, and FM&O = Folk Media and Others

On the basis of their stated preferences, statistical calculations for computing the mean ranks of all the preferred media were made using Kendall's Coefficient of Concordance (Kendall's W) from which the following mean ranks were noted (see Table 9-16).

175

Table 9-16 : Mean Ranks of Preferred Media

Mean Rank	Communication Media
1.71	Interpersonal
2.00	Video
2.86	Printed Materials
4.14	Folk Media & Others
4.29	Radio

From the above table we can see that interpersonal communication was the most preferred media of communication followed by video, printed materials (posters and pamphlets), folk media and others and radio. It should be pointed out that group discussion was the most preferred interpersonal mode as opposed to one-to- one communication.

Although the main reasons were not clear, the community leaders gave some reasons for their preferences for a particular medium. For example, for many community leaders, group discussions were a means of allowing people's participation and discussion. One community leader who gave group discussions his first preference, said that they enabled ' a lot of people to participate and discuss'. Similarly, some viewed group discussions as an important means of 'exchanging ideas'. At the same time, others saw group discussions as a convenient form of communication in terms of 'place' and 'time': 'Discussions can be held at various places and a lot of people can participate at the same time'.

A majority of community leaders perceived video to be basically a learning tool: 'actual things to be seen and easily understood.' Although video was given second preference, many community leaders believed that 'video backed by group discussions is a very effective means of easy understanding of the information'. Some believed that 'it can elaborate and demonstrate the important points explained in discussions'. Some of the community leaders also saw video as a way of gaining people's participation. They contended that 'most people will participate when a video is shown'. This refers to their participation as an audience well as to their participation in discussions.

Despite the fact that many community leaders considered printed materials (posters and pamphlets, flip charts and calendars) as inappropriate modes of communication in the village context, they (the printed materials) were nevertheless given third preference in that 'they can be effective if they are explained by the staff of the project'. It was also believed that printed materials can enhance the learning process if they are supported with good pictures and explanations. One community leader suggested that, 'information can be understood if it is in the form of pictures'. Another added that 'people can learn by looking at pictures'. It was also believed that the pictures should be relevant to the place and situation: 'Posters or others [other printed materials] can be effective if they are redesigned or changed from time to time according to the situation and place'.

One-to-one communication was perceived as an effective means of communication when there were sufficient resources to visit individuals: 'One-to-one discussions would prove very effective if health workers visited every household and spread information'. It was also believed that one-to-one communication helps explain information: 'Information can be explained to each individual properly'. More importantly, it was believed that this form of communication could help those audiences who have difficulty in understanding: 'People who have problems in reading information can be taught individually through one-to-one discussions'. Despite the many advantages of one-to-one communication, a majority of community leaders strongly held the view that it was a very 'time consuming process', especially in going door to door to every household.

Most of the community leaders considered folk song as an entertaining form of communication in the village context: 'Folk songs with information are entertaining'. Some community leaders emphasised the importance of the role of school children in message dissemination and believed that: ' Information can easily be spread by children'.

Many community leaders indicated that radio is an effective medium of communication in a village if 'one has access to it'. But, they suggested that it is essentially a 'one-way' form of communication.

A majority of community leaders perceived participatory modes of nutrition communication to be those that involve two-way dialogue and discussions. In this connection, one of the community leaders stated that 'a medium or mode that can facilitate two-way dialogues is participatory'. Another asserted that 'any mode of communication which can create discussion can be regarded as participatory'. Some community leaders also held the view that any modes of communication developed in consultation with villagers are participatory: 'Any mode which is developed by consulting villagers during the development process can be regarded as participatory'. On the other hand, one community leader contended, 'any mode which can accommodate people's views and suggestions can be regarded as participatory'. Non-participatory nutrition communication, on the other hand, was perceived mainly to be one-way communication, which lacked discussion and dialogue and which was not receptive to people's ideas and opinions.

Conclusion

According to the data as analysed above, 75% of the respondents indicated their familiarity with the project and 73% reported their participation in the project. This suggests that the project was successful in reaching substantial numbers of target audience, unlike the project in Nawalparasi district.

With the support of very significant and strong correlations, the data analysis also suggests that the respondents' level of familiarity with, and participation in, the project can largely be explained by the level of project communication the respondents were exposed to. This apparent link is similar to the data analysis results in Nawalparasi, where, however, only a very low number of respondents reported their actual familiarity with, and participation in, the program.

Despite strong positive correlations of project communication with project familiarity and participation, there were no strong indications (positive associations) suggesting that the project communication had a direct bearing on the level of knowledge of green leafy vegetables and yellow fruits as well as on the frequency of intake. The reason for this

may be that the project focused on the delivery of tangible goods, such as seeds and seedlings of green leafy vegetables and yellow fruits, which did not necessarily contribute to knowledge sharing and utilisation among villagers.

The findings of the focus group discussions suggest that the sharing of project knowledge and information was a problem and was confined mostly to those villagers who were directly trained in the program. A majority of focus group participants strongly believed that knowledge should be shared among the villagers and that it should not be confined to some individuals at the cost of the project. Similarly, the focus group discussions indicated that any of the benefits gained from the knowledge and information disseminated by the project were undermined by the villagers, who were more focused on financial gains rather than on making use of the knowledge and information for their own nutritional benefit. In addition, the focus group discussion also expressed concern over the adequacy of the information for resolving village nutrition problems. They indicated that information which contains some level of detail information is preferable in the village context.

A majority of household respondents, focus group participants and local community leaders expressed their faith in participatory nutrition communication. A majority of them preferred to be consulted on nutrition projects. Many preferred group meetings as the most effective means of consultation.

On the basis of their individual project experience, a majority of community leaders believed in a variety of approaches and mixed media, especially a combination of video and group discussion, for effective village communication. As was the case with the majority of the focus group participants, they stated their top preference to be video and group discussions. However, this differs from the household respondents, who gave their first preference to one-to-one communication followed by video.

Many focus group participants, as is the case of community leaders, believed one-to-one communication was not feasible in that it involved too much time and money. On the other hand, many considered posters and pamphlets to be inappropriate for non-literate

people. At the same time, many participants did not prefer radio as they considered it did not improve participation. Similarly, folk media - for example, 'gaines', who are a very popular form of village entertainment in Gorkha - were not considered an appropriate mode of nutrition communication in situations where the 'gaines' directly sought to collect money from the villagers.

It was observed in the focus group discussions that people did not like nutrition projects to be channelled through the local political body or development committee. The majority of the focus group participants believed that nutrition activities were participatory only if they went directly to the village people and involved an 'exchange of ideas and feelings', 'mutual-operation' and 'joint efforts'. Similarly, a majority of community leaders believed that participatory modes of nutrition communication involved two-way dialogue, discussion, and consultation with the villagers.

The next chapter 10 discusses the analysis of the data and information of the last survey district, Ramechhap. As stated earlier in chapter 7, Rasnalu Village Development Committee (VDC) was the only survey site selected in Ramechhap, where the field survey was carried out on the basis of a program designed especially for women's empowerment, including nutrition.

CHAPTER 10 : RAMECHHAP DISTRICT - PRODUCTION CREDIT FOR RURAL WOMEN

The first section of this chapter looks at the analysis of the data and information gained from the survey households and focus group discussions in the Ramechhap district, where the Production Credit for Rural Women (PCRW) conducts its nutrition program. The ensuing section then focuses on the analysis of the data and information from the community leaders (local political leaders and field workers) involved in the survey program. It should be noted that there were only four interviewees from among the community leaders. The main reason for this was that, unlike the other two districts surveyed, there were no school teachers involved in the nutrition program.

Ramechhap was one of the 49 target districts covered by the PCRW, and Rasnalu Village Development Committee (Rasnalu VDC) was the main target area in Ramechhap for PCRW activities. As explained in chapter 6, the target beneficiaries of the PCRW program were poor rural women involved in income-generating activities. The program assigned two women workers to disseminate its information in Rasnalu VDC. These two women workers were recruited centrally by the program from outside Ramechhap.

Familiarity with, and Participation in, the Program

Of a total of 134 household respondents, 44.8% reported that they had a 'high' level of familiarity with the program. 6.7% reported they had what has been defined as a 'reasonable' level of familiarity, while 48.5% indicated no familiarity with the program. It should be noted that among those who reported 'high' and 'reasonable' level of familiarity, 3.7% of them were males, despite the fact that the program was oriented towards women (Table 10-1). These male respondents informed the author of this thesis that they had helped the program staff to carry out their activities in the villages.

Table 10-1 : Program Familiarity in Ramechhap

Level of familiarity n = 134 *Frequency* *(%)*								
High			Reasonable			None		
Male	Female	Total	Male	Female	Total	Male	Female	Total
2 (1.5)	58 (43.3)	60 (44.8)	3 (2.2)	6 (4.5)	9 (6.7)	62 (46.3)	3 (2.2)	65 (48.5)

Many of the respondents who reported a 'high' level of familiarity with the program described it as a process of raising women's awareness through various activities such as income-generation, education, health and nutrition. On the other hand, most of those who had a 'reasonable' level of familiarity believed that it was for income-generation purposes only.

Since the program was oriented towards women, women were the only direct participants in the program. However, compared to the level of familiarity with the program, only 38.8% actually participated (see Table 10-2). Many of those who did not participate (11.2%) reported that they were too busy with their own household affairs to spare time for the program.

Table 10-2 : Program Participation in Ramechhap

Level of Participation n = 134 *Frequency* *(%)*					
Partial			None		
Male	Female	Total	Male	Female	Total
0 (0)	52 (38.8)	52 (38.8)	67 (50)	15 (11.2)	82 (61.2)

It should be noted that among the 67 male respondents in total (50% of the sample population), there were some who had directly benefited from the program's activities despite their lack of direct participation in the program. As one older male respondent of the focus group noted:

> When the women's development program came to the village and my wife took part in it, we learned many in regard to foods. Since then I do eat properly. My eyes can still see very well. I go to the jungle every day on my own to collect grass for

my cattle. Perhaps a knowledge of foods is more useful to older people than the younger ones as the younger people can get strength even from the water they drink. But for an old man like me, I think, proper food is necessary.

All of the 51.5% of the respondents who reported being highly or reasonably familiar with the program had been exposed to some levels of program communication. It was found, however, that 37.3% of the respondents had been exposed to a low level of program communication, and 14.2% to a medium level (see Table 10-3). The most common sources of communication, as reported by many of the respondents who were familiar with the program, were one-to-one communication and printed materials, such as posters and pamphlets. It should be noted that more than three quarters of the respondents who were familiar with the program were non-literates.

In order to determine the main factors affecting the respondents' familiarity with the program, correlations were made and the results, as presented in Table 10-3, revealed that there is a very significant and strong positive association of the respondents' level of familiarity with the level of participation (γ .99) and the level of communication the respondents were exposed to (ρ .92 at the significance level .00). Conversely, there is a significant, but negative correlation with the level of education (ρ -0.41 at the significance level .00) as more non-educated respondents reported 'high' and 'reasonable' familiarity than did those who had some level of education.

As in other districts, the level of participation of the respondents in the program in Ramechhap was also reported to have been at the 'partial' level. Thus, those female respondents who participated in the program (77.6% of a total of 67 female respondents or 38.8% of a total of 134 altogether) were involved only in the later implementation phases, such as nutrition education, adult education and income-generating activities. All the respondents who had participated reported that they had been exposed to various forms of program communication. Specifically, 23.9% of the respondents were exposed to a 'medium' level of program communication and 53.7% to a 'low' level (see Table 10-4)

Table 10-3 : Level of Familiarity By Level of Participation, Education, & Communication in *Ramechhap*

Level of familiarity	Level of participation Frequency (%)		Level of education Frequency (%)				Level of communication exposed to Frequency (%)			
	Partial	None	University	High School/Secondary	Primary/Elementary	None	High	Medium	Low	None
High	51 (38.1)	9 (6.7)	0	0	4 (3.0)	56 (41.8)	0	17 (12.7)	43 (32.1)	0
Reasonable	1 (0.7)	8 (6.0)	0	1 (0.7)	2 (1.5)	6 (4.5)	0	2 (1.5)	7 (5.2)	0
None	0	65 (48.5)	1 (0.7)	3 (2.2)	25 (18.7)	36 (26.9)	0	0	0	65 (48.5)
Statistical test:										
Correlation										
n	134		134				134			
ρ	-		-0.41				0.92			
γ	0.99		-				-			

184

It is apparent from Table 10-4 that there is a significant strong positive association between the level of participation and the level of communication (γ .80), and an even stronger positive association with the level of education (γ 1.0). It should be noted here that the main reason for such a high correlation with the level of education is attributable to the fact that there were only three educated respondents among the sample female population, all of whom participated in the program.

It was revealed from the focus group discussions that in Rasnalu, until thirty or forty years ago, there used to be some participatory processes involving the villagers for resolving important village problems. One of the senior villagers who actively took part in the focus group said:

> Our fathers used to assemble in the village if there was a serious problem to be dealt with. For example, if there was an outbreak of cholera, they used to meet and decide on some measures to fight the problem. For example, they used to prohibit people from going to cholera-infected areas or from getting into close contact with the victims of cholera. They used to hang a stone at the border of a village or house where the epidemic had struck. Now such things do not happen. No one bothers to resolve village problems with mutual discussions.

However, despite the above statement, many participants strongly believed that the women's development program had allowed for participatory practices in the villages, especially among the women. In the field enquiries undertaken by the author of this thesis, it was revealed that these participatory practices were referred to activities involving the women in the 'partial' participation, which enabled them to receive benefits from the program, such as nutrition education, adult education and financial support for income-generating projects. One of the senior staff members of the Women's Development Division (WDD) of the Ministry of Local Development, who was also supervising the PCRW at the centre level, confirmed that the program did lack full participation: 'local women were not involved in program design and development'. He further stated that 'this problem is not unique to the PCRW but is a national problem in Nepal, where a crisis of confidence between villagers and program developers has been created'[1].

---

[1] This view is very close to the observations made by the author of this thesis in Rasnalu, where two villagers rejected the request of the VDC chairman to attend a focus group discussion to be conducted

185

Table 10-4 : Level of Participation By Level of Familiarity, Education, & Communication in *Ramechhap*

Level of participation	Level of education Frequency (%)				Level of communication exposed to Frequency (%)			
	University	High School/ Secondary	Primary/ Elementary	None	High	Medium	Low	None
Partial	0	0	3 (4.5)	49 (73.1)	0	16 (23.9)	36 (53.7)	0 (0)
None	0	0	0	15 (22.4)	0	1 (1.5)	11 (16.4)	3 (4.5)
Statistical test:								
Correlation								
n			67				67	
ρ			-				-	
γ			1.0				.80	

Knowledge of the Program's Nutritional Information

Despite the fact that the male respondents were not eligible to directly participate in the program's activities, more males than females reported what has been defined as a 'good' or 'satisfactory' level of knowledge of the role of both green leafy vegetables and yellow fruits (see Table 10-5). Thus, 36.6% of male respondents indicated a 'good' or 'satisfactory' level of knowledge of green leafy vegetables, as against 32.1% of the female respondents. At the same time, 23.2% of the male respondents reported a 'good' or 'satisfactory' level of knowledge of yellow fruits, compared to 11.9% of the female respondents.

Table 10-5 : Knowledge of the Nutritional Value of Food in Ramechhap

	Level of knowledge (n= 134) Frequency (%)							
	Good		Satisfactory		Poor		None	
	Male	Female	Male	Female	Male	Female	Male	Female
Green leafy vegetables	43 (32.1)	41 (30.6)	6 (4.5)	2 (1.5)	12 (9.0)	19 (14.2)	6 (4.5)	5 (3.7)
Yellow fruits	14 (10.5)	7 (5.2)	17 (12.7)	9 (6.7)	14 (10.5)	28 (20.9)	22 (16.4)	23 (17.2)

The comparatively greater knowledge on the part of the males may be interpreted as due either to their prior knowledge (perhaps owing to their higher literacy level, see Table 10-6), or to the program's lack of impact, although it might nevertheless have had an impact in the sense that it caused a relative improvement in women's knowledge of foods, compared to what they knew beforehand.

Table 10-6 : Male and Female Levels of Education in Ramechhap

Level of education n = 134 Frequency (%)							
Male				Female			
University level	High school/ Secondary level	Primary/ Elementary level	No education	University level	High school/ Secondary level	Primary/ Elementary level	No education
1 (0.7)	4 (3.0)	28 (20.9)	34 (25.4)	0 (0)	0 (0)	3 (2.2)	64 (47.8)

187

It should be noted that, as in other districts, most of the respondents of Ramechhap emphasised the importance of green leafy vegetables in relation to eye protection. In the focus group discussions, many participants frequently referred to green leafy vegetables only. People in Rasnalu, as in other survey areas, also traditionally view both green leafy vegetables and yellow fruits as one of their regular food items. As one focus group participant said, 'We have traditionally used green vegetables and yellow fruits as normal foods'. Many said that the PCRW has helped them understand the importance of green leafy vegetables in the protection of eyes. One female participant said: 'The staff of the Women's Development Project (which is PCRW)[2] have talked about the importance of green leafy vegetables for our eyes, which we did not know before'. Referring to locally available wild green vegetables, one male participant expressed the view:

> There are some vegetables which are easily available in our waste lands and in nearby forests, such as garlic pears, amaranth, pigweed, lamb's quarters and stinging nettles that have long been used by poor people as their food. But others do not care for them, which is no good. We can use them as an alternative supply of vegetables when required.

Supporting this view, one female participant indicated the need for the villagers' participation in nutrition communication:

> We should be involved in participation because we know which foods are easily available in our villages, but we don't know their utility and importance. We will learn their importance if we take part in the nutrition communication program and share the knowledge among ourselves.

The focus group participants were very much aware of the locally available food resources which were utilised only by the poorer villagers, who do not necessarily know about their importance for health, but who eat them simply to stay alive.

To identify the most important variables associated with both the male and female respondents' level of knowledge of green leafy vegetables and yellow fruits, some correlation tests were carried out. However, except for a very significant, but weak, correlation between the level of knowledge of green leafy vegetables and the level of education (ρ .28 at the significance level .001), there are no significant correlations with the remaining variables (see Table 10-7 & Appendix Table 28 to 30). This means that, in

---

[2] In Rasnalu, villagers generally refer to PCRW as the Women's Development Project.

Table 10-7 : Level of Knowledge (Green Leafy Vegetables) By Level of Participation, Level of Education, & Level of Communication Exposed to in *Ramechhap*

Level of Knowledge	Level of participation Frequency (%)		Level of education Frequency (%)				Level of communication exposed to Frequency (%)			
	Partial	None	University	High School/ Secondary	Primary/ Elementary	None	High	Medium	Low	None
Good	33 (24.6)	51 (38.1)	1 (0.7)	3 (2.2)	26 (19.4)	54 (40.3)	0	11 (8.2)	34 (25.4)	39 (29.1)
Satisfactory	2 (1.5)	6 (4.5)	0	1 (0.7)	1 (0.7)	6 (4.5)	0	0	2 (1.5)	6 (4.5)
Poor	13 (9.7)	18 (13.4)	0	0	4 (3.0)	27 (20.1)	0	5 (3.7)	13 (9.7)	13 (9.7)
None	4 (3.0)	7 (5.2)	0	0	0	11 (8.2)	0	3 (2.2)	1 (0.7)	7 (5.2)
Statistical test:										
Correlation										
n	134		134				134			
ρ	-		0.28				0.01			
γ	0.01		-				-			

this program, the level of participation as well as the level of exposure to program communication have no relation to explain the reported level of knowledge of green leafy vegetables and yellow fruits.

Although the above correlations, based on the total sample population and also the sample population of females alone, do not explain the recorded level of knowledge among the survey respondents, it may be assumed that some modes of communication other than those used by the program may have had an impact on the respondents' reported level of knowledge. Such modes may be, for example, the various radio programs on nutrition and health sponsored by government and non-government agencies, and extension services to the villagers that relate to health, family planning and nutrition. It was revealed by a study of family planning, maternal and child health in Nepal, based on radio audiences, that more males listen to radio programs than females (New Era, 1993: ix). This may be the case in the village of Rasnalu too. It is worth highlighting here that women in Nepal , as in many other developing countries, have very little time for activities such as listening to the radio, compared to their male counterparts.

Reported Frequency of Intake of the Foods Promoted by the Program

Of a total of 67 survey households, 62.7% reported that they eat green leafy vegetables daily and 37.3 % reported a frequency of more than once a week. In contrast, as few as 1.5% reported that they eat yellow fruits daily, while 11.9% reported a frequency of more than once a week and for the remaining 86.6% the frequency was weekly or less often (see Table 10-8).

It would seem that yellow fruits have less importance in the villagers' diet. The main reason for this may be either the lack of easy access to yellow fruits or a lack of knowledge of the role of yellow fruits compared to people's knowledge of green leafy vegetables (Table 10-5). It should be worth mentioning that there are very few fruit trees in the survey villages, and the villagers did not show any interest in planting fruit trees.

Table 10-8 : Frequency of Eating Behaviour in Ramechhap

Food	Frequency of eating (n = 67 households) *Frequency (%)*		
	Daily	More than once a week	Weekly or less
Green leafy vegetables	42 (62.7)	25 (37.3)	0
Yellow fruits	1 (1.5)	8 (11.9)	58 (86.6)

In an attempt to assess the relationship of the eating frequency of both green leafy vegetables and yellow fruits with other variables, such as the level of knowledge, level of participation, level of education and level of communication the respondents were exposed to, correlation tests were made. In these tests, however, variables such as the level of participation and level of program communication the respondents were exposed to, were not included for the male respondents as these variables did not concern them.

From Table 10-9 and Appendix Tables 31 to 33 it is apparent that, except for a negative, but perfect, correlation of the level of education with the frequency of intake of yellow fruits by female respondents (see Table 10-9), none of the correlations is significant. These tables would apparently suggest that the reported level of knowledge, level of education, level of program participation, and level of communication the respondents were exposed to have no significant positive influence on the level of intake of green leafy vegetables and yellow fruits.

Perceptions of , and Attitudes towards, Participatory and Non-participatory Nutrition Communication

46.3% of the respondents reported that they had had some participatory experience during the Panchayat regime (Table 10-10). It should be noted, however, that their experience of participation consisted of a compulsory contribution of physical labour to local developments. Thus, none of the respondents reported having had any experience in participating in project design, development and evaluation.

191

Table 10-9 : Frequency of Yellow Fruits Intake By Level of Knowledge, Participation, Education, and Communication among Female Respondents in Ramechhap

Frequency of yellow fruit intake	Level of knowledge Frequency (%)				Level of participation Frequency (%)		Level of education Frequency (%)				Level of communication exposed to Frequency (%)			
	Good	Satisfactory	Poor	None	Partial	None	University	High School/ Secondary	Primary/ Elementary	None	High	Medium	Low	None
Daily	0	0	0	1 (1.5)	32 (47.8)	10 (14.9)	0	0	0	1 (1.5)	0	0	1 (1.5)	0
More than once a week	1 (1.5)	0	3 (4.5)	4 (6.0)	20 (29.9)	5 (7.5)	0	0	0	8 (11.9)	0	1 (1.5)	6 (9.0)	1 (1.5)
Weekly or less	6 (9.0)	9 (13.4)	25 (37.3)	18 (26.9)	0	0	0	0	3 (4.5)	55 (82.1)	0	16 (23.9)	40 (59.7)	2 (3.0)
n	67				67		67				67			
Correlation														
Rho (ρ)	-.16				-		-				-.16			
Gamma (γ)	-				-.11		-1.0				-			

192

Table 10-10 : Participatory Experience in Ramechhap

Participatory Experience (n = 134) Frequency (%)	
Yes	No
62 (46.3)	73 (53.7)

Although a large number of the respondents (53.7%) reported that they had never had any participatory experience in previous projects, as many as 94% of the respondents asserted that they should be consulted in the process of their development (see Table 10-11). 65.9% of the respondents who supported the need for consultation said their reasons were that they wanted to know the intentions of the program and its benefits for the people. The remaining 34.1% of the respondents indicated that they wanted interaction with the program staff to discuss the problems and issues related to the village.

Table 10-11 : Views Regarding Consultation in Ramechhap

Need for consultation (n = 134) Frequency (%)		Reasons for consultation* (n = 126) Frequency (%)	
Yes	No	To have interaction	To know the program's intentions
126 (94.0)	8 (6.0)	43 (34.1)	83 (65.9)

* Number representing those respondents who favoured consultations

One of the female participants of the focus group highlighted the importance of consultation with the villagers:

> Look, though the sisters (female program workers) of the Women's Development Division have done a very good job for us, they could not actually function very well in the first year of their work. The main reason was that they did not bother to discuss their activities with the people of all the wards of this village. As a result, their activities became limited to only some of the wards of this village, such as wards 1, 2 and 3 only, and none of the members of the rest of the wards were interested in their activities. A year later, they realised the necessity of the participation of these wards, thus they invited representatives (one male and one female) from all these wards to discuss their participation in their activities. It was good that they did discuss with the villagers eventually; otherwise, it would have been very difficult for them to work in this village.

Two themes emerged in the focus group discussions: the need for a project to have a dialogue with the village people; and consultation to be initiated from the project itself as the village people do not necessarily come forward to negotiate with the project staff unless they are approached by the latter to discuss matters of interest to them.

All the respondents believed that the usual method of dissemination of information in their village by the government and non-government organisations in regard to food, nutrition, health and other activities was one-way, from program staff to villagers, and that the staff did not seek the villagers' input through consultation, meetings or discussions of the program content. 94% valued consultation or participation, and, of these, 86.5 % preferred to be invited to a group meeting, while 5.6 % preferred consultation that goes through someone who represents the views of the villagers. At the same time, 4.8 % of the respondents suggested the inclusion of the villagers in a program consultative committee, and the remaining 3.2% recommended interpersonal discussions (see Table 10-12).

Table 10-12 : Preferred Methods of Consultation in Ramechhap

Preferred methods of consultation* (n = 126) *Frequency (%)*			
Being invited to a group meeting	Being a member of a consultative committee	Having interpersonal discussions	Consulting with someone who puts forward the views of the villagers
109 (86.5)	6 (4.8)	4 (3.2)	7 (5.6)

* Number representing those respondents who favoured consultations

Most of the respondents (94%) believed that they should be included in the design and dissemination of health and nutrition information as they have a lot of knowledge of the local conditions and traditional practices (see Table 10-13).

As far as the importance of experts help is concerned (Table 10-14), almost all of the respondents (99.2%) agreed that they need some input by experts for resolving village nutrition problems (Statement A). Most of them (85.8%) believed that experts alone

could bring about changes in the villages (Statement B). On the other hand, some 59.7% agreed that the villagers can bring about changes by themselves, while 40.3% disagreed with this view (Statement C). Furthermore, almost all of the respondents (99.2%) believed that they could engage in dialogue with the nutrition experts (Statement D). One interpretation of these seemingly conflicting attitudes is that the villagers believe that they themselves can resolve village nutrition problems, but that they need expert help and advice in working effectively on these problems.

Table 10-13 : Views Regarding the Design, Development and Dissemination of Information in Ramechhap

Views regarding the design, development & dissemination of information (n = 134) *Frequency (%)*	
Statement A Health and nutrition information should be designed and disseminated by the experts alone as the local people do not have any expertise in this field	Statement B Local people's opinion and participation should be included in the design and dissemination of information as I believe that the local people are also experts in the local conditions and traditional practices
8 (6.0)	126 (94.0)

Table 10-14: Views Regarding Expert Help in the Resolution of Nutrition Problems in Ramechhap

(n = 134) *Frequency (%)*			
Statements	Agree	Neutral	Disagree
Statement A The village communities simply need help in resolving the problem, with some suggestions and information from experts.	133 (99.2)	1 (0.7)	0 (0)
Statement B Experts alone can bring about changes in the villages.	115 (85.8)	1 (0.7)	18 (13.4)
Statement C Villagers can bring about changes by themselves.	80 (59.7)	0 (0)	54 (40.3)
Statement D Villagers can engage in dialogues with nutrition experts or workers in bringing about changes.	133 (99.2)	0 (0)	1 (.7)

Appropriate Modes of Communication

In relation to the question as to what mode of communication are preferred for facilitating the participation of the villagers in nutrition projects, 55.2% of the respondents gave their first preference to interpersonal communication, especially one-to-one communication. Another 44% of the respondents put videos as their first preference, while only 0.7% of the respondents gave the first preference to radio. None of the respondents gave their first preference to print media, such as posters and pamphlets, or to folk media (songs and dances). The respondents also indicated their second, third, fourth and fifth preferences regarding different media (see Table 10-15).

In order to ascertain the overall order of preference, Kendall's Coefficient of Concordance (W) was used, from which a mean rank of preferences was derived as shown in Table 10-15. According to the table, interpersonal communication has the first rank (mean rank 1.54), followed by video in the second rank (mean rank 1.80) and printed materials (posters and pamphlets) in the third rank (mean rank 3.51). The main reasons for these preferences are summarised in Table 10-16, which briefly indicates that interpersonal communication, such as one-to-one and group discussions, is as a means of facilitating easy understanding and the exchange of ideas, while video is regarded as a means of providing visual examples and explanations. At the same time, one respondent

Table 10-15 : Modes of Communication in Order of Preference in Ramechhap

Comm. Modes	Preference (n = 134) Frequency (%)					
	1st	*2nd*	*3rd*	*4th*	*5th*	*Mean Rank**
Interpersonal	74 (55.2)	51 (38.1)	6 (4.5)	2 (1.5)	1 (0.7)	1.54
Video	59 (44.0)	51 (38.1)	17 (12.7)	6 (4.5)	1 (0.7)	1.80
Radio	1 (0.7)	11 (8.2)	31 (23.1)	39 (29.1)	52 (38.8)	3.97
Printed Materials	0 (0)	17 (12.7)	52 (38.8)	45 (33.6)	20 (14.9)	3.51
Folk Media & other	0 (0)	4 (3.0)	28 (20.9)	42 (31.3)	60 (44.8)	4.18

(*Rank: 1 = 1st preference, 2 = 2nd preference, 3 = 3rd preference, 4 = 4th preference, 5 = 5th preference)

Table 10-16 : Reasons for Preferred Modes of Communication in Ramechhap

Reasons	Communication modes (n = 134) Frequency (%)				
	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5
Discussion and exchange of ideas possible	50 (67.5)	0 (0)	0 (0)	0 (0)	0 (0)
Actual things can be seen	0 (0)	49 (83.0)	0 (0)	0 (0)	0 (0)
Easy access to information	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Attractive and entertaining	0 (0)	2 (3.4)	0 (0)	0 (0)	0 (0)
Easy to understand	23 (31.1)	8 (13.6)	1 (100)	0 (0)	0 (0)
Pictures and cartoons attractive	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Other reasons	1 (1.4)	0 (0)	0 (0)	0 (0)	0 (0)

Mode 1 = Interpersonal (One-to-one/Group discussions) Mode 2 = Video Mode 3 = Radio Mode 4 = Printed Materials
Mode 5 = Folk Media & Others

regarded radio as an easily accessible source of information. However, for the other modes of communication, no one provided any reasons whatsoever for their preferences.

In the focus group, a majority of the participants preferred television and video as the most appropriate modes of nutrition communication. They believe that television and video can give information based on real life stories and situations. Referring to video and its use in nutrition, one of the participants suggested, 'We can get video films with examples of locally available foods and their usefulness in health'.

Many believed group discussions to be a very appropriate mode of communication as they bring people together for the exchange of ideas and information. Many believed that group discussions would be very effective if they were backed up by visual demonstrations. One of the participants believed that, 'Group discussions are appropriate if you discuss and demonstrate something in a visual or practical manner'. Some participants asserted that video or posters and pamphlets could be used to reinforce the effectiveness of a group discussion, 'A group discussion supported by posters would be good for telling the participants what they were talking about'. One participant, while

197

believing in a combination of video and group discussions for effective nutrition communication, said that:

> A combination of video and group discussions may be very effective in nutrition because they together can help stimulate discussion as well as present in a visual form the practical ways of doing things. But the problem may be that what has been seen and discussed cannot be practised in life due to real poverty and a lack of resources in the villages. For example, those foods and vegetables discussed and demonstrated through video and in the group discussions may not be available to many of the poor villagers.

During the field visit of the author of this thesis, a senior official of the Women's Development Division (WDD), responsible for PCRW, expressed a similar view and also commented on the use of borrowed pamphlets and posters by PCRW. He stated that the latter were inappropriate for many local people in the various PCRW project sites. He further stated that some nutrition-rich foods shown on the pamphlets or posters were either too expensive or unavailable in particular places or situations. He confirmed that there was a lack of people's participation in PCRW's communication process, and believed that the PCRW's target beneficiaries should be involved in the development of any information concerning nutrition, health, agriculture, livestock and adult education.

One participant, highlighting some of the commonly-used visual aids, such as posters and pamphlets, and comparing them with video and group discussions, expressed the view that:

> Well, posters are a good communication materials, but they can only be read by literate people. In our village, only a very few people can read and write. Even if a poster is read by someone, he/she mostly doesn't bother to tell the others about it or forgets to tell them. Therefore, video and group discussions are good, because everybody can easily understand what is said and shown. No one needs special help in this.

As for one-to-one communication, many participants did not favour it: 'One-to-one communication is not appropriate because it is not possible to go to from door to door due to time factors'. Comparing one-to- one communication with group discussions, one participant noted:

> We are wasting our time on one-to-one communication because it helps us to share our knowledge with only one person or household at one particular time. In contrast, in a group discussions, we can share our knowledge and experience with all the members of the group all at once, which requires only a limited time and energy. At the same time, a group discussion helps interact with each other to

198

reinforce our individual understanding, which is not possible in one-to-one communication.

As a matter of fact, the experience of the women workers of the program would appear to suggest that one-to-one communication is very exhausting and time-consuming, especially in the mountain and hill country.

Perceived Meaning of Participatory Nutrition Communication

Most of the focus group participants perceived participatory nutrition communication to be 'working together' with project staff in dealing with the nutrition problems of their villages; otherwise 'it is not participatory'.

For many participants, working together creates 'confidence to work with someone and avoids unnecessary confrontation.' Thus, many affirmed, ' we need to work together with others to resolve our problems.' In support of this, one male participant said:

> No matter how good the assistance in the village is, we village people cannot properly utilise any assistance unless we are ourselves involved in its process, because, in order to understand something and do it accordingly, we need practice. Therefore, we need to work together with the project staff to enhance the amount of practice we get.

It would appear that the above view specifically relates 'working together' with 'practice' which, in this participant's view, is very important in achieving the goals of any nutrition or nutrition-related project.

Emphasising the need for working together, one of the senior villagers who participated in the focus group put forward his views:

> If we don't work together, we tend to take care of our own interests and values only. As a matter of fact, this tendency has already emerged, as a part of a culture that neither cares for others nor our future. This culture does not help the process of development to move forward, rather it pulls it back. This is not good at all. We have often experienced a lack of co-operation on the part of our fellow villagers in achieving development goals. We have even experienced some of our villagers unnecessarily revolting against us when we solicited their co-operation. This is also not good. To-day, in this assembly, what we need to understand is that we should extend our co-operation to resolve our village problems. In this sense, we should work together with the project and its staff and workers.

199

In regard to the lack of co-operation in village development, as stated above, one of the community leaders contended that:

> The problem of not getting co-operation is, for me, the problem of village poverty as most of the village people work day and night for a hand to mouth existence. Therefore, they sometimes feel disturbed if you ask for their co-operation. But I believe that if they understand your plan and its benefits for them, they will definitely help you and co-operate with you.

The above statement suggests that poverty generally inhibits people's participation in development. However, participation can be achieved if a development project can demonstrate it has potential benefits that can make a difference to poor people's lives. To this end, dialogue with local people is necessary so that they can assess what the benefits might be.

Analysis of Data from Community Leaders

There was a general consensus among all the community leaders that the program, Production Credit for Rural Women (PCRW), used women workers (project workers)[3] as the main communicators for the development of village women in Rasnalu. It was reported that these women workers went from house to house in the target areas to disseminate program information: 'Women workers solicit the villagers' help by arriving on their door steps, and forming women's groups. They also train women in various skills and advance loans to them'.

It was stated that the modes of program information dissemination were mainly: 'Group discussions; one-to-one communication; poster; and radio'. Most of the community leaders believed that these modes were quite effective: 'the villagers are now willing to voluntarily offer their help to the program'. It was also believed that 'it has helped many village women to acquire knowledge'. However, there was a contrasting comment from one community leader (a local political leader) implying that the villagers felt frustrated with the program in relation to the program delivery:

> ..it should be noted that until recently, the villagers were highly stimulated by, and took an interest in, the program in anticipation of some physical development and the achievement of some tangible benefits. Now the situation appears to be

---

[3] These women workers were the field staff members of the Women's Development Division, Ministry of Local Development, who were recruited from other parts of the country to work in Rasnalu.

different; the villagers are gradually becoming frustrated due to the program's inability to make the physical deliveries urgently needed by many of the villagers.

Program delivery for a majority of villagers meant especially the provision of tangible physical benefits, such as the drinking water facilities, the establishment of health posts and schools. But, in PCRW, the provision of such services is not an integral part of the program. However, according to the program workers 'many villagers still have high expectations' which are beyond the scope of the program.

It was obvious from the statements of all the community leaders that the program information was quite understandable for the target audiences. The main reason given for this was that the program mostly used group discussions and posters which provided suitable examples for clarifying problems and finding solutions: 'Group discussions accompanied by posters allowed especially for easy learning'. Most of the community leaders also believed that the program staff tried to share their knowledge with their repeated efforts in the dissemination of information: 'Project staff try to share their knowledge as far as possible; information was repeated many times'.

All the community leaders commented that, although the group discussions and posters were very important modes of communication in the program, there was a lack of visual demonstrations, such as motion pictures. Many thought that ' gathering people together and showing promotional information on video would be very effective'. One of the community leaders suggested that video could be a very good support tool for the group discussions, especially in technical matters regarding nutrition. He concluded: 'Seeing and hearing, a combination of video and group discussion, is an effective means of clarifying nutrition information'.

All of the community leaders felt that the villagers should be consulted on information design and dissemination. They considered that such consultation would be potentially beneficial to the design and dissemination of effective information:

> In consultation, the villagers can give their own suggestions in regard to effective communication. For example, they can suggest what language should be used, and indicate the preferences and traditions of the local audiences in the design and dissemination of the information.

They also believed that consultation provides an opportunity for the villagers to know about the project and also to take part in it: 'Consultation can help the villagers to know about the project and brings about their participation in, or assistance with the project'. Similarly three out of a total of four community leaders preferred the villagers to be invited to a group meeting for project consultation. One community leader, however, suggested that they should be the members of a consultative committee.

On the basis of their individual perceptions as well as their experience of the communication media in the program, all four of the community leaders put the various modes of communication appropriate to village nutrition communication in order of preference (see Table 10-17).

Table 10-17 : Appropriate Media for Communicating with Village People

Community leaders (n=4)	Media of Preference*				
	First	Second	Third	Fourth	Fifth
A	VD	IP	RD	PM	FM&O
B	VD	IP	FM&O	RD	PM
C	VD	IP	PM	RD	FM&O
D	IP	VD	PM	RD	FM&O

*Media Abbreviation: IP = Interpersonal, VD= Video, RD = Radio, PM= Printed Materials, and FM&O = Folk Media and Others

In order to arrive at the mean ranks of all the preferred media, statistical calculations based on Kendall's Coefficient of Concordance (Kendall's W) were carried out, the results of which are summarised in Table 10-18 below.

Table 10-18 : Mean Ranks of Preferred Media

Mean Rank	Communication Media
1.25	Video
1.75	Interpersonal
3.75	Radio
3.75	Posters and pamphlets
4.50	Folk Media & Others

From the above table, it is obvious that video was the first preferred medium of communication followed by interpersonal communication as the second preference. The most common reason given for preferring video was that 'it [video] is a new method that can be attractive and interesting in the learning process'. In addition, it was perceived as

202

a means of both 'seeing and hearing'. As far as interpersonal communication is concerned, group discussions were seen primarily as a way of exchanging ideas: 'Group discussions make it possible for us to listen to others and put forward our own views'. It was also perceived 'easy to understand'. One-to-one communication, on the other hand, was perceived as a means of facilitating individual discussion: 'Individual discussions can come about'. For nutrition communication, however, all of the community leaders found group discussions to be a better mode of communication than one-to-one communication in terms of exchanging ideas and experiences among the villagers and program staff. In this connection, one of the community leaders stated, 'one-to-one cannot create an exchange of ideas among people unless it is part of a group discussion'. Radio was considered to be an entertaining and educational medium of communication. It was also believed that the information conveyed either by a radio or a tape recorder can be easily understood if 'they are repeatedly played '. However, all of the interviewees believed that 'the use of radio or tape recorder may not serve the participatory purpose of nutrition communication'. They asserted that 'one-to-one communication is much better than the radio or tape recorder for creating dialogue or discussion in nutrition communication'.

All of the community leaders considered printed materials, such as posters and pamphlets, to be effective for educated people: 'They [posters and pamphlets] cannot be understood unless you are literate'. Most also thought that the pictures contained in posters and pamphlets are informative: 'People can learn from the visual information provided by the pictures'. But some community leaders were concerned that 'the villagers sometimes give different meanings to the information than those intended'[4].

---

[4] During his first field visit to Nepal, the author of this thesis had a brief discussion about the effectiveness of posters and pamphlets with one of the senior staff members of the Health Learning Material Project, Institute of Medicine, Tribhuvan University, Nepal. On the basis of his project experience, he asserted that local villagers should be included in the design and development of any posters and pamphlets to ensure they are suitable to the local conditions; otherwise any efforts would be futile. He gave an example of a poster developed for the promotion of breast-feeding in Nepal which resulted in failure. On this poster a mother was seen breast-feeding her baby, whose body was fully wrapped with a white cloth from head to toe. This poster was rejected in many of the villages of Nepal as they did not like a baby being fully covered with a white cloth. It should be noted that covering a baby's body from head to toe with a white cloth in Nepal is generally taken to mean the child is dead.

Some community leaders believed that folk media (songs and dances) could be effective modes of communication: 'Local folk songs and dances can be effective as they are part of village life.' They also asserted that these modes are entertaining: 'Folk songs and dances are entertaining'. However, they were not aware of the use of folk songs or dances in nutrition and health communication.

All the community leaders saw participatory modes of nutrition communication as essentially allowing an exchange of ideas between the project and the villagers. They emphasised, therefore, that nutrition projects should be brought to the villages only after an exchange of ideas with the local villagers. They believed that such an exchange of ideas could facilitate the effective design and implementation of project activities. In this concept, one community leader stated: 'Group discussion is, for example, a form of participatory communication where everybody can exchange their ideas in the time available'. Many believed that an exchange of ideas could help all those involved arrive at a shared conclusion. Thus, it was also pointed out that 'nutrition communication becomes participatory if the villagers are consulted for an exchange of ideas in its process'. In contrast, all the general statements of the community leaders implied that media or modes of communication not involving discussion or dialogue and also the ideas of the villagers were non-participatory communication. One of the statements defined non-participatory nutrition communication as: 'Any medium that that does not enhance discussions or the exchange of ideas and which draws conclusions unilaterally'.

Conclusion

The data and information analysed above suggests that, despite the large proportion (95.5%) of the target audiences' (the women's groups') familiarity with the program, there was a lower proportion of participation (77.6%). In Gorkha, however, as noted in chapter 9, there was no such significant difference, and the proportion of participation was very close to the level of project familiarity.

As in Nawalparasi and Gorkha, the data suggest that the respondents' level of familiarity with, and participation in, the program were strongly associated with the modes of communication used in the program.

While females were the target group of the program, the reported level of knowledge about green leafy vegetables and yellow fruits was surprisingly higher among the male respondents than among the females respondents. Similarly, the data suggest that the reported level of knowledge was not associated with either the program participation and program communication. This suggests that the program communication was not able to produce a positive impact on the level of knowledge of the program information although some focus group participants and community leaders believed that the program communication was stimulating and effective in imparting program information. The main reason was that most of the program beneficiaries, in the expectation of financial assistance from the program for income-generating projects (credit facilities for income- generating activities), were forced to listen to the program information brought to the villages by the program women workers, and the resultant partial participation of the beneficiaries in the program was a kind of forced participation - that is, simply a product of the constant efforts of the women workers in approaching and persuading the village women so as to gain their compliance in carrying out the pre-designed program activities.

As regards the reported frequency of intake of green leafy vegetables and yellow fruits by both the male and female respondents, data analysis suggests that there is no strong correlation with any of the variables tested, such as the level of knowledge, level of education, and level of communication the respondents were exposed to. Further, there was no strong correlation between the participation of female respondents in the program and their frequency of intake of the both green leafy vegetables and yellow fruits.

In respect of participatory nutrition communication, a majority of household respondents, focus group participants and community leaders indicated the need for the villagers' participation in programs affecting their lives. A large majority of them felt that

villagers should be consulted in program development and implementation, and group meetings were the preferred from for such consultations.

In regard to appropriate modes of communication, one-to-one communication was given first preference by the household respondents, followed by video. In contrast, a majority of focus group participants and community leaders considered video as the most appropriate mode of nutrition communication, especially in terms of its visual effect. They also valued group discussions as an important form of communication and asserted that it could be more effective if backed up by video. Further, some focus group participants also thought that posters and pamphlets could be used as an effective back-up for group discussions.

Many focus group participants perceived participatory nutrition communication essentially to be 'working together' with project staff in dealing with nutrition problems in the villages. They felt that working together creates confidence in others and avoids unnecessary confrontation. It was indicated that 'working together' develops an understanding of the 'practices' necessary for acquiring nutrition knowledge. Most community leaders believed in the exchange of ideas between the project staff and villagers as a way of making a nutrition project participatory. Further, they held that any medium or mode of communication that does not facilitate an exchange of ideas is non-participatory. It should be noted here that, unlike in Nawalparasi and Gorkha, there was no problem associated with the financial incentives offered to the project communicators responsible for disseminating information at a grass roots level. The main reason for this was that all the women workers were salaried staff members recruited from the central office of the PCRW program.

Although it is evident, from the analysis of the data and information of Nawalparasi, Gorkha and Ramechhap, that none of the projects had a strong impact in their target beneficiaries in terms of engendering behavioural changes in dealing with nutrition problems, the chapter which follows attempts to clarify some of the key similarities and differences in the villagers' participation in project activities and communication processes.

CHAPTER 11 : SIMILARITIES AND DIFFERENCES AMONG THE PROJECTS: NAWALPARASI, GORKHA AND RAMECHHAP

Although all of the three projects surveyed were designed and implemented by various organisations, their objectives and strategies were similar. The main objective of each survey project was to address vitamin A-related problems, and to achieve this objective, the main strategy was to inform and educate the target groups with project information and activities. The subsequent discussion examines the similarities and differences in the survey results for the three districts.

Familiarity with and Participation and Communication in the Project

There are significant differences in the levels of survey respondents' familiarity with and participation in the projects and exposure to projects' communication (see Table 11-1). The highest number of survey respondents familiar with the project was in Gorkha district followed by Ramechhap and Nawalparasi. The highest number of respondents who were exposed to project communication also occurred in Gorkha district. In contrast, Ramechhap recorded the highest level of participation in the project by the target beneficiaries, while the target beneficiaries of Nawalparasi had the lowest levels of familiarity with and participation in the project, and also the lowest levels of exposure to project communication. It should be noted that, although Gorkha was second to Ramechhap in terms of participation in the project, almost all of the respondents exposed to project communication in Gorkha (75.4%) participated in the project (74%).

Although the analysis of the data of the Gorkha project, compared to the results of Nawalparasi and Ramechhap, suggests a strong association between the level of

Table 11-1 : Levels of Project Familiarity, Participation, Education and Communication in 3 Districts

The values in each cell are shown as: Observed Frequency / Expected Frequency / (% of Observed Frequency).

Districts	Level of familiarity — High	Reasonable	None	Level of participation — Partial	None	Level of education — University	High School/ Secondary	Primary/ Elementary	None	Level of Communication exposed to — High	Medium	Low	None
Nawalparasi	7 / 53 / (5.2)	11 / 9.7 / (8.2)	116 / 71.3 / (86.6)	5 / 62.4 / (3.7)	129 / 71.6 / (96.3)	9 / 5 / (6.7)	23 / 12.3 / (17.2)	41 / 34.7 / (30.6)	61 / 82 / (45.5)	0 / 22 / (0)	2 / 16 / (1.5)	16 / 24.7 / (11.9)	116 / 71.3 / (86.6)
Gorkha	92 / 53 / (68.7)	9 / 9.7 / (6.7)	33 / 71.3 / (24.6)	99 / 62.4 / (73.9)	35 / 71.6 / (26.1)	5 / 5 / (3.7)	10 / 12.3 / (7.5)	32 / 34.7 / (23.9)	87 / 82 / (64.9)	66 / 22 / (49.3)	27 / 16 / (20.1)	8 / 24.7 / (6.0)	33 / 71.3 / (24.6)
Ramechhap	60 / 53 / (44.8)	9 / 9.7 / (6.7)	65 / 71.3 / (48.5)	52 / 31.2 / (77.6)	15 / 35.8 / (22.4)	1 / 5 / (0.7)	4 / 12.3 / (3.0)	31 / 34.7 / (23.1)	98 / 82 / (73.1)	0 / 22 / (0)	19 / 16 / (14.2)	50 / 24.7 / (37.3)	65 / 71.3 / (48.5)
n	402			335		402				402			
χ^2	118.95			138.99		32.25				241.83			
df	4			2		6				6			
Significance	0.0000			0.0000		0.0000				0.0000			

Note : Percentages of observed frequencies are based on the sample size of each district. The percentage of 'partial' participation in Ramechhap is based on the actual participation of women respondents only.

communication the respondents were exposed to and the level of project familiarity (Table 11-2), the main reason for which Gorkha had the highest level of familiarity with the project, as well as a larger proportion of respondents with a 'high' level of familiarity, would appear to be related to its multiple project communication strategies: interpersonal communication, printed materials, video, radio, cassette, folk songs and dances, practical demonstrations, such as of cooking and kitchen gardening. Of a total of 101 respondents familiar with the project in Gorkha, 65.3% and 26.7% had respectively had a 'high' and a 'medium' level of exposure to project communication while only a few, 8%, had had a 'low' level of exposure (Table 11-1). In contrast, in Ramechhap and Nawalparasi, where only a few different forms of communication were used (e.g. one-to-one communication, group discussions, and posters and pamphlets), a higher proportion of the respondents were exposed to a low level of communication (72.5% and 88.9% respectively and a correspondingly lower proportion to a medium level (27.5% and 11.1% respectively). Thus, it would appear that, in Gorkha, the use of multiple media helped the project to reinforce its information dissemination with the result that many survey respondents experienced a higher degree of familiarity with the project in comparison with what occurred in Ramechhap and Nawalparasi. This suggests that the greater the number of project media, the more likely the people are to have some familiarity with the project and vice versa.

In all of the projects surveyed in the three districts, women volunteers or workers, including mothers' groups, were the main communicators at a grass roots level. They had the role of informing and educating the village people. It was, observed in Nawalparasi and Gorkha, however, that financial incentives had a significant effect on the efficiency and efficacy of the project communicators. It was reported in these two districts, Nawalparasi and Gorkha, that the women volunteers and mothers' groups wanted some remuneration for their communication work in the project. In the case of Ramechhap, this was not a problem since all the project workers involved in grass roots communication were salaried project staff, and the local women's groups were the beneficiaries of the credit facility provided by the program.

Table 11-2 : Level of Familiarity, Participation, Education, Communication in 3 Districts (Rho, ρ and Gamma, γ Correlations)

Variables	Variables								
	Level of participation (γ)			Level of communication exposed (ρ / γ)					
	Nawalparasi	Gorkha	Ramechhap	Nawalparasi		Gorkha		Ramechhap	
				(ρ)	(γ)	(ρ)	(γ)	(ρ)	(γ)
Level of familiarity	.95	.99	.99	.99	-	.75	-	.92	-
Level of participation	-	-	-	-	.99	-	.98	-	.75

During the time of the field surveys in Nawalparasi and Gorkha, the author of this thesis heard from local leaders that the project staff in their respective districts never entered into any dialogue with the villagers as a way of clearly identifying and defining the latter's roles and responsibilities in carrying out the project activities and in sharing its benefits. Consequently, many villagers, even those attached directly to the project activities, such as the women's groups, saw the project as a source of financial gain and wanted some kind of financial benefits or remuneration for the services they rendered to the project[1].

In all three of the survey districts, all of the respondents reported that they had had only 'partial' participation in the district project (see Table 11-1). The 'partial' participation in this context was their involvement only in the final implementation phase of the project in which they received some services from the project, such as nutrition and adult education programs, vitamin A capsules and seeds, and seedlings of vitamin A-rich vegetables and fruits. In terms of the extent of participation, receiving goods and services of this kind was more of a problem in Nawalparasi, compared to Gorkha and Ramechhap, due to a lack of information about the services amongst the villagers. In Gorkha and Ramechhap, a lack of time was considered to be the most common reason for non-involvement in the project services provided by the project.

As stated above, a few local women were directly involved as grass roots communicators (as women volunteers and in women's groups) in the final implementation phase of the project in both Nawalparasi and Gorkha districts. In contrast, in Ramechhap, despite the official goals of the project to involve local people in identifying, prioritising, designing and developing their own projects (see chapter 6), there was no involvement on the part of the local people in the communication processes of the project, not even in the

---

[1] It is interesting to note here that a social worker who was associated with the project perceived it as a source of financial gain. He reported that when he was assigned to supervise construction work under the project budget, he deliberately gave many village labourers the opportunity to receive more project money than was actually required to accomplish the whole construction work. This clearly indicates that there was a lack of a sense of 'project ownership'. Thus, this social worker perceived the project budget to be not the common property of the villagers for village development, but a source of financial gain.

implementation phase. The target beneficiaries were simply recipients of goods and services of the nutrition activities of the project.

Understanding of the Project's Nutritional Information

The results of chi-square tests (Table 11-3 below) suggest that there is a significant difference among the respondents in the three districts surveyed in regard to their level of knowledge about green leafy vegetables and yellow fruits. The respondents of Gorkha were the most knowledgeable about both green leafy vegetables and yellow fruits. Ramechhap had the second highest degree of knowledge of green leafy vegetables. However, in terms of knowledge of both green leafy vegetables and yellow fruits, Nawalparasi scores better than Ramechhap. Further, these is not a large difference between Nawalparasi and Gorkha in terms of the proportion of respondents who reported a good or satisfactory level of knowledge of both green leafy vegetables and yellow fruits (see Table 11-3). This suggests that, although many of the community leaders, especially women volunteers, and project workers assigned to grass roots communication in Gorkha and Ramechhap respectively claimed that the project in

Table 11-3 : Knowledge About Food Values

	Level of knowledge Frequency Observed Frequency Expected Frequency (% of Observed Frequency)							
	Green leafy vegetables				Yellow fruits			
Districts	Good	Satisfactory	Poor	None	Good	Satisfactory	Poor	None
Nawalparasi	75 83	25 17	17 22.3	17 11.7	37 38.7	37 29.3	21 31.0	39 35
	(56.0)	(18.7)	(12.7)	(12.7)	(27.6)	(27.6)	(15.7)	(29.1)
Gorkha	90 83	18 17	19 22.3	7 11.7	58 38.7	25 29.3	31 31.0	20 35
	(67.2)	(13.4)	(14.2)	(5.2)	(43.3)	(18.7)	(23.1)	(14.9)
Ramechhap	84 83	8 17	31 22.3	11 11.7	21 38.7	26 29.3	41 31.0	46 35
	(62.7)	(6.0)	(23.1)	(8.2)	(15.7)	(19.4)	(30.6)	(34.3)
n	402				402			
χ^2	19.44				37.63			
df	6				6			
Significance	0.0034				0.0000			

% of observed frequencies calculated on individual sample size in each district which is 134

each these districts stimulated interest, as well as imparted knowledge to the target villagers (refer chapters 9 and 10), their results were not really any better than those of the Nawalparasi project, where dissemination of the project information at the grass roots level was a problem.

Reported Frequency of Intake of the Foods Promoted by the Projects

There was a significant difference in all three of the districts surveyed in the reported frequency of intake of green leafy vegetables and yellow fruits. Gorkha recorded the highest frequency of intake in relation to both green leafy vegetables and yellow fruits. Ramechhap was second to Gorkha in the frequency of intake of green leafy vegetables, but was no better than Nawalparasi in the frequency of intake of yellow fruits (see Table 11-4). It is interesting to note that, compared to Gorkha and Ramechhap, a higher proportion of the respondents of Nawalparasi reported their frequency of intake of green leafy vegetables to be weekly or less, indicating that the number of people vulnerable to vitamin A deficiency might be larger there. This is despite the fact that Nawalparasi belongs to the plain belt of Nepal, where there is usually a food surplus.

Table 11-4 : Eating Behaviour

| | Frequency of intake
Observed Frequency
Expected Frequency
(% of Total Observed Frequency) | | | | | |
| | Green leafy vegetables | | | Yellow fruits | | |
Districts	Daily	More than once a week	Weekly or less	Daily	More than once a week	Weekly or less
Nawalparasi	31 42.3 (46.3)	33 23.7 (49.3)	3 1.0 (4.5)	7 8.3 (16.4)	31 22.3 (47.8)	29 36.3 (35.8)
Gorkha	54 42.3 (80.6)	13 23.7 (19.4)	0 1.0 (0)	17 8.3 (24.4)	28 22.3 (41.8)	22 36.3 (32.8)
Ramechhap	42 42.3 (62.7)	25 23.7 (37.2)	0 1.0 (0)	1 8.3 (1.5)	8 22.3 (11.9)	58 36.3 (86.6)
n	402			402		
χ^2	20.81			49.74		
df	4			4		
Significance	0.0003			0.0000		

As indicated by most of the focus group participants of all of the survey districts, yellow fruits are still thought of as a less important food. Apart from this factor, the frequency with which fruits are eaten is substantially affected by seasonal availability as well as access to the fruits by the villagers. According to the field observations by the author of this thesis, it would seem that most villagers have difficulty in getting access to the fruits since many of them do not possess their own fruit trees. Within this context, it would appear that the projects in all three survey districts failed to highlight the importance of yellow fruits in comparison with green leafy vegetables. At the same time, the focus groups, especially in Nawalparasi and Ramechhap, raised their concerns about the non-utilisation of locally available nutritious foods, such as garlic pears, amaranths, pigweed, lamb's quarter and stinging nettles, and asserted that the project nutrition information should inform the villagers about the importance of these foods which are, at present considered inferior and suitable only for the poor.

Despite the fairly high frequency with which green leafy vegetables are eaten and the fact that yellow fruits are also eaten, although less frequently, in all three survey districts, there was no indication of a strong positive correlation between the reported level of knowledge and frequency of intake of both green leafy vegetables and yellow fruits (see Table 11-5). This suggests that people's reported levels of knowledge do not necessarily have a major positive impact on their eating behaviour. In other words, people can acquire knowledge, but they may not necessarily use it to change their behaviour, unless they can recognise its importance in their lives.

Table 11-5 : Frequency of intake and Level of Knowledge (Rho, ρ, & Gamma, γ, Correlations)

Frequency of intake	Level of Knowledge					
	Nawalparasi		Gorkha		Ramechhap	
Variables	ρ	γ	ρ	γ	ρ	γ
Frequency of intake (Green leafy vegetables) (Male)	.17	-	-	.03	-	.00
Frequency of intake (Green leafy vegetables) (Female)	.11	-	-	.33	-	.31
Frequency of intake (Yellow fruits) (Male)	.08	-	.20	-	.03	-
Frequency of intake (Yellow fruits) (Female)	-.17	-	.18	-	-.16	-

Perception of, and Attitude Towards, Participatory and Non-participatory Nutrition Communication

Compared to the other survey district, a substantially larger number of respondents in Ramechhap (46.3%) (Table 11-6) reported that they had made contributions of physical labour to local development projects during the Panchayat regime. At that time, (1960-1990) such contributions were called participation (see chapter 5). They were a form of forced participation whereby the villagers had to abide by the directives of the Panchayat elites. As such participation used to take place only in the implementation phase of local development works, no one in any of the survey districts reported any experience of the design and development of village projects. Despite this, in all three districts, there was a high degree of support for the idea of including local people and consulting with them

Table 11-6 : Participatory Experience in 3 Districts

Participatory Experience (n = 134) Frequency (%)		
Districts (n= 134 in each district)	Yes	No
Nawalparasi	10 (7.4)	124 (92.6)
Gorkha	10 (7.4)	124 (92.6)
Ramechhap	62 (46.3)	72 (53.7)

in all the phases and aspects of communication of the nutrition projects. For example, 94% of the respondents in Ramechhap, 88.1% in Gorkha and 85.8% in Nawalparasi favoured the inclusion of the villagers' opinions and their participation in the design and dissemination of nutrition information (see Table 11-7). In addition, all the focus group participants and community leaders in all three of the survey districts supported the need for consultation with villagers and their participation in nutrition projects and communication if the latter were to be effective.

Table 11-7 : Views Regarding the Design, Development, and Dissemination of Information

	Views regarding design, development & dissemination of information Observed Frequency (%)	
Districts	Health and nutrition information should be designed and disseminated by the experts alone as the local people do not have any expertise in this field	Local people's opinion and participation should be included in the design and dissemination of information as I believe that the local people are also experts of local conditions and traditional practices
Nawalparasi	19 (14.2)	115 (85.8)
Gorkha	16 (11.9)	118 (88.1)
Ramechhap	8 (6.9)	126 (94.0)

There are some significant differences between the districts with regard to the reasons given for the importance of consultation. The majority of the respondents of Gorkha and Ramechhap believe that consultation is essential for knowing the intentions of the project towards them (for example, its intended activities and benefits). In contrast, in Nawalparasi, the most commonly cited reason was the need for interaction with the project to discuss village problems and issues (see Table 11-8). A majority of the respondents, including the focus group participants and community leaders in each survey district, preferred group meetings as the best form of consultation which would give them some participation in the project activities (Table 11-9).

With regard to the respondents' attitudes toward experts help in resolving village nutrition problems, there was a great similarity among all the survey districts in the responses to Statements A, B and C (see Table 11-10). Almost all of the respondents in all of the districts - for example, 99.2% in Ramechhap - agreed that they need experts to advise in resolving village nutrition problems (Statement A). Most of them (more than 80%) believed that experts alone could bring about changes in the villages (statement B), but, at the same time, more than 56% thought that the villagers could bring about changes by themselves (Statement C). One explanation for these mixed responses is that the villagers prefer to help themselves in resolving village nutrition

problems, but they do not fully believe in their capacity to independently deal with the problems, for which they need experts help and advice. At the same time, they believe

Table 11-8 : Views Regarding Consultation

	Reasons for the importance of consultation* *Observed Frequency* *Expected Frequency* *(% of Total Observed Frequency)*	
Districts	For interaction	To know the project's intentions
Nawalparasi	74 55.1 (64.3)	41 59.9 (35.7)
Gorkha	55 56.5 (46.6)	63 61.5 (53.4)
Ramechhap	43 60.4 (34.1)	83 65.6 (65.9)
χ^2	22.1	
df	2	
Significance	0.0000	

Table 11-9 : Preferred Methods of Consultation

	Preferred methods of consultation* (n = 359) *Frequency* *(%)*			
Districts	Being invited to a group meeting	Being a member of a consultative committee	Having interpersonal discussions	Consulting with someone who puts forward the views of the villagers
Nawalparasi	87 (75.7)	5 (4.3)	22 (19.1)	1 (0.9)
Gorkha	95 (80.5)	6 (5.1)	11 (9.3)	6 (5.1)
Ramechhap	109 (86.5)	6 (4.8)	4 (3.2)	7 (5.6)

*Number representing those respondents who favoured consultations

that they are capable of engaging in dialogue with experts in the process of dealing with nutrition problems (Statement D). This may mean that a participatory approach involving dialogue between experts and villagers would be appropriate for resolving village nutrition problems.

Table 11-10 : Views Regarding Expert Help in the Resolution of Nutrition Problems

Statements	Nawalparasi Observed Frequency Expected Frequency (% of Total Observed Frequency) n=134			Gorkha Observed Frequency Expected Frequency (% of Total Observed Frequency) n=134			Ramechhap Observed Frequency Expected Frequency (% of Total Observed Frequency) n=134			Chi-Square*	
	Agree	Neutral	Disagree	Agree	Neutral	Disagree	Agree	Neutral	Disagree	df	χ²
Statement A The village communities simply need help in resolving the problem, with some suggestions and information from experts.	124 128.67 (92.6)	4 2 (3.0)	6 3.33 (4.4)	129 128.67 (96.3)	1 2 (0.7)	4 3.33 (3.0)	133 128.67 (99.2)	1 2 (0.7)	0 3.33 (0)	4	8.92
Statement B Experts alone can bring about changes in the villages.	110 111 (82.1)	4 2.67 (3.0)	20 20.33 (15.0)	108 111 (80.6)	3 2.67 (2.2)	23 20.33 (17.2)	115 111 (85.8)	1 2.67 (0.7)	18 20.33 (13.4)	4	2.61
Statement C Villagers can bring about changes by themselves.	47 67.33 (35.1)	6 2.33 (4.5)	81 64.33 (60.5)	75 67.33 (56.0)	1 2.33 (0.7)	58 64.33 (43.2)	80 67.33 (59.7)	0 2.33 (0)	54 64.33 (40.3)	4	24.85
Statement D Villagers can engage in dialogues with nutrition experts or workers in bringing about changes.	104 122 (77.6)	10 3.67 (7.5)	20 8.33 (15.0)	129 122 (96.3)	1 3.67 (0.7)	4 8.33 (3.0)	133 122 (99.2)	0 3.67 (0)	1 8.33 (.7)	4	45.63

* Chi-Square table value at Significance level .05 for df.4 is 9.488 (Downie & Heath, 1984:321).

218

Appropriate Modes of Communication

A similarity among all three survey districts was found in the preferred modes of nutrition communication. Most of the respondents in all three districts gave their first preference to interpersonal communication, particularly on a one-to-one communication (Table 11-11). Many respondents viewed one-to-one communication as the most convenient way for them to have individual discussions about village problems. In fact, this perceived advantage appears to be largely related to the villagers' reluctance to talk in public. From the assessments of the author of this thesis it was noted that, in focus group discussions, the majority of the village people did not readily express their views in front of other people. Many villagers were still inexperienced in expressing their views publicly. Nevertheless, some villagers in the focus groups suddenly broke free from their silence and hesitation and started speaking up and expressing their feelings once the discussion turned to something of particular interest to them. This suggests that group discussions may encourage the villagers to exchange ideas and feelings openly with others, such as neighbours and development workers (that is, the project staff).

Table 11-11 : Communication Modes by Order of Preference

	All districts	Nawalparasi	Gorkha	Ramechhap
Comm. Modes	*Mean rank*	*Mean rank*	*Mean rank*	*Mean rank*
Interpersonal	1.58	1.62	1.58	1.54
Video	1.96	2.28	1.92	1.80
Radio	3.83	3.35	3.99	3.97
Printed Materials	3.64	4.00	3.55	3.51
Folk Media & other	3.99	3.74	4.96	4.18
Cases	349	85	130	134

Rank: 1 = 1st preference, 2 = 2nd preference, 3 = 3rd preference, 4 = 4th preference, 5 = 5th preference

After one-to-one communication, video was the second most preferred mode of communication by the majority of the respondents in all three of the survey districts. Similarly, in all of the survey districts, video was highly favoured by the focus group participants as well as by community leaders. Further, most of these community leaders in all of the districts viewed a combination of group discussion and visual aid, especially video, as being a highly effective form of nutrition communication. In all three districts

other modes of communication, such as printed materials, radio and folk media, were less preferred.

Perceived Meaning of Participatory and Non-Participatory Nutrition Communication

There was no significant difference in understanding of the notion of participatory and non-participatory nutrition communication in all three of the survey districts. The majority of the focus group participants and local leaders defined participatory nutrition communication as essentially the modes that involved two- way discussions or dialogues between the project staff and the villagers or an 'exchange of ideas and feelings', 'mutual co-operation', and 'joint efforts'. Modes of communication that did not involve discussion or dialogue with the villagers, on the other hand, were regarded as Non-participatory modes of nutrition communication.

Conclusion

Table 11-12 presents a brief summary of some of the key similarities and differences in the projects as discussed above.

On the basis of the analysis of all three survey districts, it would appear that multiple media can help make target audiences more familiar with the project. It is evident that, in comparison with Ramechhap and Nawalparasi, Gorkha, where the highest number of respondents exposed was to project communication, also had the highest level of familiarity with the project. Similarly, the survey data also indicated that the target audiences' exposure to project communication is very important for bringing about their participation in the activities of the nutrition project. For example, a large majority of the respondents in Nawalparasi reported that they were not exposed to the project communication and that many of them therefore did not receive any of the vitamin A capsules distributed in the project.

In all the survey districts, grass roots communication was mainly the responsibility of women volunteers and workers. Thus, their efficiency and willingness to work for the

Table 11-12 : Summary of Key Similarities and Differences among the Interviewees of Nawalparasi, Gorkha and Ramechhap

District	Program Familiarity	Program Participation	Media Used & Main Communicators	Main Communication Problems	Important Project Media	Preferred Modes of Village Consultation	Most Preferred Modes of Communication for Information	Participatory Modes of Communication	Non-Participatory Modes of Communication
Nawalparasi	Very little (13.4%).	Not significant. (3.7)	Main Media: Interpersonal (one-to-one) & Written notes. Main Communicator: Women Volunteers.	-Lack of flow of information down to the villages -Knowledge-sharing problems with mothers. -Written information (e.g. written notes) difficult to understand by uneducated villagers.	Not mentioned by interviewees as they believed that their experience in the very limited project modes was insufficient for comparing their importance.	Group Discussions	Interpersonal (one-to-one/group discussions) and Video.	Modes involving two-way discussion; Inclusion of local people in communication process.	Those not enhancing discussion; One -way.
Gorkha	Three-quarters of sample population (75.4%).	A little less than three-quarters of sample population (73.9%).	Main Media: Interpersonal (one-to-one, group discussions), Video, Printed Materials (posters/ pamphlets), Radio, and Folk Media ('Gaines'). Main Communicator: Women Volunteers.	-Knowledge-sharing problems with mothers. -Information put through video and posters not understandable unless clarified by the project staff.	A combination of Video and Group Discussions or One-to-one Communication.	Group Discussions	Interpersonal (one-to-one/group discussions) and Video.	Modes creating two-way dialogues and discussions; Modes developed in consultation with villagers; Modes that include villagers' views and suggestions in the project.	One-way modes not creating discussion or dialogue; not involving people's ideas, opinions, views and suggestions.
Ramechhap	Over half of the survey population (51.5%).	A bit more than three-quarters of the total women sample population who were the actual target beneficiaries of the project (77.6%).	Main Media: Interpersonal, (one-to-one, group discussion), and Printed Materials (posters/ pamphlets). Main Communicator: Women Workers (Program Staff).	-Nutrition Communication limited to project beneficiaries only. -High expectations of villagers for tangible benefits.	A combination of Group Discussions and Posters.	Group Discussions	Interpersonal (one-to-one/group discussions) and Video.	Exchange of ideas between project staff and villagers; Consultation in communication process.	Modes not involving discussion or exchange of ideas; Speeches or Information not involving others.

project greatly influenced the flow of project communication. In the case of Nawalparasi and Gorkha, the efficiency and willingness of the women was severely constrained by the project's lack of financial incentives.

In all three survey districts, the participation of target villagers in the project was at a 'partial' level: essentially they took part only in the implementation phase of the project, which included receiving deliveries of goods and services, such as nutrition education, adult education, vitamin A capsules, and seeds and seedlings of vitamin A-rich vegetables and fruits. Equally, all the modes of communication used by each of the project, whether multiple or limited, seemed to have been largely focused on bringing about the villager's participation only in the later stages of the project. This might be one of the factors that explains the observed lack of impact of the projects on the reported levels of knowledge and frequency of intake of the foods promoted, such as green leafy vegetables and yellow fruits.

Despite having had only 'partial' participation, the majority of the survey respondents in all of the survey districts indicated their preference for having full participation in nutrition projects. They wanted to be involved in the design, development, implementation and evaluation of nutrition projects and their communication processes. Therefore, most of them strongly felt that they should be consulted before any project was implemented in their villages. A majority of them preferred group discussions as the most appropriate mode of communication for stimulating villagers' participation.

In regard to the most important modes of communication for imparting the project's information, the majority of the focus group participants and community leaders in all of the survey districts thought that a combination of group discussions and video would be the most effective way of informing the villagers. The main reason given for this preference is that video can further clarify subjects discussed in the group discussions through visual examples. It should be noted that video is still very new to many villagers in Nepal, as both entertainment and education.

222

In all of the survey districts, participatory nutrition communication is viewed largely as the mode of communication that can bring the villagers into dialogue and discussion with the project staff to resolve the village nutrition problems.

The following chapter examines the attitudes of government and non-government officials involved in nutrition activities towards participatory and non-participatory nutrition communication in Nepal.

CHAPTER 12 : PERSPECTIVES OF GOVERNMENT AND NGO OFFICIALS

In order to assess the attitudes of some key people with central and region-wide responsibilities in nutrition and health activities in Nepal towards participatory and non-participatory nutrition communication, various officials from government and non-government organisations were interviewed. Of a total of twenty interviewees, twelve of the officials represented various government ministries and departments dealing with agriculture, health, education and local development. A further two officials from the National Planning Commission, who were responsible for nutrition planning and development, were also included in the interviews. Six other officials, from various non-governmental and international organisations, were included in the survey interview. A summary of their views is presented below.

Analysis of the Data from the Government and Non-Government Interviewees

All the interviewees who were asked to put their views on the importance of food and nutrition problems considered nutrition to be a major development problem in Nepal. All of them, in one way or another, considered nutrition as a 'very important' problem associated with poverty, food availability, illiteracy and lack of knowledge. Highlighting the close relationship between poverty and nutrition, one interviewee from a semi-government media organisation asserted that 'there are many poor people in this country. They cannot afford nutritious foods. As a result, they become the victims of malnutrition'. While explaining the dimension of poverty and its relation to malnutrition among the population, one of the senior government officials viewed malnutrition as a 'national development problem' and stated that:

> According to government statistics, 49 % of the population is below the poverty level. Poor people are more in the rural areas. If we look at the maternal mortality rate, we have the highest in the world. Malnutrition is a contributing factor in this

mortality problem. This problem, therefore, is a problem for national development. (Ministry of Local Development, MOLD)

Meanwhile, indicating their understanding of the significance of nutrition problems at the national level, two of the senior government officials emphasised that 'the government has incorporated nutrition promotion as a development indicator in its eighth plan.' (Ministry of Health, MOH), and 'the nation has considered the solution of nutrition problems as a development indicator, which means that food and nutrition problems in Nepal are very important' (National Planning Commission official, NPC).

A majority of the interviewees expressed their deep concern over the effects of food distribution, preservation and utilisation on nutrition. Commenting on this, one member of the government staff maintained that 'it [nutrition] is a problem associated with food availability, proper utilisation of the available food, and lack of knowledge of the infrastructures of food preservation and storage' (Ministry of Food, Agriculture and Irrigation official, MFAI). Another two government staff members argued that 'even if they [the people] have enough food, they still do not know how to eat properly (Women's Development Division official, WDD), and that 'people do not know how to use the foods that are at their disposal' (Department of Health official, DOH).

In the face of the growing consumption of commercial foods, even in the remotest parts of the country (see photographs attached in Appendix 34), one of the senior officials form the NPC put forward his view that the increasing dominance of commercial foods, such as ready- made snacks and soft drinks, is becoming a nutrition problem in Nepal:

> People have tended to cultivate the habit of consuming commercial foods forgetting all the traditional food practices. They are gradually becoming more prone to malnutrition, which can be considered as a national problem.

Almost all the interviewees considered nutrition problems to be an impediment to national development. A large majority of them linked nutrition problems with the development of human resources. One of the senior officials from the NPC indicated that 'nutrition has a direct bearing on the development of human resources' and affects national productivity: 'There is always a strong correlation between malnourishment and

225

low production. Malnourished people are always weak and thin resulting in less productivity, which is an impediment to national development'. Another government official commented: 'National investment may be counter-productive if there is no healthy manpower for development' (MOLD). In the same manner, one of the staff members from the United Nations International Children's Emergency Fund (UNICEF) asserted: 'Just as efficient and able manpower is considered the foundation of development, weakness and sickness in people which results from nutritional problems cannot be productive in the process of development'. One of the senior government officials of the Ministry of Education, Culture and Social Welfare (MOECSW) believed that the education level of the country was affected by nutrition problems: 'Many children are suffering from diseases and are not in a position to go to school. Thus, nutritional problems have become an impediment even to the flow of information and advice necessary for national development'.

There were many different views about the possible ways of combating nutrition problems in the country. Those who were connected with MFAI, MOH, MOECSW and MOLD believed that a 'multi-sectoral approach' to nutrition, using the relevant sectoral ministries and line agencies responsible for the development of agriculture, health, education and local development was the most appropriate way of fighting nutrition problems while others insisted that 'employment and income-generation' was the best way of resolving the problem. Some asserted that an increase in 'food production and distribution', and 'literacy' were the most important ways of fighting the problems. Others believed that infrastructure development, health facilities, mobilisation of communication media were relevant. Table 12-1 summarises each interviewee's opinion on how to combat nutrition problems in Nepal, and shows that nutrition knowledge and practice were the most commonly perceived needs (mentioned by 45% of the interviewees). While income and employment generation, food production and distribution, development of literacy and health facilities, and mobilisation of communication media were mentioned by some as playing key roles in the struggle against nutrition problems, most interviewees believed that nutrition knowledge, education and practices were the important elements in the resolution of these problems:

226

Table 12-1 : Interviewees' Opinions on the Means for Resolving Nutrition Problems in Nepal

Interviewees	Multi-sectoal Approach	Income Generation/ Employment	Production/ Distribution	Literacy	Nutrition Knowledge, Education, & Practice	Others[1]
A	✓					
B		✓	✓		✓	
C				✓	✓	
D		✓			✓	✓
E	✓					
F	✓					
G		✓				✓
H			✓		✓	
I						✓
J			✓		✓	✓
K						✓
L			✓		✓	
M						✓
N					✓	
O				✓		✓
P					✓	
Q	-	-	-	-	-	-
R	✓					
S					✓	✓
T						✓
n =20	4	3	4	2	9	9

Note: The tick symbol (✓) indicates the interviewee's category of response while a dash (-) represents no answer.

People should understand the importance of nutrition. In order for the people to understand its importance, we should educate people in formal or non-formal ways.

Emphasis should be placed on nutrition education. Such education should be especially oriented towards mothers who are primarily responsible for the care of children. Similarly, nutritious food should be distributed to children. At the same time, there should be promotion of breast milk and a gradual reduction in the use of formula milk.

Demonstrating the importance of nutrition information and education for the needy, one of the senior officials of NPC identified such nutrition problems as iodine and vitamin A deficiency diseases as ones which might be addressed by nutrition education. He believed that:

...knowledge and practices in relation to nutrition should be increased. According to the latest statistics, 40% of the population are suffering from iodine deficiency diseases and many people have vitamin A deficiency. Hence, the knowledge and practice of using iodised salt and vitamin A should be improved.

Those interviewees who had had some field experience believed that local food resources, traditional food practices and food values could be utilised in resolving

---

[1] Others included infrastructure development, health facilities and mobilisation of communication media.

nutrition problems in the country. Some of them also believed that an increased production of nutritious foods, such as vegetables and beans, might help overcome these problems:

> To resolve nutritional problems, the first prerequisite perhaps is an appropriate diet. Based on the available resources and local conditions, we should try to increase the production and consumption of indigenous foods. Cultivating vegetables and legumes could be a way of supplementing the diet. (Senior staff member of the Ministry of Communication, MOC)

> Nepal is a country of villages. We should not ignore village practices inherited by the villagers from their ancestors. We, therefore, should not ignore their traditional food practices. Rather we should add up the important elements we think are lacking in them. Further, we should encourage the traditional practices which are worthwhile. For example, the traditional Nepali practice of eating mixed beans, purified butter and molasses and deworming children during festivities should be encouraged on nutritional grounds. For all of these, we should try to understand the meaning of these traditional practices and values. Such understanding is very important for the success of nutrition information and education. (Middle level staff member, DOH)

While many interviewees emphasised the importance of nutrition knowledge, education and practices to fight the nutrition problems, those who spoke about a multi-sectoral approach to nutrition also related their approach to education, stressing that : 'Multi-sectoral efforts in educating people on the proper use of available foods and resources may resolve the problems' and that 'We should all work together on the task of creating awareness through programs such as literacy, agriculture production, income-generation, and health. Nutrition activities should be included in these programs'. In Nepal this multi-sectoral approach to nutrition has become a common strategy for addressing national nutritional problems. For instance, the Government of Nepal has already planned to integrate nutrition education programs into projects for adult literacy, agriculture and health in its eighth national development plan,1992-1997 (HMG/N, 1992b: 722).

For most of the interviewees, the primary role of communication was to inform and educate people to make them aware of nutrition problems and their solutions. Some interviewees considered communication to be a way of mobilising people and local resources for resolving problems, while others perceived it as a means of providing demonstrations, bringing about new knowledge and practices leading to changes in

228

behaviours. A summary of the individual perceptions in regard to the role of communication is presented below in Table 12-2.

Table 12-2 : Interviewees' Perceptions Regarding the Role of Communication

Interviewees (n=20)	Mobilising People and Local Resources	Informing and Educating People	Others[2]
A	✓	✓	
B		✓	
C		✓	✓
D		✓	
E		✓	✓
F		✓	✓
G		✓	✓
H		✓	
I		✓	
J		✓	
K		✓	
L		✓	
M	✓		
N		✓	
O		✓	
P		✓	✓
Q		✓	✓
R		✓	
S		✓	
T		✓	
n=20	2	19	6

Note: Tick symbol (✓) indicates the interviewee's category of response.

The role of communication in informing and educating people was the most commonly mentioned one. One interviewee from MOC commented : 'In a country like ours where the literacy rate is very low, communication should play a role in informing and educating people'. One senior official from MOLD posited that communication 'may play a role in the dissemination of information with the help of local villagers who know about their villages and their conditions and traditions'.

Referring to the constitutional rights of people to be informed, a semi-government official connected with the media remarked that:

> The main obligation of communication media is to inform people. The present constitution of our country has also guaranteed the people's right to be informed. To achieve this, Nepal Television has followed the directives of the constitution in informing people. Therefore, communication, especially the electronic media such as television and radio, should create suitable environments and appropriate roles for informing the people. (Senior staff, Nepal Television)

---

[2] Others included providing demonstrations and bringing about new knowledge, practices and changes in behaviour.

229

Emphasising the need for public education through communication, in relation to the maintenance of better nutritional health, one of the senior communication officials (MOC) claimed that 'communication can contribute to effective public education, such as in sanitation, health, and the preparation and utilisation of foods'. In the light of mass illiteracy in the villages of the country, many of the interviewees saw the important role of communication in informing, educating and awareness raising:

> It can play a role in increasing people's awareness of the locally available nutritious foods. It can also play a pivotal role in eradicating superstition. More importantly, people may be able to better satisfy their basic needs with the new knowledge and understanding, which communication could bring about by actively informing them. (Middle level staff, DOA)

> Communication should have a role in making villagers aware of the nutritional importance of the locally available foods such as corn, soybeans etc., that are still considered to be very inferior foods by the people. (Middle level staff, DOH)

During the interview, one of the senior staff members of NPC shed light on the villagers' lack of knowledge, giving as an example, vitamin A deficiency in the Terai belt (plains and fertile areas of Nepal) where the production of fruits and vegetables is not a problem. He observed:

> It [communication] should play a role of eradicating people's ignorance. I feel that as of today, there are not many mechanisms developed in this regard. For example, we still consider Terai as a green belt of the country, but we recently discovered that there is a severe vitamin A deficiency problem. In this region, people can grow many vitamin A-rich foods such as papayas, green leafy vegetables, pumpkins etc. People still do not know the importance of these vitamin A-rich foods because of their ignorance. The mass media should be mobilised to eradicate their ignorance in this regard. We should, therefore, try to develop efficient forms of mass media through which we may bring about changes in their knowledge, attitudes and practices.

In fact, according to the field survey of this study, it would appear that many villagers of the Terai districts, such as Nawalparasi (chapter 8), need education and information about the appropriate use of nutritious foods, such as green leafy vegetables and yellow fruits.

Many interviewees saw communication as a means of demonstration, as well as of bringing about new knowledge, practices and changes in behaviour:

> Communication should play a demonstration role in disseminating nutrition information. For example, an information dissemination session showing clearly a healthy child compared to a sick child with vitamin A deficiency may help village

audiences to understand the importance of vitamin A-rich foods. (Field staff, DOH)

> The current communication media for the distribution of information through pamphlets or for educating villagers through the use of chart or other paper materials do not really convince the villagers to adopt new knowledge. We have to reach them with practical and positive examples based on real stories. A study has revealed the fact that in Lumle village[3], until ten years ago, the farmers or villagers never used to eat some very important nutritious foods like eggs and meat. They also did not consider vegetables as nutritious foods. But now things have changed due to positive examples, and they are now consuming eggs, meat and vegetables for their health. (Field Consultant to FAO)

This example of Lumle village, according to the interviewee, was based on an agricultural development program successfully carried out by the government in collaboration with the Overseas Development Agency of the United Kingdom.

Two interviewees, one from the Ministry of Local Development (MOLD) and the other from the United Mission to Nepal (UMN), emphasised the vital role of communication in mobilising local resources and people to combat nutrition problems efficiently.

In regard to the latest (1992) government National Communication Policy (NCP), only half of the interviewees expressed any knowledge of it. Among those who were not aware of the policy was a senior staff member of the MOH, with responsibility for nutrition and health communication. Those interviewees who indicated they were aware of the policy had differing opinions about its effects on nutrition, with 60% of them indicating that it had no direct effect on nutrition: 'it does not have a direct bearing on food and nutrition communication, because it does not say anything about how the media should deal with food and nutrition, although it is considered a national problem'. One of the interviewees from the DOA saw the policy's lack of any direct effect on nutrition as the ultimate outcome of the lack of representation of all the concerned sectors in the formulation of the communication policy. As he commented: 'there is no tradition of calling for representation from all the relevant sectors for formulating a communication policy'.

---

[3] Lumle village lies in the western part of Nepal.

The remaining 40% of the interviewees mentioned that the policy had an indirect effect on nutrition. As a UNICEF official commented, 'Although it does not have any direct bearing on food and nutrition, it has, of course, an indirect bearing due to its policy of information dissemination to the people'. This was supported by a MOLD official: 'the NCP [National Communication Policy] talks about development communication. Thus, since food and nutrition are one of the main aspects of development communication, we can say that the NCP has indirect bearing on it'.

Emphasising the general nature of the 1992 NCP, some senior government officials responsible for the development of a communication policy argued that:

> Communication policy is not designed for any specific subject. Hence, the present national communication policy has a policy which includes informing people about health and nutrition. The policy of informing people is effective in all sectors of development. (Senior government staff seconded to Radio Nepal)

> We should understand the fact that the NCP in practice cannot capture or specify all the individual aspects of national development activities. We therefore should not expect the communication policy to capture nutrition communication policy separately. The NCP has perhaps specified public information policies in its documents which may cover food, nutrition and health. To be honest with you I have not yet fully studied the NCP documents. (Senior staff, NPC)

> The NCP has the clear intention of supporting development programs. Development programs are so vital that they can range from physical to mental development activities. Therefore, within the range of development programs, nutrition is automatically included. (Senior staff, MOC)

Regardless of their views about the current NCP, a majority of the interviewees (60%) believed that there should be a clear nutrition (nutrition specific) communication policy incorporated in the national communication policy documents (see Table 12-3). As an interviewee from the Nepal Press Institute (NPC) commented: 'A dynamic policy in favour of nutrition can certainly help expedite the dissemination of knowledge among the beneficiaries'. It would appear that, for many interviewees, the main reason for incorporating a nutrition-specific communication policy was to establish a basis for the resolution of the current co-ordination problems of the nutrition communication activities of the country:

> ... there should be a provision in the national policy that requires all the of agencies (sectoral government agencies such as MOH, MECSW, MOLD and non-government organisations) involved in nutrition activities not to contradict each other in their information for resolving nutrition problems. The current situation of conflicting or contradictory information emanating from different organisations

232

has put the target audiences at their wits end. This situation may end if a nutrition communication policy is formulated. (Senior staff, MOECSW)

There should be a provision in the policy which can address all the nutrition problems and can also co-ordinate all the responsible agencies involved in resolving nutrition problems. However, for the effective implementation of the process of resolving the problems, there should be policy statements specifying who is responsible for what. In other words, the policy should spell out the individual organisations' responsibilities. (Senior staff, MOLD)

There should be a clear communication policy for social development, as a result of which uniformity among the various organisations in the process of communication, say, nutrition communication, can be maintained. In that way, the flow of information and communication would not cause confusion among the people. (Senior staff, UNICEF)

Table 12-3 : Interviewees' Views of a Nutrition Communication Policy

Interviewees	Clear Policy	Separate Policy	No Separate or Clear Policy Needed, But Strategy Required	Others[4]
A	✓			
B			✓	
C				✓
D		✓		
E	✓			
F	✓			
G			✓	
H	✓			
I	✓			
J	✓			
K	✓			
L	✓			
M	✓			
N			✓	
O	✓			
P	✓			
Q		✓		
R		✓		
S			✓	
T	✓			
n=20	12	3	4	1

Note: Tick symbol (✓) indicates the interviewee's category of response.

Criticising the existing system of nutrition communication, one senior staff member of MOECSW commented that the nutrition information should not emphasise things that are not easily accessible or achievable: 'There should be a policy of informing people only of those things that can really be provided to them in due course of time'.

A separate nutrition communication policy was considered valuable in maintaining a co-ordinated focus on the issues, as one senior staff member of NPC commented:

---

[4] Others include community based communication policy.

233

Since this [nutrition] is the main problem for national development, a separate policy documents may be good for the design and development of information. This is essential because usually the decision makers, policy makers, planners and implementers forget about this problem, although it is considered the main problem of national development.

An FAO official also commented:

The Government must have a separate communication policy on nutrition and health, which enhances networking throughout the country. Similarly, the present system of having piece-meal types of projects from the donors should be replaced with big projects.

Those interviewees who did not agree with having either a specific or separate nutrition communication policy tended to favour a strong nutrition communication strategy rather than a policy. One MOH official commented: 'I feel that, regardless of the policy, there should be effective nutrition strategies to fight the problems'. Another official from the NPC emphasised:

In regard to nutrition, we simply need communication strategies rather than communication policies. I think it is not necessary or practical to look for a separate communication policy for nutrition or health. We just need communication strategies with multi-sectoral approaches. For example, nutrition communication may be included in a health communication program in an integrated fashion. I should admit at this stage that we still lack understanding of the overall strategies for having effective nutrition communication as a means of resolving the nutrition problems of the country.

One of the most senior staff members of UNICEF suggested that: 'There should be a national nutrition and health communication body in Nepal to formulate national nutrition and health strategies'. He further suggested that: 'There is a need for social mobilisation in partnership with national and international organisations and government to effectively combat nutrition and health problems; however mobilisation of this kind calls for political commitments'.

Although many of the interviewees thought the national communication policy as either inadequate or inappropriate for tackling nutrition problems, one of the interviewees connected with the media organisations (semi-government bodies) argued, further, that the existing national communication policy was responsible for cultural invasion:

Government policy seems to be quite liberal. As a result, we are facing cultural invasion created by the introduction of multi-media channels [foreign channels] in the country. If this invasion goes on without due interference, there is a strong possibility that our identity will be in crisis. Therefore, there should be a revision of

234

such a liberal policy. To resolve this problem, perhaps, the government should urgently formulate a policy that obliges the foreign channels to give 50 percent of their time to coverage of Nepali national programs that are based purely on Nepali culture and traditions so as to educate the village population of the country. (Senior staff, NTV)

It should be noted that there are more than 19 foreign television channels that can be viewed in Nepal either through a cable network or a disk antenna. Some people in remote areas who use a disk antenna can view different programs without any difficulty[5]. Thus, with the help of modern communication technology, habits associated with foreign cultural values, such as eating junk foods and drinking various alcoholic and non-alcoholic beverages, are gradually increasing in various parts of the country. Many interviewees observed that, over the past five years, these habits had greatly increased in the city areas and were now infiltrating the remote villages, even in the hills and mountains.

Most interviewees emphasised the need for a participatory approach and simple, clear strategies of communication if nutrition communication is to be effective in resolving nutrition problems (see Table 12-4). For most interviewees, however, the participatory approach was generally interpreted to mean the people's involvement in assessment of the needs and problems to be dealt with by a project. They believed this involvement helps project to design and disseminate appropriate information that would incite people to participate in the project's activities for resolving nutrition problems. In this sense, the participatory approach appeared to be perceived largely as a tool for analysing needs and situations analysis rather than as a means for involving people in the whole communication processes (design, development, implementation and evaluation), as explained in the theoretical framework for participatory nutrition communication in chapter 3. The view which follows was one which was commonly expressed:

> Simply disseminating information by media to the people cannot bring about the participation of the people. To bring about participation, information should be oriented towards the villagers' problems. We, should , therefore, understand what the villagers' problems are. We should then design information or messages based on local problems and use the appropriate media to disseminate them.

---

[5] During the time of his first field visit, the author of this thesis was very much surprised to see a disk antenna standing on the roof of one of the houses in a remote Gorkha village (see photograph in Appendix 35).

Before flowing information we should understand what exactly their needs are. Villagers can provide their participation wholeheartedly only when the result of our discussions identify their exact needs.

Table 12-4 : Interviewees' Perception Regarding Effective Nutrition Communication

Interviewees	Sectoral/ Multi-sectoral Approach	Villagers' Participation	Simple/Clear/Suitable / Appropriate/ Information/ Media
A			✓
B	✓	✓	✓
C		✓	✓
D		✓	
E		✓	
F		✓	
G		✓	
H			✓
I			✓
J		✓	
K			✓
L		✓	
M			✓
N		✓	
O		✓	✓
P		✓	
Q			✓
R	✓	✓	✓
S		✓	✓
T		✓	
n=20	2	14	11

Note: Tick symbol (✓) indicates the interviewee's category of response.

A slightly different view from the above was expressed by one of the interviewees from the MOH who argued that voice of the people should be involved in the decision-making processes of communication:

> The best form of communication can be a flow of information from the village level to the central level in decision-making processes. These processes should invariably articulate the people's needs, feelings and social realities which involve two-way dialogues with people.

Many interviewees believed that nutrition information should not be ambiguous or difficult for the villagers to understand. They asserted that the information should be within the realm of villagers' understanding and capacity. As one senior staff member of UNICEF, explaining a simple strategy of information dissemination, said, 'people who have a better level of knowledge should be provided with upper-level information (that is, more complex or sophisticated information), while simple information should be provided to people who have a low level of knowledge'. Another middle-level staff

member of DOH explained that 'communication should have a pair level or pitch level in its process; this means that communication should not be beyond the level of the villagers' understanding'. All these views assumed that information or messages can be made simple and clear when they are tailored to the level of understanding of the target audiences. It should be noted, however, that simply bringing information to the level of understanding of the target audiences will not necessarily persuade them to make the behavioural changes that are necessary for better nutritional health. The latter will occur only if they themselves realise the importance of the information through their involvement in the design, development, dissemination and evaluation of the information.

Some interviewees indicated that the choice of appropriate modes of communication in the village context is very important for making nutrition communication participatory and effective. An interviewee from DOH contended that the local media, with some suitable modifications, could be useful in nutrition communication. Citing the example of 'Jhankris' (witch doctors), he argued that: 'If modifications were made, the "Jhankris" could be very effective in disseminating information in the villages'. In fact, the field observations made by the author of this thesis suggest that 'Jhankris' are still very popular in the villages and that many villagers do have faith in them when they are ill. Thus, the participation of 'Jhankris', not only in the dissemination of nutrition information, but also in its design and development, is likely to be important and effective in Nepali villages. Miller (1987:186) observes that a 'Jhankri' in Nepal ' is familiar, indigenous to the place and culture, sharing with the local people the same ideas on the probable cause of sickness and the method of successfully treating it, thus engendering in clients expectations for an improvement or a cure'.

One of the interviewees from the media organisation (Radio Nepal), highlighting the importance of radio in nutrition communication commented that: 'Translations of peoples' voices in the radio programs may bring about people's participation in food and nutrition'. He further gave an example of how a radio program can make a communication participatory:

> As people are the participants in our development campaigns, their participation in information and communication is a must. In our radio programs, we invite village people to participate. However, this activity has not yet been extended as much it should be. Recently, we have been broadcasting every Saturday evening a program where villagers have the opportunity to ask questions of parliamentarians of their respective constituencies, and the parliamentarians answer their questions off the cuff. This process is based on the participatory approach.

He contended that the local people's participation in television and radio programs on nutrition enhances the flow of information:

> Programs that have the participation of people should be made. For example, if we include a village person in our program, he/she may request his fellow villagers to listen to the program he/she is involved in. As a result, one person will tell what he/she has said in the program to another. This process allows the message to be disseminated as much as possible. As a result, the maximum number of village people can get information.

The views expressed above indicate the need for including the people in communication processes. Their inclusion appears to be geared, however, more towards the dissemination of information rather than to the people's participation in all phases of communication processes, including the design, development, and evaluation of information..

Considering the existing level of technological self reliance and also the economic situation of Nepal, the use of radio in information dissemination, compared to television and video, is very feasible. Compared to television and video, radio can reach a larger audience due to the easy access to it many villagers have. However, because of the far-reaching visual effects of television and video, many villagers, even those who have not yet had the opportunity to watch television or video programs, such as the respondents of Ramechhap (chapter 10), now believe that television and video are better than radio in terms of providing factual demonstration in nutrition information and education.

To assess the overall preferences concerning the appropriate modes of nutrition communication, all the interviewees were asked to indicate their preferred modes (Table 12-5). On the basis of their responses, a statistical calculations for computing the mean ranks of all of the preferred modes were made using Kendall's Coefficient of Concordance (Kendall's W). (Table 12-6).

Table 12-5 : Appropriate Media for Communicating with Village People

Interviewees (n=20)	Media in Preferential Order*				
	First	Second	Third	Fourth	Fifth
A	IP	VD	PM	FM	RD
B	RD	IP	PM	FM	VD
C	RD	IP	FM	PM	VD
D	RD	IP	PM	FM	VD
E	FM	IP	PM	VD	RD
F	IP	PM	FM	RD	VD
G	FM	IP	VD	PM	RD
H	IP	VD	FM	PM	RD
I	IP	VD	PM	FM	RD
J	VD	IP	RD	FM	PM
K	IP	PM	VD	FM	RD
L	VD	IP	PM	RD	FM
M	FM	VD	PM	RD	IP
N	IP	VD	FM	PM	RD
O	IP	FM	PM	VD	RD
P	VD	RD	FM	PM	IP
Q	IP	VD	RD	PM	FM
R	RD	PM	VD	IP	FM
S	PM	RD	VD	FM	IP
T	VD	FM	PM	IP	RD

*Media Abbreviations: IP = Interpersonal, VD= Video, RD = Radio, PM= Printed Materials, and FM= Folk Media.

Table 12-6 : Mean Ranks of Preferred Modes

Mean Rank	Communication Media
2.25	Interpersonal
2.80	Video
3.15	Printed Materials
3.20	Folk Media
3.55	Radio

It is obvious from the above table that interpersonal communication was ranked first, followed by video, printed materials, folk media and radio. In interpersonal, one-to-one communication was the most preferred mode. The main reason for preferring one-to-one communication is that it makes 'individual discussions possible', which many interviewees believe is important for communicating with villagers, who, mostly, are still not educated. In addition, some interviewees, such as an official of MOH, emphasised that one-to-one communication is what people are used to: 'We have been using it [one-to-one] for a long time, so people are used to it'. Group discussions, on the other hand, were considered an alternative means to one-to-one communication on the grounds that they facilitate interaction among the villagers. It was also stated that 'Ideas can be

exchanged among group of people very easily', and that 'increased participation is possible in a group'.

The main reason for which video was the second preference, on the other hand, was that it was largely linked with video's capacity to both entertain and educate people with its demonstrations. Some interviewees even commented on video's novelty value, as one interviewee from MOH posited, 'village people can be entertained and learn something at the same time, because video is still new to them'.

While many interviewees believed that printed material, especially posters and pamphlets, was suitable generally only for the educated, they recognised the benefits of its pictorial effects so it was ranked third. Many believed: 'it is easy to learn things with the help of the pictures'. It is worth noting that, despite the high rates of illiteracy in the villages, many of the survey respondents, focus group participants and local community leaders also acknowledged the pictorial effects of posters and pamphlets in informing village people.

Although folk media are not yet very widely used in Nepal in communication practices, some interviewees believed that they might be effective in nutrition communication. This was based on the assumption that folk media can incorporate local culture and tradition and help reinforce understanding of the nutrition information.

The final form of communication considered was radio. While many commented that it has a wide audience, they indicated that it does not necessarily work as a means of two-way communication.

All of the government and non-government interviewees confirmed that the existing methods of communication in Nepal are oriented towards a top-down flow of information. According to the majority of interviewees, in this flow of information, one-to-one communication (that is, transmission of pre-designed information to individual villager/household), radio and posters and pamphlets are very common. Some of them also indicated that non-formal education and the use of video clips in information

240

dissemination are commonly practised these days, especially among International NGOs. However, a majority of the interviewees thought that the existing methods of communication with villagers were insufficient, and indicated that the villagers should be consulted in the design and dissemination of information. Some interviewees strongly believed that consultation with the villagers increases their participation:

> If we have a tradition of consulting the target villagers in carrying out our project activities, they may then feel that they have participation in the project. Once they feel they have participation, they may then be tempted to taste the fruits of the project activities they are involved with. (Senior staff, NPC)

> .. they [the villagers] should definitely be consulted. It is important because it helps us to see whether they are willing to co-operate with us. If, for example, they do not want to co-operate with us due to a lack of interest in our activities or plans of actions, we can convince them through consultations and discussions and finally arrive at a point where both of us (the villagers and ourselves) can work together for their well-being. (Senior staff, MOH)

Although, on the one hand, there was a commitment to participation, the meaning of participation for many clearly differed and meant little more than consultation in the planning phase. For example:

> They (the villagers) should be consulted for identifying their needs, local conditions and systems. They should not be fully involved in information design and dissemination as we all know that communication design and dissemination are skilled arts. (Senior MOC official)

In the view of this official, local villagers, while they are being consulted about the design and dissemination of information, need facilitation and proper assistance from experts who know the technicalities of information design and development.

A little less than half of the interviewees (40%) strongly believed that the best way to consult villagers was with their representatives, whereas just over a third (35%) felt that all interested villagers should be invited to a group meeting. While talking about village consultations, however, one of the high ranking senior NPC officials, responsible for health and nutrition, cautioned that, although consultation with the people in the design and dissemination of information is required in order to know, especially their local culture, tradition, practices and priorities, there is sometimes a need to challenge them:

> Often the local suggestions or local wisdom may not be practical for resolving local problems. For example, the majority of village people still believe that providing water to people suffering form diarrhoea makes the condition worse. Similarly, the

241

people of Humla[6] still believe that salt from the south (iodised salt) makes their body itchy. They therefore still prefer salt imported from Tibet, which is not iodised and is simply extracted from the salt mine. The overall significance of these examples is that, in many cases, local wisdom does not work in resolving the problem; thus, the experts' ideas or opinions will have to be utilised. Maybe, in some cases, experts' ideas may complement or supplement the local wisdom, that's fine; but sometimes the latter may require even total modification.

The above statement suggests that there are often problems in consultation, especially in regard to the use of local ideas and experiences mixed with traditional beliefs, which sometimes have to be changed completely for the benefit of the villagers. But, such changes may not be possible without the participation or co-operation of the local villagers.

A large number of interviewees expressed the need for two-way dialogue as an essential feature of any participatory modes of nutrition communication:

> Any form of communication which are capable of discovering the audiences' interests and informing them accordingly, may be called participatory nutrition communication. This type of communication necessitates two-way dialogues.

> The modes of communication which can keep up continuous dialogues and address the problems with due understanding of the people's knowledge, food habits and traditions may be called participatory nutrition communication.

Two-way dialogue is viewed as a means of gathering information about the target audiences for effective information design and dissemination.

One of the interviewees defined participatory nutrition communication as sharing information between people: 'Those modes of communications that can bring about interactions (especially one-to-one interactions) between the beneficiaries and the project designers and implementers are participatory'. Another interviewee considered that village people should be given equal responsibility for their development and the modes of communication that render that possibility may be called participatory: 'Those modes which recognise the communicators and the villagers have equal responsibility in the design and dissemination of information, regardless of what the end results (good or bad) might be are participatory'. This view is comparable to the notion that the audience's participation in the communication processes of the development program is the key

---

[6] Humla is a remote mountain district of Nepal.

242

element for development success (see chapter 3). Similarly, some of the interviewees claimed that any mode of communication can be participatory if it has an impact on the villagers and brings about participation in nutrition communication:

> The mode of communication that has an impact on people and that helps achieve the objectives of communication may be called participatory. For example, if the people had not taken part in the publicity about kitchen gardens, the information and the media employed could not have been regarded as participatory. On the contrary, if they participated, it was participatory - the participation was possible because of the impact of information and media.

As far as non-participatory modes of nutrition communication were concerned, a majority of the interviewees defined non-participatory mode simply as one-way, or non-dialogical. In this context, some considered that 'any modes containing one-way dialogue are non-participatory', while others considered that those modes 'not encouraging the villagers to listen and discuss' were non-participatory. One official from MOH who defined non-participatory modes as: 'those that are one-way towards the beneficiaries and those responsible for the design and implementation of the project'.

Apart from this, there were mixed responses from a number of interviewees, who defined non-participatory nutrition communication as essentially a top-down information system lacking orientation towards the local village conditions, the environment and the villagers' interests.

In general, non-participatory modes of nutrition communication were defined as those modes which cannot lead to increased dialogues or interactions between the villagers and the project staff, or to shared responsibilities for the design, development or dissemination of communication, and which do not assess the local needs, conditions and cultures of the villagers.

Conclusion

Most of the interviewees from government and non-government organisations viewed nutrition problems as 'very important' for the development of Nepal. They linked them with poverty, food availability and a lack of education and knowledge. Most of them also

linked the importance of these problems to human resource development and felt that malnourished people would have difficulty participating in national development.

While bearing in mind the importance of increased food production, food distribution, income and other physical facilities for nutrition development, a majority of the interviewees stressed the urgency of disseminating appropriate nutrition knowledge and information for dealing with existing nutrition problems. They felt strongly that nutrition knowledge and information would help maximise the use of the existing resources in the process of resolving nutrition problems in the country. In this context, a majority of the interviewees highlighted the importance of the role of communication in informing and making people aware of nutrition problems and solutions. A majority of the interviewees thought that there should be a clear nutrition communication policy within the National Communication Policy while others even wanted a separate nutrition communication policy in view of the scale of the nutrition problems facing the country. Conversely, some of the interviewees held that a clear nutrition strategy, rather than a policy, was needed to effectively address the existing nutrition problems.

In regard to a nutrition communication strategy, a majority of respondents singled out the necessity of simple and participatory approaches to communication. Among other considerations, many strongly believed that the information should be tailored to the level of the audiences' understanding. To this end, the need for a strategy of involving the local people in communication and in the choice of appropriate modes was frequently emphasised by a majority of the interviewees. However, the importance a majority of them attached to the audiences' participation only referred to the sharing of information about their needs, problems, local conditions and traditions in the course of the design and dissemination of the nutrition information of the project.

On the basis of their experience and perceptions, many interviewees believed that one-to-one communication was the most important mode of communication for the villagers followed by video, group discussions, posters and pamphlets, folk media and radio. The main reason for the preference for one-to-one communication was, according to many interviewees, that many of the non-literate villagers of Nepal still need individual

consultation for clarifying nutrition issues and problems. This contrasts with the views of many of the focus group participants and local community leaders who felt that one-to-one communication was not very feasible since it required so much time and energy to reach each individual household. In order to save time and energy and also to allow for an exchange of ideas, the focus group participants and community leaders preferred group discussions rather than one-to-one communication.

Video, the second most preferred mode of communication, was considered as an effective means of communication because of its visual and audible effects. Despite one interviewee's attempt to illustrate the ways in which a radio program could be participatory, radio was considered the least important mode of communication because it is only one-way. It should be noted that most of the survey respondents, focus group participants and local community leaders too, considered radio as only one-way communication.

In contrast to the widely-held view that the current approach to nutrition communication in Nepal is only one-way (a top-down flow of information), all of the government and non-government interviewees favoured consultation with the villagers in anticipation of nutrition communication in the future that would be participatory and two-way. However, a majority of them preferred consultation with villagers through the villagers' representatives. This was contrary to the opinions of most of the survey respondents in all three survey districts, who preferred group meetings, rather than the involvement of local villagers' representatives, as a means of village consultation.

In relation to participatory approaches, a majority of interviewees perceived participatory nutrition communication as continuous dialogue, interaction, information sharing and understanding with villagers. In essence, they considered participatory nutrition communication as a common pursuit of dealing with nutrition problems through exchange of information, ideas, and understanding of local culture, tradition and conditions. By contrast, non-participatory nutrition communication was perceived by a majority of interviewees as one-way, non-dialogic, and non-interactional communication

that does not respond to local conditions, culture and tradition, nor encourage villagers to discuss problems and issues.

In the context of the data analysis of sample survey households, focus group discussions, local community leaders in the three districts, and interviews with government and NGO officials involved in nutrition and health, the ensuing final chapter discusses the findings of this study.
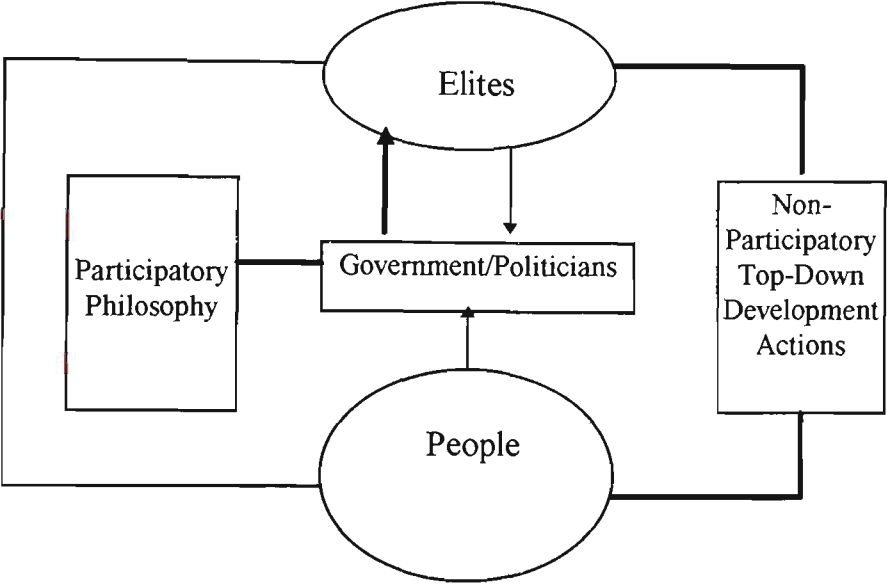
CHAPTER 13 : CONCLUSIONS

Participatory communication is not new. It has been practised and promoted for many decades in a variety of fields. It has received considerable attention in industrialised countries in adult education, community development and development communication, and has achieved increasing visibility internationally in sociology. Some international organisations have made participatory communication and research a principle component of development project works (Servaes, 1996b :13).

In Nepal, as in other countries and contexts, the notion of participation is not new, but the experience of participation has in practice affected both the understanding of the notion and community attitudes toward it. During the Panchayat System (1960-1990) its popularity was so high that it became a national slogan in every development project. At that time, provision was made in the constitution for the decentralisation of power down to the villages as a means of achieving overall national development goals. Also, during this period, the importance of the villagers' participation in the planning and implementation of local development projects was strongly emphasised by politicians, bureaucrats and technocrats. Unfortunately, the policy of securing the peoples' participation degenerated into exploitative activities on the part of elites who used it to gain forced participation for their own ends. Paradoxically, participation came to be seen by most people as adherence to certain political and bureaucratic directives aimed at realising the vested interests of powerful groups of the society. No one, therefore, became involved in participation unless he or she was forced to. Thus, for the vast majority of poor people in Nepal, the notion of participation was generally understood as 'orders' or 'mandates' rather than 'partnership' or 'co-operation' in development activities. This situation enabled the elite groups to harness their power in the realisation of their vested interests. Consequently, a smoke screen of rhetorical speeches prevailed in the country during the Panchayat regime and one-way communication, oriented towards 'orders' or 'mandates' predominated in the development plan and its implementation. During that regime, the notion of people's participation remained a mere

theoretical assumption, rather than a practical solution for national development in Nepal.

The following conceptual diagram (Figure 13-1) summarises the above discussion by highlighting the manner in which a participatory philosophy for national development eventually resulted in a non-participatory, top-down approach to national development during the Panchayat System.

Figure 13-1 : Conceptual Diagram of Non-participatory Nutrition Communication

In the above diagram, the left-hand line connecting the people and the elites, without an arrowhead, shows that the elites are an integral part of people and society, and the central line, with a downward arrowhead connecting elites and government/politicians, suggests that elites dominated the government and politicians with their bourgeois' power in the Panchayat. At the same time, a central line, connecting the people and government/politicians with upward arrowhead, shows that government and politicians came from the people. In order to sustain the government and a political system dominated by elites (which was the Panchayat System), the government and politicians theoretically advocated the philosophy of participation in development in order to give people hope of prosperity. Thus, this philosophy, as conceived by the Panchayat System, is directly connected by a bold straight line to the Government/Politicians. From the government, the participatory philosophy was channelled to the people down at the grass roots level through the elites. During this channelling process, strong rhetorical advocacy

for participation emerged, as a result, concrete actions for the people's development remained non-participatory and one-way. If the participation of some people was involved, it was forced participation, given only to comply with orders. The most plausible reason for this situation was that it protected the vested interests of politicians and elites as Lohini asserts:

> The basic fact remains that a scheme of people's participation that can resolve the economic and cultural [contraction] will ultimately threaten the economic and political power of the existing elite (Lohini, 1978:148 quoted in Belbase, 1994:447).

The situation highlighted in the diagram also represent a clear picture of the 'powerlessness' of the majority of people in Nepal, who are basically poor and uneducated. It appears that the social structure in Nepal during the Panchayat regime was so influenced by the elite groups of the society that they could easily manipulate participatory approach to development in retaining their status quo. Bordenave (1994:45) asserts this kind of cultural influence and social structure is largely predominant in the Third World countries.

In order to break down the culture of 'powerlessness', a structural change in the society is necessary. To practise participatory approaches to development, without distorting or manipulating their real essence, structural changes are needed in the current patterns of elite domination of Nepali society.

Since the end of the Panchayat System in 1990, the notion of people's participation in Nepal has taken on the more substantive meaning of increased democratic participation of the people in the resolution of development problems. However, in this new context, it would appear that, although the majority of the government and non-government respondents (bureaucrats and technocrats) who were interviewed as part of this study strongly emphasised the need for the people's participation in national development, most of them, with some exceptions, preferred partial levels of participation, where the people are involved in only one or other particular phase of a development project. The notion of full participation, including design, development, implementation and evaluation of projects, was not commonly accepted among the government and non-government officials who were interviewed. In contrast, a majority of the survey

respondents, including focus group participants and community leader who were interviewed preferred full participation in the development projects and communication processes. This clearly indicates that the government and non-government interviewees, and survey respondents understand the required level of people's participation in the development in different ways. Within this context, the following sections summarise the study's findings and highlight some of the implications.

Conceptualisation of Participation

As the field survey for this study has revealed, the meaning of participation for a large majority of the focus group respondents and community leaders in all three of the survey districts is that villagers should be included in the design, development, implementation and evaluation of the project and its communication processes. In contrast, for most of the government and non-government officials who were interviewed, people's participation means the villagers should be included in the process of needs assessment for the design and development of the project. Most of them believe that the inclusion of villagers forms a basis for (a) tailoring the projects and the information relating to project activities to resolving village problems, and (b) bringing about the villagers' participation in the project delivery phase (that is, the implementation phase).

As this analysis indicates, the survey respondents, and the government and non-government officials who were interviewed have conflicting notions about participation. These conflicting notions appear to be linked to the perception of government and non-government officials that the villagers are still not capable of being fully involved in all phases of the process of development. For example, one of the senior officials of the Ministry of Communication, referring to a nutrition communication project, argued that the villagers should not be fully involved in the nutrition communication processes as they lack the required skills in this field (see chapter 12). Not only do these government officials think that villagers still lack the capacity to be fully involved in the development processes, they also believe that the villagers need to develop their capacity gradually with paternalistic guidance. This paternalistic guidance or approach to development was very manifest during the Panchayat System (refer to chapter 5) with its rhetoric of

people's participation in development, but it did not succeed due to the lack of genuine participation by the people in their development. A point to note here is that development activities should not involve paternalistic approach if they want to engage the genuine democratic participation of the people (Dudley, 1993:8).

Because of the history of this paternalistic approach, people still mistrust the government's development processes and practices. For example, in Gorkha (see chapter 9), the focus group participants clearly indicated that they do not want nutrition projects to come through local political and administrative authorities. It would seem that the villagers no longer trust any authority, be it government, non-government or local administrative bodies. They believe that a project is participatory only when it comes directly to the villagers. It would further appear that villagers do not like the old traditional modernisation paradigm of development (one-way approach to development); they prefer to have full participation in the development process.

The paternalistic approach to development assumes that there are two distinct groups in the development process: 1) the development 'authorities', such as political leaders, bureaucrats and technocrats who consider themselves as all-knowing (fountain of knowledge) and b) 'ordinary people', who are viewed as followers under the guidance of the development authority. Such a clear distinction can be anti-participatory in the sense that it cannot facilitate horizontal and continuous dialogues or discussions or a sense of partnership in the development process. Rather, it can lead to manipulation (albeit with a feedback system) and fosters the use of power to maintain the structural inequality of the society, instead of creating a critical mass that would promote social development based on people's participation. Structural inequality can be defined as the product of a structural system that assists 'in communicating an ideology and in supplying manipulative skills which maintain the status quo' (Sargent, 1994: 5).

In all of the survey districts, the respondents do not discount the value of experts help in carrying out their full participatory responsibilities. In fact, experts help in technical matters, especially in nutrition, can allow the villagers to take part in all of the phases of a project and its communication processes.

Implementation Problems of Nutrition Communication Projects

The fieldwork demonstrated that there was a lack of consultations with villagers in the planning, development and implementation in all of the projects which were surveyed. None of the villagers knew about the intentions and objectives of the projects until they were finally launched in the districts. Although the villagers liked to see development projects in their villages, this approach to development (that is, the lack of consultations) was not appreciated by the majority of the survey respondents.

Because of the lack of consultation, there were some major problems affecting the projects' activities in the implementation phase in all of the three survey projects. For example, in Nawalparasi and Gorkha, there was a problem related to the dissemination of information regarding the projects at a grass roots level in that women volunteers and women's groups did not work properly because their financial expectations were not satisfied. Similarly, the focus group participants in Gorkha cited an example of village people who received training about nutrition from the project, but then did not properly share their knowledge. It was indicated in the focus group that these villagers assumed that they were 'superior' or 'knowledgeable' persons, and believed that they should be approached by other villagers for knowledge sharing. These examples suggest the village people who were involved in the project activities did not feel an obligation to work properly on behalf of the projects for the benefit of their village communities. Their individual feelings, including the desire for 'monetary gain' and a sense of 'superiority', had a negative effect on the dissemination of project information. On the other hand, those villagers who had no direct contact with the projects and simply remained ordinary target beneficiaries regarded the village people directly involved in project activities (women volunteers, women's groups and some villager trained by the projects) as 'project people', who were different from them. Such attitudes seem to have constrained some of the important norms of participatory approaches, as delineated in chapter 3, which include a sense of ownership, partnership, co-operation, solidarity and role taking in projects on the part of the target beneficiaries.

A lack of consultation may also have contributed to the perceptions of some villagers that some people received preferential treatment. Some people directly connected with the project activities even engaged in nepotism and favouritism while carrying out project activities. In Nawalparasi, for example, favouritism, in anticipation of financial gain, was reported in the recruitment of women volunteers. Most of the focus group participants in all of the survey districts, including community leaders who were interviewed, believed that, in order to avoid major problems that might affect village development project, the villagers should be consulted before any project is actually launched in their villages. They believe that consultation can help establish dialogue and discussions between the project staff and the villagers, as a means of both increasing the villagers' participation and of helping project implementation. Most of them believed that the villagers should be approached and motivated in a way that would make them interested in project activities (see chapter 10).

One of the major problems in the implementation of nutrition communication in all of the projects surveyed was a lack of shared responsibility among the people directly involved in the projects. In all of the survey districts, women volunteers and workers were largely responsible for project communication at the village level. Consequently, other village people, directly involved in the project activities, such as community leaders and school teachers, did not feel any responsibility for grass roots project communication. Thus, a clear hierarchical structure was reinforced in the system of dissemination of information used by each project: it began at the highest level (the central office level) then reached to a grass roots level, and the final communicators in all of the survey districts were women volunteers and workers. Such a hierarchical structure cannot nurture a participatory approach to development, in which everyone is involved actively and equally in the development process.

Villagers' Scepticism of Local Development

From the villagers' point of view, village development was seen essentially as the physical development of villages, which is similar to Stone's observation (1989) (see chapter 3). Therefore, they showed great concern for their needs, such as the

establishment of health posts, schools, potable water systems (as, for example, expressed by people in Ramechhap), and the project's inability to satisfy those needs was seen as not contributing to the people's development. This attitude can prevent people from realising the importance of nutrition projects in human growth and development. It demonstrates that, in order to help them realise the importance of nutrition, people need to be engaged in a dialogical process of project communication, where they can have the opportunity to participate in discussions and become more aware of the importance of nutrition alongside other development needs.

Inadequate information was identified in Nawalparasi and Gorkha as an important factor in the people's scepticism towards project information and the delivery of goods, such as vitamin A capsules. As a consequence of this scepticism, people tended to be casual about project information and the delivery of goods and did whatever they like with both. For example, in Nawalparasi, vitamin A capsules were said to have been given to children to play with rather than to consume. Similarly, in Gorkha, it was reported that the villagers exchanged green leafy vegetables for alcohol, tobacco and cigarettes. It should be noted that 'for a new idea to be adopted, it must make sense in terms of the intended user's own rationale' and 'it must be clear what aspect of the idea is new within the context of existing knowledge' (Dudley, 1993: 17). A process involving dialogue and discussion would almost certainly be more effective in reducing the villagers' scepticism and in helping them to 'internalise' nutrition information and 'appreciate' the value of nutritious foods.

Modes of Communication

In all of the survey districts, the preferred mode for consultations with villagers for project design and development was group discussions. Most of the household respondents, focus group participants and community leaders who were interviewed believed in the value of group discussions as a means of exchanging ideas and views. Interpersonal communication (one-to-one communication and group discussions) and video were considered to be the most important modes of communication for the dissemination of project information in the project implementation phase, with many

expressing a preference for a combination of these communication modes. It should be noted that group discussions supported by audio-visual methods were considered an excellent means of creating two-way dialogue and discussions and of sharing nutrition knowledge and information: a feeling supported by Latin American research findings that video 'sparks discussions' and brings people 'close to situations thus allowing them to analyse the cause and effect' of the problems (NCP, 1992:14). Singh and Kumar (1990: 24-25) highlighting the importance of video in rural Third world believe that video can create 'an ideal condition for two-way communication' between villagers and development experts.

The use of traditional or 'alternative' media that are 'more accessible to their audiences' (Shah, 1996:162), such as 'gaines' in the Gorkha survey district, was thought to be entertaining and educating. However, 'gaines' were not well received by the majority of the survey respondents in Gorkha because of their traditional, occupational practice of demanding food or money in return for providing entertainment to villagers. This implies that the inclusion of any local media in project communication cannot always guarantee effective communications. Thus, a participatory approach, which involves the local villagers and the project staff may be necessary even in the selection of appropriate local, traditional modes of communication. Nevertheless, many communication scholars believe that the latter can be effective in informing village people.

According to the survey findings, there was no indication that the modes of communication used by each of the individual projects had had a positive impact in any of the three survey districts on the people's knowledge and their frequency of intake of green leafy vegetables and yellow fruits. It was found, however, that, with the use of paid local women volunteers and multiple media, the project in Gorkha, in comparison with the other two districts, proved more successful in conveying the project information and in bringing about a high degree of people's participation in the delivery of project's goods and services. In contrast, Nawalparasi was the least successful since the unpaid women volunteers and the limited project media were not able to communicate properly with their target beneficiaries, and there was less participation by the villagers in the delivery of goods and services.

Cultural and Social Issues in Food and Nutrition

Culturally, many locally available wild vegetables and fruits are considered as inferior foods in all three of the survey districts. However, some of the focus group participants in Ramechhap indicated that these foods could be promoted if their nutritional values were better known by the villagers. In contrast, in Nawalparasi, some school children, despite the fact that they learn about nutrition at school, still seemed to maintain the cultural belief that wild vegetables and fruits are 'poor people's food' while the adoption of new cultural practices, such as drinking soft drinks and eating junk foods, are associated with modernity. In order to bring about changes in attitudes and eating habits, a participatory approach, which involves actual experimentation with, and demonstration of, the use of locally available wild vegetables and fruits, could be helpful. As Coombs (1980: 31) believes, 'people are not sheep who can be led blindly', and they need 'understanding' through 'demonstrations and practical actions', since people cannot necessarily be influenced by 'preaching and propaganda' that do not take into account the need for 'convincing reasons and new insights' for changes in their behaviour and practices.

The Value of Participatory Communication

The field research revealed a high level of support for participatory communication. The respondents maintained that participatory nutrition communication can be helpful in creating a sense of understanding, co-operation, and shared responsibility between a project and the intended project beneficiaries. To this end, the respondents suggested that the villagers be involved in all phases of the nutrition project and its communication processes (that is, that they have full participation).

Except for few local women volunteers and women's groups, the participation of a large majority of the villagers in all three of the survey projects was limited to receiving delivery of the project's goods and services. This level of participation of the villagers did not secure 'active dialogue' and 'communicative action', in Habermas' sense (see chapter 3), between the project staff and the target beneficiaries which would allow them

to reach an understanding about the actions necessary for achieving the project goals. Because of this lack of active dialogical or communicative action, none of the projects had a positive impact on the target beneficiaries in terms of knowledge gain and behaviour change.

Implications of the Findings

The findings of this study have significant implications for government policy, especially in the field of development, nutrition and communication.

Development policy

Although Nepal has already had seven consecutive development plans and is now completing its Eighth Plan (1992-1997), the notion of participatory development seems to have been overshadowed by the use of a conventional model of centrally-planned development efforts. As a result, none of the three projects which were surveyed could be considered as truly participative. However, it can be seen from the survey findings that no development efforts, be they in nutrition, health or another area, can be successful unless the people are engaged in dialogue. The fieldwork findings strongly suggest that there is a need to consult the villagers before any development plan or program is formulated and implemented. For this, national policy guidelines specifying the strategies for involving people in all phases of the development and communication processes have to be prepared. These policy guidelines would support the notion that real development must be people-centred, and take account of full participation at a local level (see chapter 3). Rhetoric alone does not produce participation in development; for this substantive policies, strategies, actions and political will are needed.

Nutrition Policy

According to the field survey information, there are policy inadequacies in the nutrition and nutrition-related development projects in Nepal. As a result, nutrition and nutrition-related projects appear to have been formulated and implemented solely at the discretion of donor agencies or project experts and planners.

Since nutrition development has been much emphasised in various national development plans, and it is focused on the Eighth Plan as a development indicator, a large majority of the government and non-government officials who were interviewed suggested the need for a national nutrition policy, and for co-ordination of the design, implementation and monitoring of nutrition activities. Many of the government officials who were interviewed implied that, due to the lack of a nutrition policy and co-ordination, the country was facing problems related to the sharing of responsibility and co-ordination among the different organisations (national and international) involved in nutrition activities.

Communication policy

Highlighting the important role of communication in nutrition development, most of the government officials and NGO representatives who were interviewed argued for a clear nutrition-specific communication policy to be incorporated into a national communication policy. Interestingly, one of the senior government officials who was interviewed linked the current lack of a clear nutrition communication policy with the government's traditional attitudes and practices of not inviting the participation of important organisations involved in nutrition. This suggests that, although many government bureaucrats and technocrats claim to believe in a participatory approach to development, they themselves fail to adopt participatory norms in the process of national development. This failure adversely affects the multi-sectoral approach to nutrition development in Nepal, where participation and co-ordination of sectoral agencies are essential. Many interviewees believed that such participation and co-ordination has to be from the national level to the grass roots level, if nutrition campaigns and projects are to be effective.

Future Directions for Nutrition Communication

To improve nutrition, which is considered by the majority of government and non-government interviewees who were interviewed, to be one of the major aspects of human development (see chapter 12), there is a need to mobilise the people's participation in all the sectors of national development which directly or indirectly affect the nutrition status of the people. For example, the people should participate in food production and

258

consumption (the production, marketing, distribution and utilisation of available foods), education, health and income-generating activities.

In order for the people to participate effectively in nutrition activities in Nepal, a multi-sectoral approach, involving people in sectors such as agriculture, education, health and other relevant fields of the economy, might be very relevant as these sectors are the most important in human nutrition. However, it is not a simple task, and the successful implementation of a multi-sectoral approach is not possible unless there are adequate policy and strategy measures that can lead to inter-sectoral co-operation, co-ordination and understanding. In Nepal, it would appear that intersectoral co-operation, co-ordination and understanding have been a problem for a long time. In order to resolve this problem, a participatory strategy, based on achievable and realistic goals and national policies and programs, should be initiated among the various government and non-government sectoral agencies. In this participatory strategy, communication aspects should be given the highest priority that can generate mutual action, consensus and understanding among the sectoral agencies involved in resolving nutrition problems. Similarly, every sectoral agency or organisation which has a nutrition project in the village should foster the grass roots people's participation in project activities and the communication processes from the very start of the project development phase to the end of the project evaluation. This level of participation - 'full participation' in the sense that it is used here - can provide ordinary people with greater opportunities to be involved in communicative actions (for example, transactional dialogue and discussion) for resolving the village nutrition problems. At the same time, full participation in project activities can empower ordinary people through action and reflection (that is, praxis, in Freire's sense, see chapter 3) on their activities. This process of action and reflection is very important in nutrition since nutrition-related behaviour is more complex and difficult to change than most other forms of health-related behaviour (Achterberg, 1991). The main reason for this is that many people still do not consider nutrition as an important factor in maintaining good health, and many others do not have adequate knowledge of nutrition. Because of their lack of knowledge, even those people who have enough food to eat can suffer from nutritional deficiency diseases. For example, in the survey district of Nawalparasi, where the production of green leafy vegetables and yellow fruits is not a

259

problem, there are vitamin A-related deficiency diseases, especially among growing children. Thus, for people to become aware of the importance of nutrition, they need to understand, acknowledge and utilise the relevant knowledge and information properly. In this regard, nutrition communication can play a vital role. As McAnany (1980:15) asserts, even slight changes brought about by nutrition campaigns may have the potential to save the lives of many people. In this respect, nutrition communication in the future should not be considered only as a means of disseminating information. Rather, it should be considered as an important mode of empowering people by involving them in communicative action (transactional and horizontal dialogue and discussions) and reflection (analysis of their mistakes and failures) in all the phases of the project so that the appropriate understanding necessary for the resolution of the nutrition problems can be generated. Involving people only at the needs assessment stage and tailoring the project information accordingly (which many of the government and non-government officials who were interviewed thought adequate) cannot make nutrition communication participatory since this strategy does not entail continuous (transactional) and horizontal dialogues and discussions between the target beneficiaries and the project staff throughout the project period.

In order to test the practicality and appropriateness of the research findings of this study, it is recommended that a pilot action research project on nutrition communication that fully involves the target audiences in the design, development, dissemination and evaluation of nutrition communication, and which uses a combination of group discussions and video as the main media of project communication be undertaken. The main objectives of a project of this kind should be to ascertain the effectiveness of the involvement of both the target audiences and the modes of communication in bringing about changes in dietary behaviour of the target group. Further, studies related to the involvement of the local village people in the nutrition communication processes, especially with regard to the mobilisation of locally available nutritious foods and the local media, should also be conducted in order to assess the effectiveness of the role of participatory nutrition communication in the resolution of village nutrition problems by the villagers themselves.

BIBLIOGRAPHY AND APPENDICES IN VOLUME II