

**Teaching Beekeeping in Nepal:  
A Field Test of the FAO's  
Development Communications  
Process Model**

**M.A. by Thesis  
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Durham University**

**by**

**Charlotte Bannister  
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## **Abstract**

This thesis explores the problem of integrating women into rural development programmes. Specifically, it examines the potential of Development Communications as a strategy for achieving sustainable development, with particular reference to the author's beekeeping project for women in Nepal.

The thesis also addresses typical failures in development programmes relating to women and gender issues. Women are effectively excluded from the majority of development programmes because of their low social and economic status. However, they do make up half the adult population, and can play a vital role in family and community development. It is therefore crucial to ensure their participation in the development process. Indeed, the thesis argues that this is the key to achieving sustainable development.

Therefore, strategies are considered for involving and empowering women in development programmes - this is done principally through income-generating activities - and one activity in particular, modern beekeeping, is identified as being most appropriate for rural women living in the Sindhupalchowk district of Nepal. Development Communications is hence seen as the essential means for motivating and enabling such a target audience to adopt these new activities.

The theoretical and practical issues involved in Development Communications are then surveyed in a number of projects from Nepal and other parts of Asia. The author describes her own case study, called "Communications for the Future", in which the FAO's Development Communications Process Model is evaluated and specific improvements are recommended. Solar power is used to run the communications equipment in the field, and this is identified as the most appropriate means of activating video-training systems in remote rural areas.

However, successful Development Communications depends not only on technology but also on interpersonal communication and on an interactive approach. The thesis suggests that potential problems, such as differences of language or culture, can be overcome by taking a bottom-up rather than top-down approach, involving the target audiences in all stages of the communications process and producing educational material which is culturally specific.

Finally, the thesis demonstrates the practical value of its approach to Development Support Communications. It shows that involving women in income-generating activities can have positive effects for the local economy, for the status of women and for integrated rural development.

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# Chapter 1

## Introduction

### 1.1 The Background to the Thesis

During the last two decades, an increasing amount of importance has been placed, by academics and practitioners, on understanding the role played by women in development, and on the need to establish effective means of incorporating them in the development process. During the same period, a new field of study has emerged, that of Development Support Communications, concerned with analysing effective systems of communication at the grass roots level of the development process.

In a paper written for the International Oxford Symposium in 1986, the author of this thesis brought together these two new concepts to illustrate the possibility of integrating women in development by applying a new approach in communications. The conclusions of that paper were based purely on secondary research, however, and therefore the author decided, in addition, to conduct this master's thesis so as to analyse at first hand the appropriateness of utilising Development Support Communications for women's development and education. This has been achieved by the practical establishment of a case study project in Nepal called *Communications for the Future*.

Initially, the M.A.-year's research was split into two six-month periods, spread over two years. In the first year, a number of non-governmental organisations (NGOs) and international aid agencies were visited by the author in India, Nepal and Pakistan. The purpose of these visits was twofold: firstly, to establish an overview of the type of Development Support Communications projects which were already in use in the field, and secondly, to chart the effectiveness of these projects.

The second year's research consisted of field work over three months with a single NGO, ActionAid Nepal (AAN). The aim of this project was to establish a communications unit for AAN and to produce a set of audio-visual materials targeted specifically at women living in ActionAid's project area. Developmental educational materials such as a video, slide set and flipchart were designed to help women become more integrated in ActionAid's development programme, and to encourage income-generating activities permitting sustainable development.

After being granted a two-year extension to the thesis, the author used this extra time to monitor and evaluate the case study. Unfortunately, this had to be postponed due to the political instability and national disturbances in Nepal during 1990. This past year, 1991, has therefore been spent monitoring the case study, writing up the thesis and designing a follow-up communications training course for ActionAid in Nepal; the latter course ensuring a continuation of the project work related to the above-mentioned case study *Communications for the Future*.

## **1.2 A Brief Summary of the Central Arguments and Conclusions of the Thesis**

It is becoming more widely recognised that if women are effectively incorporated into development programmes, they and their whole community will derive greater benefit from these programmes. The importance of women's potential developmental role stems from the fact that women normally constitute half the adult population and typically play a very important role as guardians of children's welfare. In addition, they may also, in a country such as Nepal, be the primary producers of the family crop, as well as being managers of the local natural resource systems. Development programmes can not only enhance the way in which women undertake these traditional roles but they can also, in suitable circumstances, introduce new roles, such as income-generating activities. But new roles can only be introduced successfully if they are appropriate and if they are

accompanied by effective means of raising the interest of the potential participants, by information transfer and by training.

The present thesis takes the case of women living in the Middle Hill district of Nepal. Against a background of a brief geographical and historical survey which provides the development context, the thesis examines the past and present role of the women both in their society and in the development process, and goes on to argue that their active participation in income-generating projects, such as beekeeping, in their home village is feasible, and also of potential value in several ways.

This thesis also investigates the appropriateness and practicality of utilising the Development Communications Process Model (DCPM) system, devised by the FAO, as an approach by which to secure the active participation of the women. And the applied field-research project, conducted by the author, concerning the use of the DCPM is also reported on. This research takes as a case study the introduction of beekeeping as a new income-generating activity for women. The report explains why beekeeping was thought to be appropriate and how women were involved in the decisions about the structure and content of educational material related to the beekeeping programme, about the design and production of the DSC materials and finally about participants in the programme.

The results of the field research indicate that Development Communications material does indeed support educational development work if used frequently, and, furthermore, that slide sets are the preferred medium. However, a number of problems appeared during the implementation of the research project, raising questions about some aspects of the comprehensiveness of the DCPM as a process model. The present thesis, developed from the experience gained in the field research, identifies the positive aspects of the DCPM but also concepts and actions that the model fails to take into consideration. Two major omissions in particular are reported here that reduced the value of the model as an aid to structuring and conducting the field research. These are also likely to reduce the model's value in other areas of research. These omissions were, firstly, not using members of the

target audience as actual participants and co-producers of the educational material and, secondly, not incorporating the semiotic functions of communication into the design process.

In conclusion, this thesis argues that the DCPM model is a very important tool for the development of communication materials, and hence a recommended method for achieving development communications, though it is also pointed out that it would be improved by rectifying the two omissions, mentioned above. The model should be utilised by international and national agencies as a prerequisite for participation at all stages in the development process, and especially for programmes pertaining to women and gender issues.

Finally, the thesis suggests areas for future field research that needs to be carried out to confirm the conclusions in the long term. However, the research so far undertaken *does* suggest that in the Middle Hill region the use of DCPM can indeed result in the participation of women in income-generating development projects in their home villages - though, perhaps, this will not involve beekeeping especially - and that this will be of benefit to the women in the district, and hence to the whole community.

### **1.3 The Rationale for Focusing on Asia and ActionAid in Particular**

The main reason for concentrating on Asia and Nepal was the author's familiarity with the social, economic and political situation in that geographical area. The position of women in Asian society has been well documented (Sen & Grown, 1988) and has also been studied in detail by the author in her research papers for the Centre for Development of Instructional Technology, New Delhi; the International Centre for Diarrhoea Diseases, Bangladesh; and the International Press Service (IPS), Rome. The Asian continent also has a fascinating communications structure which ranges from sophisticated satellite communication systems, such as those established at the Satellite Research Station in

Ahmedabad, India, to the most traditional forms of verbal communications practised largely in rural areas of Nepal. For this reason, a wide range of techniques and approaches towards communications for development can be found in the region, and the documentation of these has been extremely beneficial for the thesis research work.

With regard to focusing on Nepal, at the time of conducting the first year's work, AAN was most interested in establishing stronger communications links, in the field, between their staff and one of their major target groups: disadvantaged rural women. AAN was therefore very responsive to the idea of establishing a case study Communications Unit at the already-existing rural training centre, which is based in Thakani in the Sindhupalchowk district of Nepal, and which produces material directly for, and with the help of, the rural women of that district.

If the pilot project proved successful then ActionAid London planned to extend the use of the DCPM into their fourteen regional offices worldwide. This has now meant that by working with AAN the very practical nature of the thesis research work could have far-reaching effects on other development programmes around the world.

#### **1.4 Sponsors and Supporters of the Thesis**

The potential relevance and applied research value of the thesis has been recognised by a number of organisations with interests in development communications, communications technology, women's development, extension education and distance learning. BP Solar International, the prime sponsor of this thesis, donated solar panels to power the electrical equipment in the field. In the Sindhupalchowk district, only 5% of the area is linked to any form of electrification (Central Bureau of Statistics, Nepal, 1986) and the Thakani centre itself, with no electricity supply, was dependent on either solar lighting or diesel-operated generators. Today, the central development region, which has 33% of the country's population, consumes over 70% of the total electricity supply. However, this consumption



is mainly confined to Katmandu so that, although the Sindhupalchowk district falls into that region, very few rural centres outside the limits of the capital have any electricity. Therefore, in order to operate the media technology in the training centre in Thakani, some form of reliable power source was necessary. The author was concerned that solar-powered equipment should be tested as part of the field research carried out with ActionAid Nepal as this seemed the most environmentally and, in the long run, financially sensible energy source to utilise. BP Solar also acknowledged the potential use for solar-powered communications units (including televisions and radios) for the developing world. They therefore donated to AAN a solar lantern, a manpack 45w 12 volt solar panel, 245-44 solar modules and a 12 volt colour television for the project *Communications for The Future*. In return, they requested a report by the author on the effectiveness and appropriateness of solar-powered equipment in the context of the project.

Adequate basic health care for children and their mothers in developing countries is a most urgent need which was recognised by the Institute of Child Health in London. In response to this need, the Institute wanted to collect academic research on the potential use for audio-visual technology as a means to health education in rural areas, with specific reference to videos. The aim of the Institute of Child Health's *All Nations Child Health Videos* project, initiated and researched by Graham Hunter Consultants, was to:

"employ video as the medium for sharing the highest quality paediatric medical teaching skills while instigating a truly international distribution system. It is designed to give life to the written word not to replace the human element in teaching". (*ANCHV Development Report, 1988, p.2*)

Consequently, Graham Hunter Consultants sponsored a substantial part of the second-year research work on the thesis in return for access to the thesis's conclusions concerning the potential use for audio-visual technology in the field.

Non-formal education is the most common form of education used in developing countries amongst rural poor participating with development agencies. However, the extent and standard of *formal* education in a developing country is also an important indication of a country's stage of development (Brown, 1990). The Centre of British Teachers (CBT) is an

internationally renowned organisation which supplies the Ministries of Education, in developing countries, with English teachers, especially so that they may provide formal English education in secondary schools. Similarly, AAN runs both formal and non-formal education classes. There are only 42 teachers for 1351 secondary-school children in the ActionAid project area, and these teachers need material that works in both formal and non-formal settings. Moreover, the participation of girls in formal education is still negligible in the area (*ActionAid Progress Report July 1988-June 1989*, & Adhikari, *Personal Communication*, 1989), and the CBT needed a new communications proposal to support their educational programmes. In April 1989, in return for sponsorship received from the CBT, the author gave a lecture, to the CBT in Oman, on using Development Support Communications techniques in their formal educational programmes.

The Aga Khan Foundation is one of the most successful integrated, rural development organisations in Asia. It has some programmes in the North West Frontier (NWF) province of Pakistan. The Aga Khan Foundation proposed to the Institute of Child Health in London a new challenge: to address health needs in the town of Chitral in the NWF area. One of the four points in their new health-development strategy was to:

"seek effective methods of health education and communications, aimed mainly at the education of women for the benefit this can have on health at both family and community levels" (*AKF Health Report, 1988*)

The author was employed, through Graham Hunter Consultants, to advise the Aga Khan Foundation as to how best to establish a communications unit in Chitral. She also supervised the pilot research trip to Chitral in the summer of 1989, which was led by Janet Jenkins from the International Extension College, London University. The experience gained in establishing a communications unit at Thakani for AAN was mentioned in the recommendations put forward to the Aga Khan Foundation both by the Institute of Child Health and by Graham Hunter Consultants.

## 1.5 The Communications Framework for the Research

The central case study of this thesis was project-based, and was concerned with how best to communicate a certain message to a target audience while working in often adverse conditions in remote areas. In order to carry out this project, the author had to ensure that strong communication channels were established at all levels throughout the duration of the project. This requirement therefore involved establishing communication between the staff, on the one hand, and the target audience, AAN's own development sector, other NGOs based in Kathmandu and various international organisations on the other.

Despite not speaking Nepali, the author ensured that all the members of the communications team at AAN (who did speak English) could interpret the questionnaires correctly and could record accurately the target audience's responses while in the field. Naturally there were varying levels of competence in English amongst the staff, which did lead to a varying degree of accuracy in the documentation of the interviewees' responses, but all the questionnaires could be adequately interpreted as shown in Chapter 7.4.7. In order to ensure good communication between staff members and sectors, it was necessary to produce a timetable and a plan of action for establishing the audio-visual unit at Thakani, and to distribute these to all relevant staff at the beginning of the project (see Appendix II).

ActionAid Nepal's organisational structure consisted of a number of sectors, one of which had been specifically designed for women. At first, ActionAid had a separate sector dealing with the development work for the women of that area. However, experience showed that the other sectors, although interested in women's development, could not really fulfil their goals. Eventually, during the organisational restructuring procedure, the women's sector was withdrawn and one women's-participation officer was appointed to monitor issues all over the project area (Verma, *Personal Communication*, 1989). As a result of this, all women's development was incorporated into a newly created income-generation sector. Consultation was therefore now needed among staff from four sectors, the income-

generating sector, the sponsorship department, the education department and the new communications unit, to ensure the smooth establishment and operation of Development Support Communications within ActionAid's development work.

On a national level, ActionAid works in close cooperation with the Social Services National Co-ordination Council of Nepal. Finally, therefore, this Council had to be alerted to the establishment of the communications project and to the construction of the new communications unit at Thakani. It also had to approve the three-month consultancy position given to the author by ActionAid to allow her to conduct the field research and direct the project. Other NGOs in Katmandu were also notified of the work, and were consulted at the start of the project. For example, Save The Children Fund - UK, UNICEF, The Beekeeping Training and Extension Support Project (BETRESP), The Development Communications Programme (DCP) of United Mission and the Himalayan Bee Concern all played a vital role in advising and in contributing to the communications project. Two in particular, DCP and BETRESP, became closely involved with the production of the DSC material. This type of communication and collaboration from the grass roots up to the national level was extremely important in ensuring the success of the research.

## **Chapter 2**

### **Nepal, the Middle Hill Region - with Specific Reference to Women**

#### **2.1 Introduction**

This chapter provides an introduction to the geographical, historical and economic context of Nepal. It illustrates the emerging development of the kingdom as well as the specific environment in which the women of the Sindhupalchowk live. The discussion of the integration of women into the development process is thus complemented both by this country analysis and by a description of AAN's objectives.

#### **2.2 The Location and the People of the Middle Hill Region, Including ActionAid's Project Area**

The varying topographical range in Nepal, from the high mountainous regions (35% of land mass), through the Middle Hill region (42%), down to the sub-tropical plains of the terai (23%), severely limits the communications and development efforts of the Nepalese Government and NGOs. Over half the population live in villages in hills and mountains that are inaccessible by road (*Statistical Pocket Book 1990*).

The ActionAid project area covers eleven Panchayats or one Ilaka (area) in the Sindhupalchowk district and a population of approximately 38,500. The population densities are high, relative to the amount of arable land available, and over 40% of the population have less than one hector and therefore farm below subsistence level. As the major economic activity in the area is smallholder mixed farming, many households have to seek additional employment such as portering, labouring on other farms and gathering and selling firewood to supplement their income (*ActionAid Nepal Annual Report, 1988*).

ActionAid's programme is an integrated rural-development scheme, and includes implementing health programmes, community organisation and leadership development, basic education, agriculture and forestry, community health, sanitation and economic development (*ActionAid Planning and Progress Report 1986-87*). One of its basic aims is to assist the government and people of Nepal in building a self-sustaining process of social change and economic growth, concentrating on the most disadvantaged groups in the Middle Hill region.

AAN's project area covers a wide range of people from different castes and, subsequently, with different social and occupational skills, which naturally affects the approach AAN takes to implementing development programmes in the area.

The caste make-up ranges from the Indo-European races from western plains to the Tibeto-Burmese races from the north. Castes present in the district broadly reflect these races and are comprised of high-caste Brahmins and Chetris and low-caste Sarkis, who represent the Indo-Aryan influences, together with the Tamangs, Magars, Gurungs, Rajbanshis and many more from both the hill region and Tibet (Majupuria, 1989). The Brahmins and Chetris are the dominant ethnic group in Nepal, and their participation in politics and in social and religious affairs, according to Majupuria, is considerable in comparison to other groups.

Caste politics still play an important role in development activities in the villages, with each caste differentiated by certain cultural attitudes and occupational skills. For the Tamangs, who are the dominant caste group in the Sindhupalchowk district, the main occupations are agriculture, husbandry, carpentry and masonry, while the Gurungs are mainly agriculturalists and sheep-rearers (Majupuria, 1989). Therefore, in order to tackle the development needs of a given community, the ethnic origins and customs must be considered at the outset, especially when formulating and structuring women's programmes. The caste system also affects the amount of autonomy and freedom women experience or are allowed. As Majupuria states:

"In different ethnic groups the freedom enjoyed by women also varies in form and extent. For example there is a greater latitude of freedom shown towards women in communities of the Tibet-Burmese race, whereas the communities of the Indo-Aryan race in the terai are more orthodox in nature in their prejudice against women." (Majupuria, 1989, p.183)

Different religious beliefs and practices also affect the social status of women in the communities. For example, there is no segregation of women in the Buddhist community, unlike in the Hindu communities and, perhaps to a greater extent, in the Muslim community (Acharya & Bennett, 1981).

### **2.3 An Historical and Political Perspective**

It is important to outline the historical and political development of Nepal, not only because it has formed the current socio-political framework in which many of the rural poor covered by the AAN project live but also because it has affected the lives of rural women who have been excluded from the local political arena.

"In 1951 the Government of Nepal changed within weeks from the century old feudalistic rule of the Rana family to the Government under the leadership of the monarchy, the Shar family. One of the early acts of the new regime was to initiate the involvement of Government in rural development, especially in terms of decentralisation and meeting overall village development." (Dunsmore, 1987, p.1)

Prior to 1951, Nepal was virtually isolated from the rest of the world. Development activities were limited throughout the Rana period, and during this time land grants and assignments favoured particular sections of society to the exclusion of others (Seddon, 1987). Those given land were primarily Brahmins, Thakurs and Chetris, while the Gurungs, Magars and Tamangs and other indigenous non-Hindu groups rarely received favours, indeed suffered progressive encroachment onto their lands (Seddon, 1987). This had the effect of keeping rural communities in feudalistic relationships, with little

advancement in the area of basic needs such as health, education or agricultural reform (Thapa, 1981).

Prior to this, social deprivation in Nepal was seen as a consequence of an historical development involving a relatively backward economy, a profoundly unequal distribution of economic and political power, and fundamentally inhibitive religious and social practices (Seddon, 1987).

Women had little power or participation in 1951. However, a women's organisation was established in Nepal as early as 1917-18 in the Chandragani, Siraha district of Nepal, with a membership of forty (Majupuria, 1989). Its main objective was to encourage women's participation in the hand-loom industry. In 1947, the Adrash Manila Sangh (The Ideal Women's Organisation) was set up. It had a stronger political edge, claiming that its main objective was to bring about social and political consciousness among women in the community. However, the movement remained relatively isolated and elitist, and failed either to address the true needs of the majority of Nepalese women or to achieve a fundamental change in their social or economic status.

As the year which saw the overthrow of the Rana dynasty and the instalment of a new constitutional monarchy, 1951 has been documented as the dawn of a new era in Nepal and a turning point, largely because of the commitment, on the part of the new government, to investing in development programmes.

The first indication of this new policy was the introduction of the village-development programme in 1957. This multi-sector programme proposed a staggered approach to the implementation of development, leading eventually to village development in which the emphasis was put on activities in the agricultural field, in health, cottage industries and co-operatives, and in manpower training (Dunsmore, 1989). However, this commitment to development proved to be merely theoretical and was not extensive enough to change,



effectively, the sanitary or economic condition of the vast majority of rural poor - and, in particular, women.

With the failure of the village-development programme in 1960, a new partyless, panchayat system was introduced. Local development was put in the hands of a council at the village level, creating for the first time a decentralised approach to governing. The aim of the panchayat system, which was an executive body and territory encompassing an administrative unit of villages and towns, was to promote local development through small-scale public works. At the same time as the establishment of the panchayat system, all the women's organisations were merged into one and given the name of The Nepal Women's Organisation, which provided voluntary services for the welfare of women. A major objective of this organisation was to mobilise the masses for the successful implementation of the programmes outlined by the local panchayats (Majupuria, 1989). So, for the first time, centralised development policy and regional rural implementation were co-ordinated.

In theory, therefore, women became involved in local development politics, and, in accordance with the aims of the Nepal Women's Organisation, tried to support literacy services, legal aid, skills development and family planning. However, when Acharya and Bennett carried out a questionnaire in eight villages in Nepal in 1980, they discovered that over 43% of women did not know the official name of their own panchayat team-member, and that only 6% of the women in the eight villages had even heard of the Nepal Women's Organisation. This would suggest that the objective of raising consciousness among women at the grass-roots level had, and still has, a long way to go.

In 1966, the central government made another attempt to decentralise its control over rural districts by introducing the Local Administration Act. This established fourteen zones and seventy-five districts, and gave responsibility for governing that area to the Chief District Development Officer. However, this system still failed to ensure real decentralisation of development, and the need for further reform was reflected in the creation of the 1974

District Development Plan. Unfortunately, policies continued to be administered in a top-down manner, and the stated aim of the panchayat system remained largely unimplemented.

One of ActionAid Nepal's major objectives is to:

"continue to build on leadership development at grass roots, ward and panchayat level to assist in the development of local decision making capacities and systems which facilitate the inclusion of views of maximum number of people." (*ActionAid Progress Report 1987/88*, section 1.11)

Yet even in 1989, all ActionAid's development work still had to be co-ordinated through the Social Services National Co-ordination Committee, a central government body located in Kathmandu.

Robert Chambers (1983) states that effective integrated rural development cannot be achieved unless development agencies work closely with local village leaders and their political institution. AAN is fully aware of this statement, and in their *Planning and Development Report 1987/88*, they stressed the importance of retaining good relations with panchayat leaders and their committees.

"Many of the newly elected individuals have come out of the ActionAid's grass roots groups and are therefore familiar with and committed to the work of the organisation." (*ActionAid Progress Report 1987/88*, section 1.8)

The outcome of the 1987 local elections in the AAN's programme areas has strengthened the link between local development activities and the decentralised panchayat system and has seen a number of new Pradhan Panchas, most of whose newly elected committees have come directly from AAN grass-roots groups. Both the 1986 National Assembly elections and the 1987 local elections saw wide participation from different groups with differing opinions, some of which chose to use a party profile despite there being no official recognition of such a profile. The overt use of these profiles for the first time in twenty-eight years led to internal disagreement among some of the outlawed groups. However, the net result of the elections has been a broadening of the representation of

political opinion, particularly in the urban areas and in the adjacent countryside (*ActionAid Progress Report 1986/87*).

Despite this emerging political diversity, the whole concept of panchayat democracy - the establishment of political franchise - is still an anathema to the present government. As UNICEF's *Children and Women of Nepal, A Situation Analysis* (1987) discloses, some marginal and low-caste groups experience difficulties in articulating their problems in the inter-caste and inter-ethnic context of panchayat meetings. Consequently, for underprivileged groups living on the margin of society or in remote settlements, the state remains a distant dimension. This is also particularly true for women.

After the 1987 elections, the impulse towards centralisation was relaxed, and former members of the banned political organisations, such as the Nepali Congress and the Nepali Socialist Front, were represented by eight new members in Parliament (Economist Intelligence Unit's *Quarterly Review*, 1990). It has been suggested that the combination of many people living at subsistence level with a slight political "relaxation" was what led to the pro-democracy demonstrations in March 1990 (Economist Intelligence Unit's *Quarterly Review*, 1990). It took an eight-week demonstration and the death of over five hundred people for King Birendra to agree to devise a new constitution (Robinson, *Sunday Telegraph*, 22 April 1990). The non-party system had included universal suffrage and a secret ballot but it did not include any basic human or civil rights. There still remained no freedom, of assembly, of speech or in the press, and accusations have been made that much of the half a billion pounds of annual foreign aid flowing into the country disappeared into royal and ministerial accounts (Brown, *Guardian*, 20 April 1990). At the time of the demonstration, the Nepali Congress Party's supreme leader and pro-democracy fighter for thirty years, Mr Singh, still supported the government in principle, but made demands for a new type of democratic socialism where the feudal system of land ownership would be abolished and "Land to the Tillers" given instead (Robinson, *Sunday Telegraph*, 22 April 1990).

The pro-democracy demonstrations brought about the abolition of the panchayat system at central government level. But thousands of local and district panchayats, based on patronage and underpinned by corruption, stayed in place, perpetuating the conservative system and employing some 280,000 civil servants whose loyalty remained to the old order. Furthermore, the majority of villagers in the Sindhupalchowk district remain faithful to the old order, bolstered by the belief that the King is a reincarnation of the Hindu God Vishnu, and it has been suggested that development programmes will continue to be hindered unless greater political awareness reaches the grass roots.

Women will also be affected by these political changes, and ActionAid Nepal has, through organising new women's groups, collectively called the Adarsha Goan Sevika Karyakram (Frontline Village Workers), tried to involve women in integrated rural development at the village level. The aim of these new groups is to teach personal and environmental hygiene, nutrition, family planning and grain saving, and, ultimately, to act as facilitating mechanisms for the promotion of development work with women and children.

However, according to Walton (*Personal Communication*, 1989), the overwhelming problems of population pressure, falling agricultural production, ecological degradation and control of trade across the open border with India continue to hamper economic stability and growth in the Sindhupalchowk district.

#### **2.4 The Economic Infrastructure of Nepal - and its Relevance to Women in the Sindhupalchowk District**

The economic structure of Nepal has been classified by the World Bank as a low-income economy: 91% of the total population derives its livelihood from agriculture and other allied economic activities (*Statistical Pocket Book*, 1990, Nepal). Its Gross National Product (GNP) per capita was \$150 in 1990, and in that year only Ethiopia had a lower per-capita GNP figure (Pearce, Banbier & Markandya, 1990). Pressure on the land in the Middle Hill

region is great, and is mainly caused by division of land through inheritance, over utilisation and overpopulation. Women are particularly affected as they are primarily responsible for the farming enterprise, being the maintainers of subsistence agriculture and the managers of the natural-resource base.

In AAN's project area, the majority of the farm population is restricted to small land-holdings of below 0.5 hectares. The area has experienced declining yields of both livestock and crops, combined with dwindling forest and fodder reserves. According to AAN and the World Bank, Nepal needs to increase agricultural productivity and create sustainable agricultural systems by minimising dependence on external inputs. Yet, any sustainable agricultural system needs to diversify, to generate alternative economic activities which are not solely dependent on agricultural production. The positive implications, however, are that the government and development agencies do support the introduction and encouragement of alternative income-generating activities. The government and development agencies in Nepal have realised the urgent need for economic reform.

In Nepal, over 42% of Nepalese still live below the poverty line, which the World Bank estimates should stand at US\$ 500. 10% of the families earn 47% of total income, while the poorest 40% of the population earns only 9% of total income. There is a large discrimination in both wealth and landownership between the top social strata and the lowest social strata - the latter comprised of the rural poor who are dependent on a continuing, impoverished, subsistence agriculture. According to Acharya and Bennett (1981), land constitutes the major economic asset in the Sindhupalchowk district, and pressure on land usage is high. As they point out:

"Animals and land constitute more than 80% of all the household assets and 40% of total income is generated by agriculture and including kitchen gardening, animal husbandry, hunting and gathering, domestic food processing brings the contribution up to 81.4%. Therefore of the total income only 18.6% is generated outside the household sector." (Acharya & Bennett, 1983, p.305)

For women, dependence on subsistence-agriculture economic activity is particularly acute as it is they who are primarily responsible for subsistence agriculture, and, as Chambers assessed, women represent a:

"poor and deprived class within a class .... rural single women, female heads of households and widows include many of the most wretched and unseen people in the world." (Chambers, 1983, p.19)

Research conducted by Archarya and Bennett reveals that women's control over economic assets depends on whether the man in the household, the de jure owner of the land, is directly and consistently working the land. Nepalese women therefore have virtually no control over economic assets as women have no right to landed property and inheritance of their own. Traditionally, all property, including houses, fields, animals, equipment and furniture, is inherited nominally or patrilineally, from father to son. The independent economic assets that women might possess amount only to what daughters are given in the dowry, *Daijo*, on marriage from their natal household, and in personal gifts or private economic earnings called *Pewa* (Acharya and Bennett, 1981).

As a result, not only are families in the Sindhupalchowk district heavily dependent on agricultural economic activities, but women in particular are highly dependent on agricultural production only, and consequently they are increasingly vulnerable to the effects both of the environmental degradation of the land and of its declining productivity.

Encouraging alternative forms of economic activity has been a priority for the Nepalese Government and AAN. The government's Basic Needs Programme, established in 1985 by King Birendra, was described by the World Bank as Nepal's first fully fledged poverty-alleviation programme which attempts to identify sectoral production targets and input requirements appropriate for Nepal. However, this programme is clearly aimed at a generalised target group, namely the rural poor, and it does not identify women as falling into a special-needs category. Nevertheless, it *has* encouraged an increase in economic activity, not only in agrarian production but also in cottage industries, non-agricultural sectors and small-scale labour-intensive industries (*World Bank Report, 1989*).

ActionAid estimates that a high proportion of farmers grow only enough food to last between 3 to 6 months per year, the deficit being made up either by buying food grains through other sources of income, which are usually seasonal and unreliable, or by grain received through bartering, a practice which is typical of the Nepalese rural economy.

The role of AAN's Income Generating Sector is therefore to motivate villagers to try alternative income activities which are not dependent on traditional economic activities, which harmonise with their environment and which are appropriate within the social context. These include cardamom and ginger cultivation, mushroom-growing, beekeeping, carpet weaving, knitting and tailoring, pig-rearing and carpentry, and other such enterprises. The special aims and objectives of ActionAid's Income Generating Sector are to raise the economic standard of the community, by focusing on utilisation of free time available to women, and to promote extra income-generation programmes for the betterment of the family.

ActionAid's Income Generating Sector's Director, along with Acharya and Bennett, shares in the understanding that:

"Women who have greater access to independent income earning activities like trading and sale of processed food obviously have greater economic independence." (Simkhada, *Personal Communications*, 1988).

## **2.5 The Industrial Structure of Nepal - with Specific Reference to Women in the Sindhupalchowk District**

On an industrial, macroeconomic level, Nepal is highly dependent on its neighbouring countries, such as India and China. In 1985, over 1,293.7 million rupees were spent on manufactured goods from India, and the external balance of payments shows that Nepal was heavily dependent on foreign aid to pay off external debts. While, again in 1985, Nepal exported 32,572 rupees worth of machinery and transport equipment to India, it

also paid out, under the same category of commodities, over 1,671.4 million rupees. Nepal is therefore highly dependent on foreign financing, even for its basic development programmes: according to the Finance Minister, over 64% of the total development outlay in 1987/88 was acquired through foreign grants and loans (*Statistical Pocket Book of Nepal, 1986*).

In ActionAid's project areas, there is no major industrial production. As Verma stated, in a personal communication in 1988, the growth of cottage industries in the project area was an important and vital development for women aiming to earn significant cash incomes which could compete with incomes to be earned by working in India. The wages paid to women through non-agricultural labour in the Sindhupalchowk district are extremely low. According to Shrestha in 1978, Tamang women from Katarache were, in 1978, prepared to accept a wage as low as 3.5 rupees per day for portage from a slate mine to Chautara: this was the only way to earn cash locally. According to Acharya and Bennett, portage in Tamang villages in the Sindhupalchowk district is second in importance to employment outside the family household, or to agricultural activities, for the lowest stratum of women, providing approximately only 11% of their paid employment. It would seem that while there has been a dramatic growth in the number of cottage and small-scale industries (from 362 in 1981 to 1355 in 1984, throughout Nepal), large-scale industrial production is yet to reach ActionAid's project area.

However, large-scale industrialisation, at this point in the development of ActionAid's project area, certainly seems an unlikely if not also an inappropriate economic option. There is still uncertainty as to whether, in fact, growth and modernisation through large-scale industrialisation would be enough to alleviate poverty, through benefits trickling down to the poor, and it is important to consider Chambers's observation of the more realistic, if depressing, view that sometimes growth and modernisation make the poor poorer (Chambers, 1983). Large-scale industrial production would also necessitate a certain amount of migration to the factory site, which, for both men and women, often has negative effects.



"Powerlessness in labour relations is often acute for migrant labourers. If village labourers became desperate and migrate this may be taken as an excuse by the village patrons to withdraw from their obligations to provide support while those who employ migrant labourers accept no responsibility. Health is then crucial, sick labourers get neither work nor help." (Chambers, 1983, p.136)

Finally, women would be the last to benefit from large-scale production: men are probably the first to be employed, and even if women are employed they usually do not receive proper working conditions or equal pay.

"Women who move to cities from rural areas typically face severe discrimination, and end up being employed in the worst paid and least regulated work sectors." (Carr, 1984, p.109)

## **2.6 The Communications Infrastructure**

It is important to analyse the communications infrastructure of Nepal, given that the advancement of any country's communications infrastructure has an effect upon the political and economic development of that country, and hence the development opportunities open to its people.

The extent to which new ideas are transmitted can be affected by physical infrastructures, government control and inherent topographical features. Also, economic development and cottage industries can be affected by poorly developed roads and lack of external resources. Finally, communications infrastructures themselves, and the control of them, affect power relationships between those people at the centre (bureaucrats) and those at the grass roots, especially women. As Chambers puts it:

"Those who are powerful and dominant have greatest accumulation of wealth, a centralised and inter-connected system of communication, an ability to determine what new knowledge shall be created and control over

forms of information from the centre to the rural periphery." (Chambers, 1983, p.76)

Two factors have influenced the lack of development of a communications infrastructure in Nepal. The first relates to geographical constraints, and the second to the lack of political commitment, on the part of the Nepalese government, to encouraging the growth of independent structures, such as a free press and media.

Firstly, the topography of Nepal is not conducive to the installation of many communications structures. The major part of the country consists of high mountains and rolling hills, which account for about 77% of the total landmass, and the remaining 23% is occupied by the flatlands of the terrai. As much as 80% of the rainfall occurs during the monsoon period from June to September, making footpaths and roads often difficult to pass, and this adds to the difficulty of developing roads in the mountainous areas. In the Bagmati zone - in which the Sindhupalchowk district is located - only 630 km of tarmac road existed in 1984, making this by far the most developed of all the zonal regions in Nepal. In the ActionAid project area, there are no roads but just walking tracks, and it would be possible for a four-wheel-drive vehicle only to pass into one section of the project area. Even those roads that are built often cost enormous amounts to maintain, and supplying building materials to remote areas is difficult (in ActionAid's *Progress Report* of 1988/89, an example is given of over 30 km of the Bitumen Road (which runs from Kathmandu to Tibet) being washed away in just a couple of hours by heavy rainfall). Finally, in the Himalayan mountain region, which includes the peaks of Mount Everest, Kanchanjungha and Annapurna, the technology required for building roads is extremely sophisticated, and subsequently very costly.

Secondly, during the Rana regime between the second half of the 19th century and the first half of the 20th century, some innovative measures were taken to introduce printing technology to Kathmandu (Rai, 1987). But this was not enough: basically, the Rana regime was found wanting in its communications policy, and as a result, the regime failed to counteract the forces acting against it. During the period 1951-1961, under the Shar

monarchy, a national communications policy was, at last, adopted. A government broadcasting unit, called 'Radio Nepal', was established, and papers such as the weekly *Jargan* and the daily *Airay* were published; the first cinema hall, in Kathmandu, also appeared during this period (Rai, 1987). This all symbolised a break from the authoritarian communications systems organised under the Rana dynasty. But it was not until 1971 that the first comprehensive plan for channelling the national communication effort for development purposes was formulated. Even then, however, it still took a low priority.

In terms of the political and financial commitment made on the part of the Nepalese Government, communications continue to be given a low priority. The government's development expenditure on communications in 1986 rested at 110.5 million rupees, compared with expenditure on irrigation of 814.2 million rupees. In nearly all forms of modern communication, as regards the material infrastructure and the media, the Government has maintained tight control. This has ranged, for example, over the spheres of radio, television, newspapers and telephones, and, partly due to the low national literacy rate, over the content and circulation of newspapers.

Television was installed in 1985, and this occurred only after King Birendra realised how effective a tool it could be both in propagating the Government's line on certain issues and for the coverage of state visits abroad (McBean, *Personal Communication*, 1989). However, the spread of television throughout the major cities of Kathmandu, Pokhara and Surkhet has meant the broadcasting of visual images and messages to a wide audience previously confined to receiving entertainment and images through some of the thirty-seven cinema halls. The features shown in cinema halls remain mainly of entertainment value and do not include developmental or political issues. Of all forms of communication, it was *radio*, perhaps, that had reached the largest number of people in Nepal, especially those inhabitants of the rural areas. UNICEF estimated in 1981 that about 180,000 radios were in use, and that most of these radios were located in the hills, with an average of one radio for every 68 people. Radio-listening patterns in Nepal have revealed that news and agricultural programmes are the most popular, but health programmes less so "because

most items carried were informational rather than entertaining" (UNICEF, *Children and Women of Nepal*, 1987).

The 1990 pro-democracy movement would not have occurred if some forms of alternative communication had been active over the previous decade. As early as 1981, anti-democracy slogans were being written on the houses of Kathmandu, and in 1988 undercover, anti-government newspapers were being printed. These, however, were limited to an elite and had restricted distribution outlets, so that the vast majority of the Nepalese people remained isolated from any communication - traditional or modern (Walton, *Personal Communication*, 1988).

Current traditional forms of communication in the Sindhupalchowk district include religious gatherings and celebrations of Buddhist festivals, as well as such major Hindu festivals as *Diwali* and *Holi*. For women, the *Bhai Tika*, or brother ceremony, is of particular importance as it is one of the few occasions in which a woman can return to her natal home, often carrying messages by word of mouth from one village to another. As over 70% of the Nepalese are pre-literate, communication by word of mouth is one of the most common means of conveying messages. Similarly, at religious festivals, storytellers and musicians relate sections of the *Ramayana* and the *Bhagavad Gita*, both fundamental to religious Hindu teaching. However, unlike India, Nepal does not have a history of travelling actors, of the kind now being used by development agencies to communicate development messages (Social Work Research Centre - Tilonia, 1987), and even the traditional forms of communication are limited and do not extend to rural areas throughout Nepal.

## **2.7 Conclusion**

Politically, there has been a move away from centralised bureaucracy to localised democracy. This offers an improved climate for development programmes.

On the economic front, this chapter has described the poverty of Nepal and the subsequent need for development. It has suggested that the optimum model for industrial development involves small-scale, localised industries, as these are particularly appropriate for women.

Finally, it argues for the provision of a communications infrastructure specifically relating to the needs of the rural poor and women.

## **Chapter 3**

### **Women and Sustainable Development**

#### **3.1 Introduction**

This chapter surveys the role of women in development. It suggests that they are the key to successful programmes, but that they have not yet been integrated fully into the development process. This is because their status is low, and because the development agencies have failed to target them as a priority. Income-generating activities are proposed as an entry-point for women into development, and beekeeping is presented as one such opportunity.

##### **3.1.1 Women and Sustainable Development**

The declaration of International Women's Decade and the worldwide plan of action for the United Nations Decade for the Advancement of Women (1975-1985) represented the greatest commitment by Governments worldwide to addressing the issue of women in development.

In the following, well-known United Nations statement, which became a slogan for the Decade, some of the most important issues pertaining to the status of women in development were raised.

"Women constitute half the world's population, perform nearly two-thirds of its work hours, receive one-tenth of the world's income and own less than one-hundredth of the world's property." (Seager & Olson, 1986, p.101)

Many of the multi-sector development programmes that were initiated throughout the Decade did not, however, really incorporate gender-related issues into the labour-differentiation process within the different programmes, and as a result, many thousands

of women were simply ignored by the whole development process. The positive side of the Decade, on the other hand, was the understanding that sustainable development is simply not possible if the integration of women is not achieved in all areas of development. It is to be noted that this integration does not merely mean the establishment of women's programmes, or of a special sector for monitoring women's activities, but rather entails a sincere acknowledgement of their contribution to the community structure on all levels.

Debbie Taylor, in her *Women and a World* report (1986), has highlighted further some of the achievements of the Decade:

"There have been changes in the last ten years - new laws, new government departments that have come about directly as a result of pressures on individual governments both from women within their countries but also from a current of world opinion arising from the Decade's activities."  
(Taylor, 1986, Preface)

At the end of the Decade there was certainly a change in the level of commitment to women's development at both a national and international level. Voluntary funds for small projects in developing countries had been established along with the International Research and Training Institute for the Advancement of Women (INSTRAW), the United Nations Development Fund for Women (UNIFEM) and a Ministry of Women's Affairs in Nepal.

However, these changes were only really changes in terminology and in the establishment of institutions; the actual practicalities, in terms of development policies really changing the status of women in the field, were only marginal. NGOs and international agencies, after the Decade, knew that development had to focus on incorporating and integrating women, but few had the expertise or know-how to actually put these intentions into practice.

The Koshi Hills Rural Development Project (KARDEP), funded by the Overseas Development Administration, is a perfect example of where rhetoric and the aims of the development programme were not reflected in the actual programme that was carried out in the project area - nor in the level of commitment it gave to women. While, on the one hand, Dunsmore, Director of the KARDEP programme, stated that women played a major role in the economic life of the family in addition to their traditional duties, on the other hand, KARDEP's actual women's-development programme had little success, and this was because:

"The obstacles to access by women to development services were seen to be socio-economic constraints on farm women and aspects of performance, attitude and knowledge constraints on the part of the women's development extension services." (Dunsmore, 1987, p.106)

A lack of real understanding of the issues pertaining to women's development, alongside a lack of qualified personnel to carry out the appropriate development work, seems to be a typical characteristic of most NGOs. Barbara Rogers, in *The Domestication of Women* (1980), also underlines some further factors which have hindered the achievement of the mid-Decade goals of the United Nations. Firstly, although large international agencies had been established, there was a huge absence of women from developing countries on the staff of these international agencies. Secondly, when the aid agencies were placed in the developing world, more often than not, the women in them were urban intellectuals and administrators, as opposed to women who had direct experience in the field. As Rogers says:

"There is a major gap in any attempt by the development organisations to reach women at a village level." (Rogers, 1980, p.44)

Rogers also points out that during the seventies it was the male development workers who were primarily responsible both for conducting statistical surveys and for writing up both project reports and programme documents, which often led to women being overlooked and their work undervalued. This, however, has changed during the last decade, and



indeed if development agencies are now going to achieve sustainable integrated rural development, then the role of women in development must continue to be emphasised.

Sustainable development has been defined as a form of development which involves:

"improving peoples's material well-being through utilising the earth's resources at a rate that can be sustained indefinitely.....living off nature's interest rather than depleting the capital." (Conroy, 1988, p.xi)

Central to the concept of sustainable development, therefore, is that the world's natural-resource base must not be destroyed in the process of development, and that any development programme or action which seriously and continuously depletes the natural resources now will adversely affect the lives of future generations.

Nepal's natural resources consist of its cultivable land, such as forest, soil and water, and much of Nepal's forest resources are dwindling fast. The use of forests for fuel, the demand for fodder and increased population-pressure are currently putting great strain on the environment, and on the possibility of natural-resource management (Pearce, Barbier & Markandya, 1990). Rural women play a key role as subsistence farmers whose livelihood, and that of their families, is dependent on natural-resource utilisation. Also, having large families increases their needs, and hence the utilisation of resources. Therefore, in order to talk about sustainable development, it is vital and necessary to include women, the environment and development as concepts.

But it is also true to say that other factors, such as women's health and education, also affect the possibility of achieving sustainable and integrated rural development in community programmes.

### 3.2 Health and Educational Status

The problems of health which face women in ActionAid's Project Area are typical of those of many women throughout the developing world. Heavy daily work coupled with poor-quality food, ignorance of health techniques and few health centres, means not only that the average life expectancy for women is lower than men but also that women suffer severe medical difficulties.

The average day for a woman in the Sindhupalchowk district consists of physical activities which include animal husbandry, herding, fodder collection, milking and agricultural activities such as land preparation, harvesting, weeding, water collection, threshing and cleaning grain. Alongside these, women undertake responsibilities for all domestic activities such as cooking, cleaning, washing, fetching and preparing fuel, and, finally, child-rearing and childcare (Acharya & Bennett, 1981). It would seem that the above activities are often undertaken on inadequate nutritional intakes, causing iron deficiency. And what's more, a poor nutritional intake on the part of a female child can lead to further health complications in a woman's later life.

"Poor nutrition in childhood, resulting in inadequate skeletal development, may affect their capacity to give birth to their own children and add to the risk of premature, complicated or prolonged deliveries. The heavy work burden and declining food availability ... may also have a negative impact on the health and nutritional status of women, particularly those from poor families." (UNICEF, *Children and Women of Nepal*, 1987, p.168)

It has been noted that calorie consumption is around 2,000 calories per capita, which is 14% below the average for the low-income group (Pearce, Barber & Markandya, 1990). More evidence from UNICEF's research shows that, often, women are the last in the family to feed themselves, and then only on scraps left over. It seems that food distribution within the family tends to favour boys more than girls. In consequence, women are more vulnerable to health problems, and this creates susceptible, potentially sick children.

Coupled with this, fertility is highly prized throughout Nepal. Nepali women spend most of their adult lives in pregnancy or lactation, with five or six births, each accompanied by one or two years of breast-feeding, which makes child-bearing and child-rearing a physically hazardous as well as time-consuming occupation (UNICEF, 1987). According to Acharya & Bennett (1981), post-partum haemorrhage and post-delivery infection are the most common causes of maternal mortality. Nearly 40% of married women wed before the legal marital age of sixteen, and a small but significant number (7%) were married before the age of ten. Survival is a constant preoccupation, and at its most basic, requires both adequate food and freedom from sickness or prolonged illness. A decline in a woman's health can affect the balance of the whole family, which might spiral into poverty as a result.

ActionAid has highlighted that the key factors preventing health education in the project area are ignorance and a lack of proper communication and information. Traditional beliefs, such as reducing fluid intake for diarrhoea, the use of weaning foods that lack proper protein content and the lack of proper sanitation, all increase the risk of sickness and infant mortality, which stands at 130 per thousand live births (UNICEF, 1987).

While ActionAid and other development specialists acknowledge the need both for a balanced amount of positive, traditional medical practices and homoeopathic treatments, and for the knowledge of faith-healers, women themselves must be directly targeted by village health-care workers and traditional birth attendants who can inform them of modern health techniques such as Oral Rehydration Solution (ORS). Problems exist where women and families still rely first and foremost on faith-healers. ActionAid has tried to create a newly briefed group of faith-healers, who are becoming more popular and are well-respected by the community, but sometimes personal interests dominate and they "forget " to refer serious patients to the clinic, which can lead to further complications - and often death.

Raising health standards for both women and children through village health programmes has been a major priority for ActionAid. An important emphasis has been placed on training local women as village health-care workers, and on combining their training with literacy classes. Mrs Kumari Gurung is one such village health-care worker whose responsibility covers promoting village immunisation, nutrition and family planning. As stated in ActionAid's *Women in Development* report, Mrs Gurung felt that the right education was the most important thing in life, coupled with the need for training in community health care, with the emphasis placed on a mother's knowledge of preventative measures.

To conclude, the primary causes of poor health stem from childbirth and its risks. They also seem to be related to socio-cultural factors, which undermine women's access to knowledge, education, health care and to food, and which therefore undermine female health from the time a girl is very young.

In *Preparing the Future, Women Literacy and Development* (1990), Brown brings out the importance of the education of women by showing its link to the family's well-being.

"Women's literacy showed in many cases as having an important effect on infant mortality and child survival through better nutrition, immunisation and the capacity to apply such life saving techniques like oral rehydration therapy." (Brown, 1990, p.28)

The literacy rate for women in ActionAid's project area is very low, standing at about 6% - and, in ActionAid's focus area, at 4%. Acharya and Bennett found that throughout all economic strata, people preferred to educate boys rather than girls. This manifests in two ways:

"Firstly, fewer people are willing to send girls to school and secondly even among those who do send girls to school there are very few who want as much education for their girls as for boys." (Acharya & Bennett, 1981, p.109)

There are many reasons why these attitudes persist, but primarily, the need for female child labour in the farm and household is the major factor hindering the spread of female

education. Girls are seen as an economic asset in terms of farm labour, and formal education does not seem relevant to the needs of the household or to the running of a subsistence farm.

Caste also seems to play a part in determining literacy levels amongst women. ActionAid has found that the lowest female literacy rate, of 3.6%, was found amongst Tamang women. Records from ActionAid's Awareness and Literacy Classes and Community Literacy Classes show a higher attendance of Brahmins and Chetris compared with those of Tamang or other ethnic groups, which indicates that Tamangs do not consider education as an important priority for women.

However, ActionAid's approach to non-formal education has been specifically designed to attract a large number of women, and up to 1,285 from the project area attend literacy classes. One approach which has encouraged these women was to introduce key words into class literature. The key words relate directly to important aspects of daily life, like water, irrigation and sanitation, thus making education directly relevant to the women's concerns and daily lives.

Another approach adopted by ActionAid to encourage literacy amongst women was to promote interaction and communications outside the confines of the household unit. It has been found that women:

"who came into greater contact with the outside world, as part of a trading group or operating by themselves in the cities like Pokhara and Kathmandu feel a more intense need for education."(Acharya & Bennett, 1981, p.137)

Therefore, the health status of women can be improved by effective education which is appropriate both to women's needs and to their environment. And it must also be recognised that poor health and poor education hinder the opportunity for women to adopt new income-generating projects and thus improve their economic status.

### 3.3 Economic Status

The economic status of rural Nepalese women, like the level of their health and education, is relatively low. Economic activity is primarily confined to household agricultural production and husbandry.

Within the household, however, women are the major economic contributors. Acharya's and Bennett's findings highlight the widely acknowledged importance of household farm-based production, in terms of both income produced and time spent. Over 81.4% of the average income per household, in the eight-village sample, was derived from household production. Furthermore, the sample showed that, on average, adult women devote 9.9 hours a day to the family farm enterprise, compared to the men's 5.86 hours a day.

38% of total work time - the highest of any conventional, economic, daily activity practised, amongst the Tamang women, in farm production - is spent in *agriculture*. In the eight villages studied, women's highest degree of involvement is in internal economic activity, but there are significant intercommunity variations in the degree to which women participate in the outside spheres of the economy, i.e. in the local market and/or through short-term migration for employment purposes. In all the Tibeto-Burman-speaking, non-Hindu groups, the inside-outside dichotomy appears to be fairly strong. Women are contributing between 40% and 68% of their time in local-market economy work, and between 34% and 46% in short-term migration. Castes coming under the above-mentioned category of groups include Baragaonle, Lohorung Rai, Kham Magar and Tamang. It would seem, therefore, that the orthodox Hindu religious traditions confine women to traditional roles, keeping them in 'inside' economic activity only. For example, even an educated Brahmin, Mrs Tara Khanal, now one of ActionAid's model village workers called "Adarsha Gaon Sevika", met with strong criticism and objections from her family when she chose to join an ActionAid training programme.

"In the category of domestic expenditure women also lead in decision-making though not as great a margin as in farm management. Several sub-

categories, education and health, clothing and household durable in which men show a marked pre-dominance over women." (Acharya & Bennett, 1981, p.298)

Women have the lowest input in decisions regarding the disposal of household production and major capital transactions, and this area might be more important in the context of the actual distribution of power in the household.

This is not, of course, to claim that female participation in the market economy is the cause of women's greater decision-making role in these communities. Although it has been noted that the two phenomena appear to be associated, it is difficult to determine a direct cause-and-effect relationship.

Therefore, one of the primary reasons for trying to increase women's earning power is to attempt to boost their decision-making power in how money should be distributed within the household so as to ensure that it benefits all family members, including the children.

In conclusion, the development of such non-agricultural employment opportunities for women will encourage traditional skills, and can be an effective step towards local resource utilisation. Moreover, caste differentiation should be taken into consideration: this would result in high-caste women's (such as the Brahmin and Chetri) being encouraged to perform economic activity outside the household sphere, and in Tamang's attending adult literacy classes and so becoming more enterprising in the scope and type of income-generating activities which they adopt.

### **3.4 An Alternative Way of Generating Income**

One of the biggest income-generating activities in ActionAid's project area is prostitution. Undertaking this activity directly affects the lives of women and their families in the region in both a positive and negative manner. The existence of this trade also puts

pressure on development initiatives undertaken by such NGOs as AAN, making integrated rural development programmes difficult to operate.

Information on this income-generating activity is scarce, and the reliability of the sources variable. For instance, a clear definition of prostitution or trafficking of women is not given in Nepalese law, and a woman "consenting freely" to the act of prostitution is not held as criminal. However, HMG Ministry of Labour and Social Welfare maintains that the number of Nepalese prostitutes in India may be as high as 200,000. Of these, about 20% were under the age of twenty and 35% had been abducted by traffickers (Grover, 1991).

Throughout Nepal's history, systems of prostitution have existed. During the Rana regime, Tamang women from neighbouring villages were supplied to the Mahals and Darbars of rich Ranas (Yemi, 1988). According to Hisila Yemi, Tamang women were not only charming and beautiful but their cultural tolerance and liberal attitudes towards sex made them more vulnerable to prostitution.

Religious practices have also played a role in perpetuating the act of prostitution. Amongst certain groups, such as the Chetris living in Dadledhura and Buitadi, there exists the practice of selling daughters to rich Thakuns and Brahmins. These girls are dedicated to certain deities, and when they come of age, they can live with any man, thus acting as prostitutes called Devaki. This name signifies that they are attendants of the deity - i.e. God's slaves - and according to the Hindu religion, they represent the highest type of prostitute.

The exact extent of trafficking in women from the Sindhupalchowk district to Kathmandu or India is not known, but some rough estimates have been made in the region of 5,000 women at any one time; and within ActionAid's Project area, over 50 brokers seem to be operating in the district (Verma, *Personal Communication*, 1988). Girls in the 10-14 year age group are at a high risk of being picked up by traffickers. Girls are bought for as little as 135 Rs. (US \$ 4) and are often sold by brothers or fathers.



This type of income-generating activity does have positive aspects: on returning to their home village women often accrue a higher status than that held when they left (see the previous chapter). This status results from the fact that they now possess substantial wealth and even perhaps land in their own right. Women are sold for between 8,000 and 15,000 Rs. to brothel managers, but can only start sending a percentage of their earnings home after they have paid off this initial investment.

Parents have been known to purchase land for their absent daughters with these earnings. Ex-prostitutes or "Bombay wallahs" (a local name given to them) also buy respectability on return to their natal village. As Verma puts it:

"One prostitute flew back to her house in a helicopter, another built a temple, so that although the money comes from prostitution, it is spent on religious activities and therefore women gain acceptance and recognition in the community. The real thing in society is that having money gives one a privilege status higher than anything, i.e. it does not matter how you get money the fact that you have it gives power." (Verma, *Personal Communication*, 1988)

Another positive effect is that women are economically independent and therefore often have potentially greater control over the decision-making processes on return to their homes. Normally:

"Women are totally dominated and have to pass their money onto their husbands for they are often beaten up. This is very common and is usually due to drunkenness. But the men now regard women who have returned from Bombay as rich cows that do not give milk. [Their lack of milk refers to their infertility due to sterilisation]. And often women become partners in bigamous marriages so that they are no longer viewed or treated as animals but as an important economic asset" (Verma, *Personal Communication*, 1988)

Finally, travelling abroad can instil a certain confidence and awareness about life. As shown in Chapter 3.3, those women who had economic and commercial dealings outside their household revealed a greater awareness of their education needs and thus became more confident in the decision-making process.

Notwithstanding the fact that widespread prostitution hampers ActionAid's ability to carry out effective integrated rural development in their region, this type of trade also presents substantial problems for rural families, and for communities. Firstly, it creates an imbalance in the ratio of men to women within certain areas, and rough estimates suggest that up to 60% of men aged about 35 are unmarried. This has led to unnatural male-female sex ratios and the breakdown of the joint-family, patrilineal systems. Within the villages, men are left idle but receive excess income from abroad. This leads to reports of drunkenness and violent behaviour.

Similarly, the brokers are described as some of the most politically powerful men in the region. They share their earnings with the police, district leaders and local parliament members, enabling systems of power and nepotism to operate from the grass roots up to central administration in Kathmandu. These systems of power lie outside the officially recognised Panchayat system, and often pose a threat to those development activities which might disturb the peaceful operation of the brokerage system.

It is unclear, moreover, to what extent women are free to choose to enter this profession and to what extent they are coerced, but what *is* known for sure, however, is that many women and teenage girls are kidnapped by their brokers. When ActionAid started their work in the project area, field workers were stoned as they approached the villages, for many families feared that they might be trying to kidnap their daughters (Thypten, *Personal Communication*, 1989).

Of course, prostitution poses a serious health risk for women: they are exposed to venereal diseases, suffer from psychological problems and face an increased risk of contracting AIDS and spreading it through the community. In *Time's* recent article, "Warning! AIDS has arrived" (1991), Desmond reported that health experts estimate that 25-30% of Delhi's 100,000 prostitutes are HIV positive.

According to Grover, it is extreme poverty which is normally the root cause of trading in women and young girls:

"Absolute poverty, combined with illiteracy is often the main reason for selling girls. Harsh economic conditions makes it difficult for many families to eat even two square meals a day. Ethical and moral concerns are probably distant and unrealistic ideals when deprivation can be relieved temporarily by the sale of one's "property" a daughter or sister or wife."  
(Grover, 1991, p.66)

ActionAid's means of combating this situation is through education - both directly, in a non-formal context, and indirectly, through creating alternative income-generating programmes and encouraging women to join them.

In non-formal adult-literacy classes, the key words 'big city' are written into the script of the adults' literary textbook, and is meant to generate discussions about the existence of big cities such as Bombay, Calcutta and Kathmandu. Ganesh Singh, the new Project Area Director, realised the danger of incorporating these words in a co-educational context - because many men attending would object - but sees it as one important method of stimulating awareness, if not discussions, of the positive and negative effects of this type of prostitution.

As mentioned above, the key method for combating the problem of extreme poverty is to introduce alternative income-generating activities which women can adopt. It might seem, at first, that no income-generating activity can be as rewarding, in numerical terms, as the sums eventually earned through prostitution. However, if an income-generating activity can generate enough income to meet the basic needs of a family, then the pressure to send women abroad will be reduced. What's more, women will enjoy greater financial control, as well as developing a new self-confidence which could give them the strength to say 'no' to being sent abroad. In the next section, the importance of identifying and implementing such activities is discussed, along with their economic feasibility and reliability.

### 3.5 Beekeeping: an Entry Point for Women's Development

Beehaving is a traditional activity which has been carried out throughout Asia for thousands of years. However, *beekeeping*, which includes the actual management of bees through the use of hives, is a relatively new income-generating activity for many communities in Asia. It entails keeping bees and regularly checking and manipulating colonies, which implies a major change in attitude from merely having bees in a traditional hive.

This section looks at whether modern forms of beekeeping amount to Appropriate Technology (as well as an income-generating activity for women living in the Sindhupalchowk district) that helps to raise awareness of development and environment issues, and to increase their non-agrarian household income. Firstly, however, a definition of Appropriate Technology is given which leads on to an examination of the characteristics of beekeeping, both in its traditional and modern forms.

The term Appropriate or Intermediate Technology was introduced by Dr Schumacher in India in 1964. Schumacher proposed a method of development which attempted both to recognise the potential of a particular community and to try to encourage a gradual process of development in that community. Appropriate Technology is therefore concerned with the total or integrated development of the community, and hence to the improved quality of life for its individual members. What Schumacher emphasised was that:

"Whether a given industrial activity is appropriate to the conditions of a developing district does not directly depend on 'scale' but on the technology employed." (Schumacher, 1973, p.149)

Its focus on local resources is also important. Schumacher stresses the importance of using renewable resources, and of employing local skills and materials which are compatible with local cultural practices. In essence, if the technology propagated is truly "appropriate", then the process of development through the use of Appropriate Technology will assist

the system of self-help methods. Dunn, in *Appropriate Technology* (1978), gives a broader definition to this type of approach to development:

"Appropriate Technology is a methodology of development which takes account of social benefits and costs in addition to purely economic factors; it offers a package of techniques which can be applied in all development situations." (Dunn, 1978, p.29)

Marilyn Carr, in *Employment for Rural Women in Developing Countries* (1984), points out some of the advantages of the application of Appropriate Technology, and relates them specifically to the position of women in the rural development context:

"A more relevant approach would be to identify which activities rural women are already engaged in and to try to raise productivity of labour so as to increase existing earnings, or to help transform a subsistence activity into an income-generating one." (Carr, 1984, p.5)

In terms of Appropriate Technology, beekeeping falls into the category of an existing area of work which experiences an increase in productivity as a result (as Carr would describe it) both of the introduction of improved technologies - namely a modern frame hive - and of the provision of supportive services through training courses/programmes. The objective, therefore, is to enable women to increase output and to improve the quality of traditional products.

Carr summarises the use of Appropriate Technology by pointing out three provisos which, if adhered to, would assist in the adoption of new income-generating activities.

- 1) The technology or technique is more likely to be accepted if it closely resembles existing technologies and does not necessitate any significant changes in skills, consumer preference or cultural habits.
- 2) It is more likely to succeed if women are consulted during the design stage, and if technologies fully investigate traditional processes during the design phase.

- 3) It is more likely to reach the potential beneficiaries (i.e. poor rural women) if there is a good working relationship between a technological institute and a women's organisation.

The circumstances surrounding introduction of Appropriate Technologies for income-generating activities in Nepal should be relevant to the environment in which women operate. Few have the time or the money to attend classes, and the training itself needs to be free and at the appropriate season - not, for instance, at the time of harvesting or planting. Secondly, if possible, the income-generating activity should build on already-existing practices of traditional activities. Finally, women should be consulted by change agents (see p.54) so that they themselves can identify a means of earning cash. For, as Dunn states (1978), villagers prefer traditional practices, since an unwillingness to depart from them is often necessary for survival.

Traditional beekeeping is an ancient custom in Nepal whereby a traditional hive is (usually) used as a receptacle for a colony of bees to build its nest in. The name given to this kind of hive is a *wall hive*, for the bees literally create colonies in the walls of houses in Nepal. The technique of modern beekeeping is actually quite simple.

Wild Asian bees (*Apis Cerena*) are caught from trees or in local forest areas and placed in log or wall hives. The wall hive is sealed off from the inside of the house with one external hole through which the bees can enter and exit. The honey is harvested twice yearly, once before the winter in November-December and once before the monsoon in June-July. The amount of honey extracted is measured in terms of *manna*, one unit of which is equal to about 0.5 kg. Karel Speth of the Beekeeping and Training Extension Support Project (BETRESP) estimates that a traditional hive, in the course of one year, can yield about 7.5 manna, or 187 Rs. (*Evaluation of Beekeeping Programme in the Small Farmers Development Project - February 1986*). In February 1990, BETRESP conducted another survey which concluded that the average recorded yield for a wall hive in one year was 4-12 manna per

year, and that the current price per manna was 50 Rs., making an average annual income of about 400 Rs..

Mrs Rabali Tamang, a traditional beekeeper from the ActionAid project area, estimates that it is possible to make up to 10 manna (or 5 kg) per year, which yields about 260 Rs. per harvest and 520 Rs. per year (Questionnaire, 1989).

Honey has many traditional uses. In the survey below, conducted on farmers in 1986, the largest usage was stated as, firstly, medical and, secondly, religious - i.e. for use in rites. Honey, therefore, was used basically for home consumption, and was not sold. A questionnaire carried out in 1989 by the author (Appendix IV) showed that of those women located in the ActionAid district, only 1 out of 10 women mentioned the use of honey for religious ceremonies. The rest used it as a medicine, as a nutritional supplement to food (especially amongst Brahmin women during harvesting) and finally as an item to be exchanged for commodities such as chickens, grain or rice. In conclusion, villagers of both genders - though most predominantly the *male* villagers - have therefore, up to now, "had" bees successfully for many generations, and have considered the honey as a valued and useful product.

Modern hives, however, must offer women and men the chance of higher economic returns, through greater honey yields, than those gained by the traditional methods, if they are to be adopted by the villagers. Yet, as Speth has pointed out (1986), beekeeping should perhaps be seen, first and foremost, as a vehicle for development, a medium for raising Nepal's rural population's sense of self-reliance and self-sustainability.

The relevance and potential of modern hive management for the women in ActionAid's project area, in meeting their needs for an appropriate income-generating activity that would lead, in turn, to greater self-reliance and confidence, has to be considered.

## Usage of Honey

Type of Usage	Times mentioned
1. For medical purposes	149
2. For religious purposes	61
3. Together with regular meals	38
4. For selling purposes	38
5. As a sugar substitute	20
6. With snacks	18
7. As food for children	10
8. As veterinary medicine	5
9. For exchange purposes	2

(Source: Speth, *Report on Evaluation of Beekeeping Programme in the SFDP Project Areas*, 1986, p.17, Table 12.)

Firstly, modern hives, if well managed, can increase honey yields by an estimated 75% - i.e., generate an annual revenue of 675-1,100 Rs. (BETRESP, 1986, Annex 1, p.1). Secondly, both the training programmes and the production of honey itself can be conducted in the rural areas, close to the women's own homes. This is important because, as stated earlier in Chapter 3, women already face a heavy daily workload. They would be unable to travel to time-consuming training courses far from home, since this would result in losses both economically and for the development process. Fritz Hans estimates that it takes between 10 to 20 minutes per week to manage a frame hive, which naturally means their attention is not drawn away from other vital, household, subsistence activities, such as livestock management and subsistence agriculture. Another advantage includes the use of simple equipment: in many cases local resources can be utilised without recourse to imported materials, which links in to Schumacher's method of Appropriate Technology. Akratanakul (1987) uses the example of a bee brush used to brush bees off combs, which can be made from twigs and grass. Although this is considered one of the most necessary tools for



harvesting frames of honey combs, in less sophisticated operations a handful of grass or leaves can, however, be used instead.

Beekeeping is also a non-arable activity. However, according to Speth (1986), it can be combined with developmental and environmental education on allied topics such as horticulture, vegetable growing, insecticides, ecology, re-forestation and the planting of trees and flora. For example, to understand that the *Apis Cerena* can actually assist in cross-pollination is useful for the beekeeper. On a single trip, a worker bee may visit as many as several hundred flowers of the same species, and flower-fidelity is very useful both in cross-pollination and in helping in mustard pollination (Akranakul, 1987). Knowing that there is abundant bee flora in the area can also be very helpful, for it assists the beekeeper in determining hive locations; and information on the average foraging distance of a bee (about 800 metres) should also be passed on to farmers.

By its very nature, beekeeping encourages alternative forms of income-generation, ranging from wax production - in 1987, one kg yielded 250 Rs. - to the employment of carpenters who construct the actual hive. Also, if women are involved in the actual marketing of a product, such as honey, this can, in itself, lead to increased status within the household for a woman, and to greater self-confidence as a result of trading outside the traditional household economy. Captain Tapas from the Himalayan Bee Concern acknowledges that Kathmandu is one of the best markets for honey, as he is able to buy honey off hill farmers for 100 Rs. per kg and sell it for 300 to 350 Rs. per kg in Kathmandu (Tapas, *Personal Communication*, 1989). This means that, at a minimum, women can expect to sell honey for 50-100 Rs. locally, and if marketing links were established with distributors in Kathmandu, then perhaps even more income could be derived from selling the honey.

The advantage of beekeeping in a modern hive with a movable frame is that honey can be extracted from the hive without having to kill the bees or drive them from the hive. Akranakul states that the movable frame hive is the most advanced form of beekeeping, with regard to the native honey bees, since:

"The method allows for virtually any manipulation of the colony: brood-nest adjustment, inspection for diseases and pests, verifying food-store levels, queen recovering, supervising during the honey flow season." (Akranakul, 1987, p.43)

In theory, this is all true, but when it comes to transferring the principles of beekeeping knowledge and technology to rural women, these methods of colony manipulation are slightly too sophisticated for the initial training stage. A balance must be reached by any trainer in distinguishing between the essential knowledge required for adopting a new technology on the one hand and any allied training information on the other. Another important point is that there already exists amongst the villagers an innate and valuable knowledge of beekeeping which should be harnessed and used by the trainers both during their workshops and in their production of educational materials.

In the case study *Communications for the Future*, the Development Support Communications Process Model is put into practice in producing effective audio-visual educational material for women learning to adopt modern beekeeping techniques. Before giving a detailed analysis of the production of such materials in Chapter 7, it is important to discuss the process of Development Communications, a new field of study which allows for innovative message- and knowledge-transference to take place at the field level.

### **3.6 Conclusion**

The low status of women is seen as an obstacle to development, and income-generating activities are shown as one solution to this problem. Beekeeping is endorsed as an appropriate income-generating activity for women in the Sindhupalchowk district. It enables them to participate in the development process, and it raises their status.

To achieve successful beekeeping programmes, a mechanism for the sharing of information is required, and various Development Communications systems are examined in the next

three chapters. Chapter 4 describes the theoretical concepts of communication, Chapter 5 examines practical applications in projects in Asia and Chapter 6 focuses on Nepal.

## **Chapter 4**

### **Development Communications**

#### **4.1 Introduction**

This chapter explores the theoretical basis for Development Communications. It proposes a definition both of Development Communications and of Development Support Communications, and it examines various communications models and their appropriateness to a development context. Finally, it explores various aspects of communications, including access, participation, deprofessionalisation, and the locus of control. Awareness of these concepts is shown to be essential to the success of any Development Support Communications project.

#### **4.2 Development Communications & Development Support Communications**

From the outset, it is important to make a distinction between Development Communications (DC) and Development Support Communications (DSC) for it is the latter approach on which this thesis focuses. Development Communications is the broad term which denotes the communications strategy of a whole society, or the communications component of a national development plan. It can influence the environment in which a whole country's development takes place. Development Support Communications, on the other hand, implies the application of communications strategies that are specially designed for concrete development programmes, and it usually covers a particular project, audience and location. DSC is usually used:

"in micro-situations, takes the form of campaigns and is generally terminated when the development project is completed. Because it is designed for specific purposes it is capable of being managed, overviewed and researched. Concepts such as "diffusion of innovations" "trickle-

down"...."change agent" are more easily operational and observed."  
(Jayaweera, 1988, p.77)

Development Communications can be an important tool for ensuring both that the type, structure and content of development activities are appropriate to the wider development context in Nepal and that the associated DSC materials - i.e., specific project-training materials - help both to raise the interest of the participants and to inform and train them, thus ensuring the successful adoption of new activities. Most importantly, DSC is generally *interactive* and *participatory*, as opposed to *top-down* or *hierarchical*, characteristics associated more with DC and with the mass media.

Richard Friederick from the Development Communications Project (DCP) of the United Mission in Nepal has shown that DSC can take on two distinct forms: the traditional, or *non-projected*, form, and the non-traditional, *extended* or *projected* form. The traditional form covers basic communications techniques such as face-to-face conversation, lectures, role-playing, puppetry, folk songs, drama and street theatre. These are all very appropriate for village-level communications as they require the development only of local resources and local talent. For example, the Social Work Research Centre in Tilonia (SWRC), Rajasthan, has built up a troop of travelling actors who use puppets when visiting villages to propagate development messages. This has proved to be an extremely effective tool for determining message-transfer, and was used by the Social Work Research Centre during a severe drought in 1987. One of the reasons that traditional forms are often favoured over non-traditional forms is that they do not require the presence of expertise to produce or operate the medium, as skills-training and production can be managed at a local level.

The Social Work Research Centre has ten actors and two trained puppeteers. Hand puppets, although not traditional, do belong, however, to the non-projected category, and they can be used in an interactive manner by actors who can improvise in any given situation. Even audience participation is available, with members of the audience coming up and using the puppets, thus allowing the target audience a chance to communicate their own ideas and needs. Ahmedabad Women's Action Group (AWAG) is another

example of the use of traditional forms of communication. The Forum has written street plays on women's issues exploring topics such as exploitation, dowry deaths (the killing of young brides), violence and wife-beating.

"Our plays take tunes of popular songs and change the lines to present our point of view and then the theme goes straight to the minds of the women who start to sing too." (Dave, *Personal Communication*, 1987)

The second type of DSC, as we saw, falls under the category of non-traditional or extended (projected) communications. This means that the forms are not confined to the present and include the communication of information through alternative media such as books, posters, audio-cassettes, radios, telephones, slide-sets, videos and films. The distinctive feature of DSC is therefore that it provides a social process designed to seek a common understanding or consensus among all participants of development activities, which creates a common ground and understanding for concrete action.

Development Communications only became an integral part of development studies in the 1960s, with the growing awareness of the need for more appropriate forms of communication that would expand development messages to cover rural audiences. Just as, in the 1960s and 1970s, development projects marginalised the understanding of the importance of women in development (as shown in Chapter 3.1), so communications during this same period were seen only as an essentially "unidirectional", top-down process - i.e., as a one-way flow of information from the government and NGOs to the rural population.

In 1976, Bordenare, in *Communication and Rural Development*, showed how, through mass-communication techniques, media campaigns in support of development projects were targeted at particular audience groups in the early '60s and '70s - just like advertising campaigns in the North. This was thought to be a method of information dissemination, tried and tested in the USA, which could be transformed so as to aid development in less developed countries. Consequently, the first forms of Development Communication were

constructed in the North, and were then directly applied, with a little adaptation, to the needs and environment of the South.

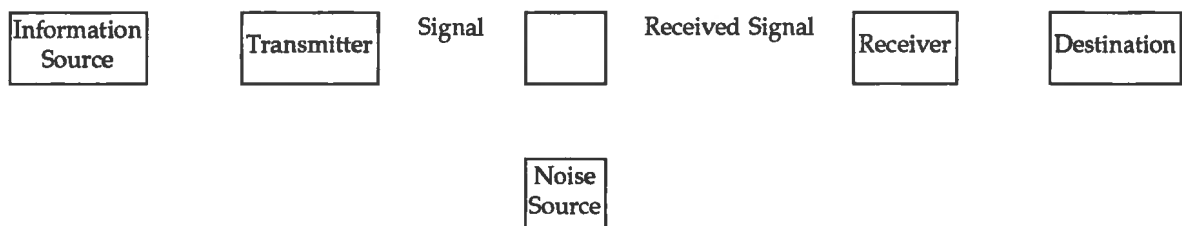
As Frances Berrigon points out (1979), the above approach to Development Communications was limited and restrictive because of its vertical and one-sided nature.

"It assumes that certain behaviours and habits can be changed through the provision of messages ...It is not a use of communication in which there is any opportunity for the individual to find out more, to question, to learn the whys and wherefores, to voice suspicions or protests." (Berrigon, 1979, p.10)

The findings of this thesis also confirm that unidirectional communications are unlikely to achieve the given objectives of any kind of Development Communications campaign.

This unidirectional mode is illustrated in Shannon & Weaver's Model of Communication devised in 1949.

### The Process Model



This model, according to Kemp, illustrates that:

"a message, generally in the form of information, originated by a source or sender is encoded - converted into transmittable form. The message then passes through a transmitter (print, film, television) via a suitable channel, (air waves, paper, light), to the receiver (a person), where the message is decoded." (Kemp, 1980, p.59)

This is essentially an inadequate communications model, for it fails to incorporate any system of feedback from the target audience to the information source. Not enabling that two-way flow of communications, in a development-programme context, would almost inevitably lead to a failure in the comprehension or adoption of the message. Some more recent models, however, have gone further in addressing this issue.

#### **4.3 Models of Communication**

In *Communication Models for the Study of Mass Communications*, Denis McQuail and Sven Windahal describe Roger & Shoemaker's Model of Innovation Diffusion. An explanation of this term shows that one of the most important applications of mass-communications research has been to the process of encouraging the adoption of innovations - i.e., to the replacement of old techniques with new. In 1973, Roger & Shoemaker created a model to illustrate the basic four steps in the innovation-diffusion process. These steps are as follows:

- 1) *Knowledge*: The individual is made aware of the existence of the innovation, and gains an understanding of how it works.
- 2) *Persuasion*: The individual forms a favourable or unfavourable attitude towards the innovation.
- 3) *Decision*: The individual engages in activities which lead to choosing between rejection or adoption of the innovation.
- 4) *Confirmation*: The individual seeks reinforcement for the positive or negative innovation-decision.



Although this model represents a comprehensive approach to communications, and includes a two-way communication process and feedback from the target audience, it is, however, designed from the perspective of an external or superior change agent. In other words, it is a project leader who decides on what is beneficial for the target audience and then directly proceeds to promote that message. This model still, therefore, emphasises a unidirectional, top-down approach. Furthermore, it also presupposes a linear, rational sequence of events, planned in advance, and revolving around the criterion of rationally determined, externally manipulable sites. This is inappropriate for developing countries, as it fails to take into account local needs and local pressure. The model would be more complete, according to McQuail and Windahal, if it included certain feedback loops from later to earlier steps. In so doing, it would go one stage nearer to satisfying Berrigon's requirement of understanding and incorporating the concept of participation within the communications process.

Another communication model, designed by Jakobson in 1958, bridges the gap between the process school of communication and the semiotic. The process school, as already shown by Shannon & Weavers' model, is concerned with the transmission of the message, and sees communications as:

"A process by which one person affects the behaviour or state of mind of another. If the effect is different from or smaller than that which was intended, this school tends to talk in terms of communication failure and to look at the stages in the process to find out where the failure occurred."  
(Frisk, 1986, p.2)

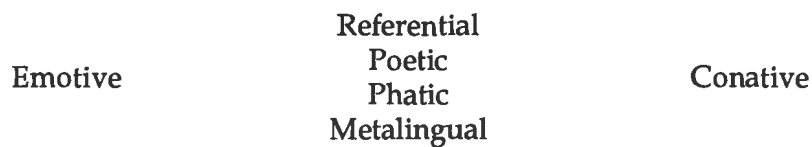
The semiotic school, however, sees a production and exchange of meanings in the communication process. With reference to communicating in the developing world, the understanding of semantics is crucial, for it is concerned with analysing communications in terms of its cultural context. For instance, this school does not consider misunderstanding to be necessarily evidence of failure of communication, but rather appreciates that it might result from a cultural difference between sender and receiver.

## Jakobson's double model:

### 1. *The constitutive factors of communication.*



### 2. *The functions of communication*



Jakobson's model works on two levels, one being the process level, and the other the semiotic. The first diagram, which shows the constitutive factors of communication, takes the basic linear approach of Shannon and Weaver and covers the basic premises of the process school: *addresser, message, context, addressee*; but it now adds two further concepts, those of the *contact* and the *code*. The contact is the channel for the message between the addresser or addressee - e.g., a letter - and the code is the semantic system by which the message is structured, an example being the English language. So far, we have the basic factors, or basic process of communications, clearly laid down. In addition to this, Jakobson's second diagram now shows that each factor has a corresponding *function*, which operates on a more symbolic level.

The reason for analysing Jakobson's model is that any DSC programme should include both the factors and the functions of communication. The emotive functions describe the kind of relationship that exists between the message and the addresser. For example, a video love story or drama is very emotive, while news posters are much less emotive.

The *conative* function refers to the effect of the message on the addressee: Does the communication want to inspire revolutionary attitudes or does it wish to bring the audience to tears? This function will affect how a practice is adopted by the audience once they have received the message.

The *referential* function is the reality-orientation of the message, and is clearly of top priority in objective and factual communication. The message refers to the correct way of carrying out an action, and in this thesis it is illustrated by the management of bee hives.

The *phatic* function involves keeping channels of communication open - namely those between the addresser and the addressee - via the contact factor; for example, a postal system exists which can send a letter from the addresser to the addressee, thus maintaining the relationship between the two.

The *metalingual* function is that of *identifying* the code that is being used. It highlights the aesthetic proportions and relationships in a communication, and thus sees it *metaphorically*. When, in a beekeeping session, the trainer talks about a "queen gate", the metalingual function ensures that the message will be encoded as the gateway on the beehive through which the queen bee cannot fly, and not Her Royal Highness Queen Aishwarya's palace doors!

The final function illustrated in Jakobson's model is the *poetic*. This is the relationship between the message to itself. For instance, the video-title *Bees and Chameli* is aesthetically and poetically pleasing because it rhymes and so is therefore much more memorable. This function was used by AWAG in their street-theatre songs (see section 4.2).

In Chapter 6, it is revealed how important it is to consider these functions of communications when creating an effective Development Support Communications model. And yet, for all their importance, these functions are not incorporated by the FAO in their Development Communications Process Model. This Model, discussed in Chapter 7, follows

more closely the *process* school, as opposed to the *semiotic* school. However, the latter school incorporates concepts which need to be considered as they are invaluable for DSC programmes in the developing world.

#### 4.4 Concepts Involved in Development Communications

To ensure effective communications, it is important to look at four key concepts of communication: these are participation, access, deprofessionalisation and the lotus of control.

Paulo Freire, in his work on education, sees communications as a process of "conscientisation" in which the community is helped to articulate its problems and then to find the solutions for those problems. Participation by the whole community is therefore fundamental to the success of Freire's approach. Unlike the traditional approach to rural education, which relies upon the transmission of knowledge and skills in a vertical fashion, Freire's approach focuses on the community as a knowledgeable, decision-making unit. Subsequently, the primary objectives of education, according to Freire, are to increase freedom and remove dependence. These can only be achieved through increased participation on the part of the community. Indeed, AAN itself states that participation is a key component in its development work, and that participation in the communications process is probably the most crucial element to any programme. Francis Berrigon describes participation as calling for a:

"horizontally layered process, in which community groups consider and decide priorities for development and suggest ways in which this can be achieved." (Berrigon, 1979, p.13)

However, a more far-reaching definition of participation is given by Karl in *Powerful Images*, which looks specifically at women's participation in the communications process:

"Participation means that women are involved in searching for and deciding upon the solutions to their problems. More, it means that women are

involved in deciding what their problems are in the first place and what they feel is important to work on. These may be quite different from what an outside development agent or organiser has in mind." (Karl, 1986, p.6)

Another key concept in the designing of any communications model is that of *access*. Access, by definition, implies the ability of the public to move closer to the communication system; and in concrete terms, it can be related to the community's access both to *choice* and to *feedback*.

- 1) *At the level of choice, access includes:*
  - i) the individual's right to communication materials, alongside the right to listen to, or to view, desired programmes whenever he or she wants to;
  - ii) the availability of a wider range of materials, the choice of which is made by the public instead of being imposed by production organisations;
  - iii) the transmission of materials requested by the public.
  
- 2) *At the level of feedback, access implies:*
  - i) interaction between producers and receivers of messages;
  - ii) direct participation by the audiences during the transmission of programmes;
  - iii) The right to comment and to criticise, as a means to keeping in touch with producers and administrators, and with the managers of communication organisations.

The notions of access and participation are both supported, in a wider context, by the right to information clause in Article 19 of the Universal Declaration of Human Rights, which expresses that everyone has the right to freedom of opinion and expression. This right includes the freedom both to hold opinions without interference and to seek, receive and impart information and ideas through any media, and to do so regardless of frontiers.

We have seen in Chapter 2.4 that the Nepalese government, up until last year, attempted to restrict information in order to maintain centralised control. However, it is not only governments that create political restraints: resistance to the dissemination of information is also likely to come from influential people and groups that are trying to keep the majority of the population in a state of disestablishment, as regards their access to communications. The leaders, according to Berrigon:

"see their status quo as threatened by the socio-political implications of access and participation and the practices of these notions through an opening up of communication systems to the wider community." (Berrigon, 1979, p.18).

Not surprisingly, therefore, the first places that are captured by revolutionary or opposition forces in a political coup are the radio and television stations of the capital, which are the channels of national communication. However, the desire to control access to information also operates at a local, grass-roots level, affecting development in the field. For example, the brokers of prostitutes have opposed the successful non-formal education in the ActionAid project area because of the effect it has on the confidence and status of women in the area. Giving women access to literacy and to income-generating programmes has changed the traditional situation of gender status quo and created a challenge to the brokers' current powerful position within the village structure.

*Deprofessionalisation* is another important concept which needs to be included in Development Communications-model structures. By definition, it involves modifying production hardware so as to make it possible for non-professionals to produce their own programmes - i.e., to make their own material for participatory and feedback purposes. Deprofessionalisation makes possible the inclusion of rural groups in the network of decision-making units creating effective communications materials, simple video technology, slide-set productions, and so on.

In *Technology in Non-Formal Education* (1978), Evans discusses the important concept of *the locus of control* by questioning who defines the problems and needs of the learners. Evans

stresses that all communications materials should create a bridge between the sender and the receiver of a message, and that the receiver has often to re-educate the sender. In regard to the use of television, he states that in order to:

"facilitate communications between rural areas and urban areas the emphasis should be on the educating, urban based decision makers about the needs and reality of rural areas." (Evans, 1979, p.7)

This illustrates a new type of awareness vis-à-vis communications, where the producer has an equal amount to learn from the receiver group, during the process of communication, as do the receivers in decoding a given message.

#### **4.5 Conclusion**

In conclusion, a theoretical analysis is crucial to the practical application of Development Communications in the field. Structures (i.e., models), functions (specifically semiotic functions) and concepts (i.e., those of access, participation, etc.) cannot be ignored if effective Development Support Communications are to find a place in integrated development programmes.

## **Chapter 5**

### **Development Communications and Development Support Communications in Asia**

#### **5.1 Introduction**

This chapter surveys projects in Asia in order to evaluate the practical applications of Development Communications. Successes and failures are identified, and lessons are drawn for the design of the Nepalese case study.

The projects covered illustrate some of the crucial concepts - such as those of access, participation and locus of control - which have direct relevance to women in development. They include SITE, which is the Indian Government's Satellite Programme, and the smaller, grass roots Khendra Communications Project. The Self-Employed Women's Association (a large women's trade union), Allam Iqbal Open University of Pakistan (specialising in non-formal education), the Family Planning Association of Pakistan, which emphasises women's education, and, finally, from Nepal, the Worldview International Foundation, and its approach to participatory video production, are also discussed.

#### **5.2 Satellite Instructional Television Experiment (SITE) and the Khendra Project, India**

Probably one of the best-known projects, in the field of Development Communications, that used television as an educational tool was the Satellite Instruction Television Experiment (SITE) project which was conducted in India between August 1975 and July 1976.



The project consisted of a satellite disc which beamed three hours of television into 2,330 villages, spanning 7 states and 4 languages. Morning transmissions of SITE were meant for school children, while evening transmissions contained news and educational programmes covering health care, animal husbandry and family planning. As well as the SITE disc, a low-powered, terrestrial television transmitter was set up in Pij in Gujarat to broadcast one hour of programmes to the Khendra district every evening.

Dinaz Kalwachvala, the only female producer on the Pij project, made a number of programmes directly related to women's issues, such as *If I Wake Up and See*. Kalwachvala expressed her conclusions about the effectiveness of producing women's educational programmes in the Pij project at the South Asian Regional Workshop in March 1986. They were as follows:

- 1) Firstly, that it was important that change agents use transmission channels such as television, while others engage in parallel efforts in non-transmission modes. One cannot depend on television programmes alone to change attitudes or behaviour patterns, so other forms of communication channels should be employed as part of Development Communications.
- 2) Secondly, that SITE should evolve an overall policy on women's portrayal in all kinds of programme, not just those labelled as women's programmes. For example, a positive women's image in *If I Wake Up and See* could be totally destroyed by the negative portrayal of women in another programme related, say, to farming and agricultural practices.

Kalwachvala also claimed, at the *Women and Media in Development* Workshop held in Delhi by the Centre for Development of Instructional Technology (CENDIT) and the FAO in 1986, that:

"although people had liked the alternative picture of women that has been depicted, its impact had been erased by the play which followed

immediately after and which showed a sobbing, helpless miserable women unable to fight her circumstances." (Kapoor & Anuradha, 1986, p.21)

Therefore, SITE demonstrated that television should not be relied on as the only channel for the dissemination of a development message, but should be used in parallel with other, back-up communications material. Secondly, it demonstrated that either all programmes should carry a positive image of women or else television, in its use for development purposes, should be isolated from those centrally broadcasted programmes which tend to reinforce negative images of women (an example being Doordashan, India's main television station, with its most recent dramatisation of the Hindu religious book *Ramayana*). It must be noted, however, that the latter approach could violate one of the already-mentioned central concepts: that of the participants' choice of access to different forms of communication. This dramatisation has been highly popular, and, with mass media here being the medium for transmission, censoring such programmes would not be appropriate or democratic. However, on a local level, with DSC, it is easier to be consistent with the images of women presented in the various communications materials.

The general benefits of using television as an educational tool for rural audiences as part of the SITE project were outlined by Malik in *Traditional Forms of Communication and the Mass Media in India* (1983). She emphasised that:

- 1) gains were noted in health and nutrition, especially among females;
- 2) there was no significant gain in family planning;
- 3) people with little or no prior media exposure gained most in awareness;
- 4) modernity increased, in terms of both attitudinal and behavioural information, and that female viewers gained more in this respect than male viewers.

These results highlight not only that television can be a useful tool for reaching marginal groups, such as women, but also that it can lead to a change in an individual's overall awareness. However, it must also be noted that no official knowledge, attitude or practice (KAP) study was conducted to reach the above conclusions. They had been derived purely from personal observations and questionnaires.

In the Khendra Communications Project, an ordinal approach was taken, involving combining traditional folk habits with the media form. By studying how traditional stories were told in the village, one of the producers of the programmes for the Khendra project, Baradi, was able to use characters from these stories in the programmes produced. The characters were familiar to the villagers, and the latter could therefore identify with the former (Malik, 1983).

Another issue of general interest that arose out of the Khendra experiment was the theme of audience participation, exemplified in a programme called *Vat Tamari* which recorded people's views on problems such as transport, drinking water and schools. According to the project managers, the programme worked very well as long as the leaders and richer members of the village community were being interviewed; but when the microphone and camera turned to the Harijans (untouchables) and the poor, the response to the programme altered in both affluent and poor sections of the community. Apparently, a sense of unease and distrust crept in. The producers were disturbed both at the apathy expressed amongst the low caste and at their unwillingness to do anything to change the status quo. Another producer, Raina, stated:

"The two possible reasons why we have failed to shake the oppressed adequately can be that we are either expecting too much from the medium or that the approach is not the most suitable. Besides T.V alone cannot do much unless there is a clear cut follow-up plan. The need for follow-up action concurrent with a media campaign is, of course, indisputable." (Malik, 1983, p.60)

Leela Rao, in her article "Medium and the Message, An Indian Experience" (in *Rethinking Development Communications* (1987)), backs up Raina's conclusions by stating that:

"One immediate realisation when we started this study was that it was unlikely that television, by its mere presence, would cause any major changes in media operations or modification of existing infrastructure meant to provide communications support to development activities." (Rao, 1987, p.179)

### 5.3 The Self Employed Women's Association, India

Operating at the local level, the Self Employed Women's Association (SEWA) in Ahmedabad has become involved in video communication to help motivate women in the self-employed sector both to express their grievances through video and also to use video as an educational tool for teaching topics such as oral rehydration, building smokeless stoves and the importance of collective action.

Unlike with SITE, where programmes were produced by professional broadcasters and then beamed out to villages, at SEWA, Martha Stuart Communications held a workshop in which the actual members of the Association were trained in the production of video on 3/4 Umatic equipment. SEWA is also now part of a larger video network called Village Video Network, and one of the most significant aspects of this organisation, as stated by Kristin Helmore in *The Christian Science Monitor* (3 April 1986), is its commitment to demonstrating that illiteracy is no barrier to effective communication.

Video Village Network (VVN) is a project jointly undertaken by Martha Stuart and the United Nations University Headquarters in Tokyo. The purpose of the project is to make possible an organised, large-scale, global interchange of both locally generated video-tape information and communication material, in order that the video tapes circulated around the network can be produced by women at organisations like SEWA.

The outcome of SEWA's grass-roots training was that the technical details associated with video recording and production were learned by the members of the union within a period of three weeks. This illustrates that even illiterate women can be taught to use sophisticated technologies effectively in a short period of time. According to Sally Stuart, Martha Stuart's daughter and current Director of Martha Stuart Communications, this fact gives the women a new self-confidence and a sense of involvement in shaping their own lives.

For example, Nela Been, a sound recordist in the SEWA video team, had spent her life on the streets collecting paper from rubbish dumps before she joined SEWA. Her husband, at first, was extremely hostile to the idea of her joining SEWA-Video (the name of the organisation) to be trained as a sound recordist, but, as Nela Been states:

"At first I was confused when I heard that I will be given video training, but now I am totally familiar with it and have been to film a video in Orissa of mine workers in the interior." (Been, *Personal Communication*, 1987)

Before training, Nela Been had never seen a television before and was not familiar with such terminology as "words monitor", "television" or "headphones"; so that when she saw them for the first time, she was apparently too scared to touch them.

"When I showed it [the equipment] to other women they who were not able to see such things now they say that one of our women can now make such programmes and it has created a lot of self confidence amongst the women." (Been, *Personal Communication*, 1987)

SEWA-Video has, through the instruction of Martha Stuart Communication, brought the knowledge and deprofessionalisation both of video technology to its members, and of video film to rural villages, thus propagating mutual help and participation as approaches. The locus of control of the equipment is now in the hands of the women and operators; it is they who decide on the subject matter of their next programme, and on how to shoot it.

The Head of the Rural Wing of SEWA, Amila Dholakia, noted that:

"Rural women who were not able even to go and talk to our village head are now able to approach the panchayat head and complain that such and such has happened." (Dholakia, *Personal Communication*, 1987)

which illustrates a new type of confidence and autonomy hitherto unexpressed in local village politics. The advantages of SEWA's being part of an actual network is shown by the fact that when a programme on women in Mali was screened, members of SEWA-

Video reacted by saying that it was interesting that women in other parts of the world had similar difficulties to their own.

However, the approach adopted by Martha Stuart Communications and by the Village Video Network has two major drawbacks. Firstly, the equipment currently used (3¼ inch Umatic video) is outdated and is no longer the most user-friendly nor most cost-effective equipment on the market, as regards techniques of video production. Secondly, and most importantly, the approach adopted by Martha Stuart Communications in its training courses assumes that, for any given organisation, video technology is the only appropriate channel of communication for DSC.

The company does not train people in other forms of DSC, such as slide-set or flipchart production, nor in traditional forms such as role-playing or model production. Furthermore, when it responds to a request for video-production training courses by other organisations, it does not carry out a needs analysis of the situation prior to training. Consequently, the training lacks a holistic approach of the kind which would allow the answers and needs to emerge from the rural people themselves, and this prior to the adoption of the video-communications approach. However, as stated above, once the women's group has received video training, then many of the important aspects, such as participation, access and control, become apparent. And it must be noted that Martha Stuart Communications and Worldview International (discussed later) have, to date, generated some of the most radical and successful Development Support Communications programmes that make use of video technology.

#### **5.4 Allam Iqbal Open University, Pakistan**

Another organisation that has been using audio-visual technology in the field is the Allam Iqbal Open University (AIOU) in Islamabad. The objective of the AIOU is "education for all", and the University specialises in distance-learning through the use of correspondence,

television, radio, tutorials and workshops. Its courses cover the subjects ranging from basic, functional programmes like child care and poultry farming to BA and MA degrees in formal subjects such as medicine and law.

The work of David Carr at the AIOU is particularly interesting, as it was he who initiated and designed their Basic Functional Educational Programme (BFEP). The BFEP uses flipcharts and audio cassettes for the distance-teaching purposes, and its educational programmes cover such topics as poultry keeping and healthcare. The aim of the BFEP is to bring cassettes and flipcharts to villages so that the inhabitants can become familiar with the subject matter by following these tapes and charts in their own environment. It seems that familiarity of venue breeds confidence and trust.

One indication of the success of this programme was that the AIOU saw little need to utilise video instruction in the field. The solar-powered video and television unit, which had been provided by BP Solar International, was not in operation when the author visited the project. Les Cook, head of the Technical Education side of the AIOU, stated that:

"A major hindrance to its utilisation was that the containers for the equipment were too big to be used in a conventional vehicle like a Land Rover or jeep. This meant that if the University wished to transport the equipment into the field they would have to either hire a van or risk damaging the unit by not transporting it in its container." (Cook, *Personal Communication*, 1987)

Two interesting points can be deduced from this experience. Despite all equipment having been donated by BP Solar in full working order, and despite their having had professional technicians to operate it, yet, due to lack of urgency and motivation, the equipment remained in its containers. Secondly, and perhaps this was partly the cause of the above situation, the AIOU had already perfected a technique of distance-learning that was appropriate enough, and that suited the learning needs of rural audiences using the BFEP technique.

## 5.5 The Family Planning Association of Pakistan

Another important initiative for women's development with regard to the use of video was a project led by Ferida Sher, the Head of the Women's Programme at the Family Planning Association of Pakistan (FPAP). During November 1987, Ferida Sher attended, with the author, the National Smokeless Chulla Workshop held at the Thal Project Centre in the Sind District of Pakistan.

Smokeless fuel chullas are stoves used to conserve fuel and also to protect women from fumes produced by the traditional stoves. The building of these chullas provides an income-generating activity (Clarke, 1985).

Ferida Sher filmed the proceedings of the training programme on video during the training course, and, at night, she played back some of the footage to women participants in the workshop. Similarly, she would use this opportunity to show videos, shot in other parts of Pakistan, which described the lives lived, and the difficulties faced, by women fighting the purdah system, and which also illustrated the plight of widowhood.

During the workshop, Sher pointed out some of the important uses for video, in terms of recording changes taking place in women's development:

"We find every year there is a change when we go to the villages. People are developing and their attitudes are changing and one of the things we are using video for is recording that change. It is extremely difficult to quantify women's development, even the way a woman begins to talk, the way she looks and this cannot be recorded on paper. It is extremely difficult to do this. The video captures it and the impact is tremendous."  
(Sher, *Personal Communication*, 1987)

The FPAP highlights, in conclusion, that video DSC has a further function beyond recording and documenting more conceptual developmental changes amongst women, such as changes in attitudes and status.



## 5.6 The Worldview International Foundation, Nepal

Examining the locus of control in DSC, questioning who defines both the problem and the needs of learners, is crucial to ensuring a successful communications programme. The *addressee* in the communication chain also often has a message to convey to the addresser, as well as vice versa.

This is precisely the concept that the Worldview International Foundation of Nepal (WIF) incorporated, in 1987, into their *Rural Women in Participatory Communication* project-cum-workshop. The overall objective of the workshop was to enhance communication between the project site, at Ramghat, and the Women's Development Section in the Ministry of Agriculture in Kathmandu. By using videos to show policy-planners and project-implementors the needs of the community at Ramghat, the local women of the region were able to express directly their grievances against central government. The highlight of this workshop was that the rural women assessed their own problems and then produced videos on these needs. The need for irrigation facilities, for instance, was shown in *Dry Land, Running Water*, while the need for a women's legal-service office in Surket, as well as for continuing legal advice through video letters, was recorded on video in *Legal Problems and Solutions of the Women of Ramghat*. This participatory approach, comprising the workshop and the presentation of the videos in Kathmandu, also helped rural women understand the situations and processes which the bureaucrats go through to meet rural needs, and why the central government cannot meet all of them.

These videos, produced by the women and the workshop, are a direct example of how the locus of control over production, editing and presentation can be put into the hands of the target group, i.e. the rural women of Ramghat. The project also exemplifies the concept of deprofessionalisation of the medium. Ten women from Ramghat attended two training sessions on video production. The result was that:

"they were able to produce video programmes on the important issues of their community and successfully communicate these problems and opinions to the centre". (Belbase *et al*, 1986, p.6)

Many other organisations were visited in the first year of the thesis research, and it would be impossible here to analyse each and every one of their individual approaches to Development Support Communications.

## **5.7 Conclusion**

From the above projects the following conclusions can be drawn. The SITE and Khendra projects showed how video can be used effectively in a rural context, but also that it should not be relied on as the only medium for transmitting a certain message. The SEWA showed how to deprofessionalise the video medium so that rural women could now learn the technique of video production. The AIOU illustrated that video is not necessarily always the best medium for a campaign, and therefore that organisations might choose to adopt other media forms better suited to their requirements. Finally, the FPAP and the WIF illustrated that the locus of control can be put into the hands of the rural audience, and that this ensures that effective feedback procedures are carried out.

From the examples given, moreover, an understanding was made possible of the general importance of establishing effective communications techniques in Nepal. Many of the conclusions drawn by the author as a result of witnessing these project were incorporated into the structure and design of the case study research work carried out with ActionAid Nepal in the following year.

## Chapter 6

### Development Support Communications Research in Nepal

#### 6.1 Introduction

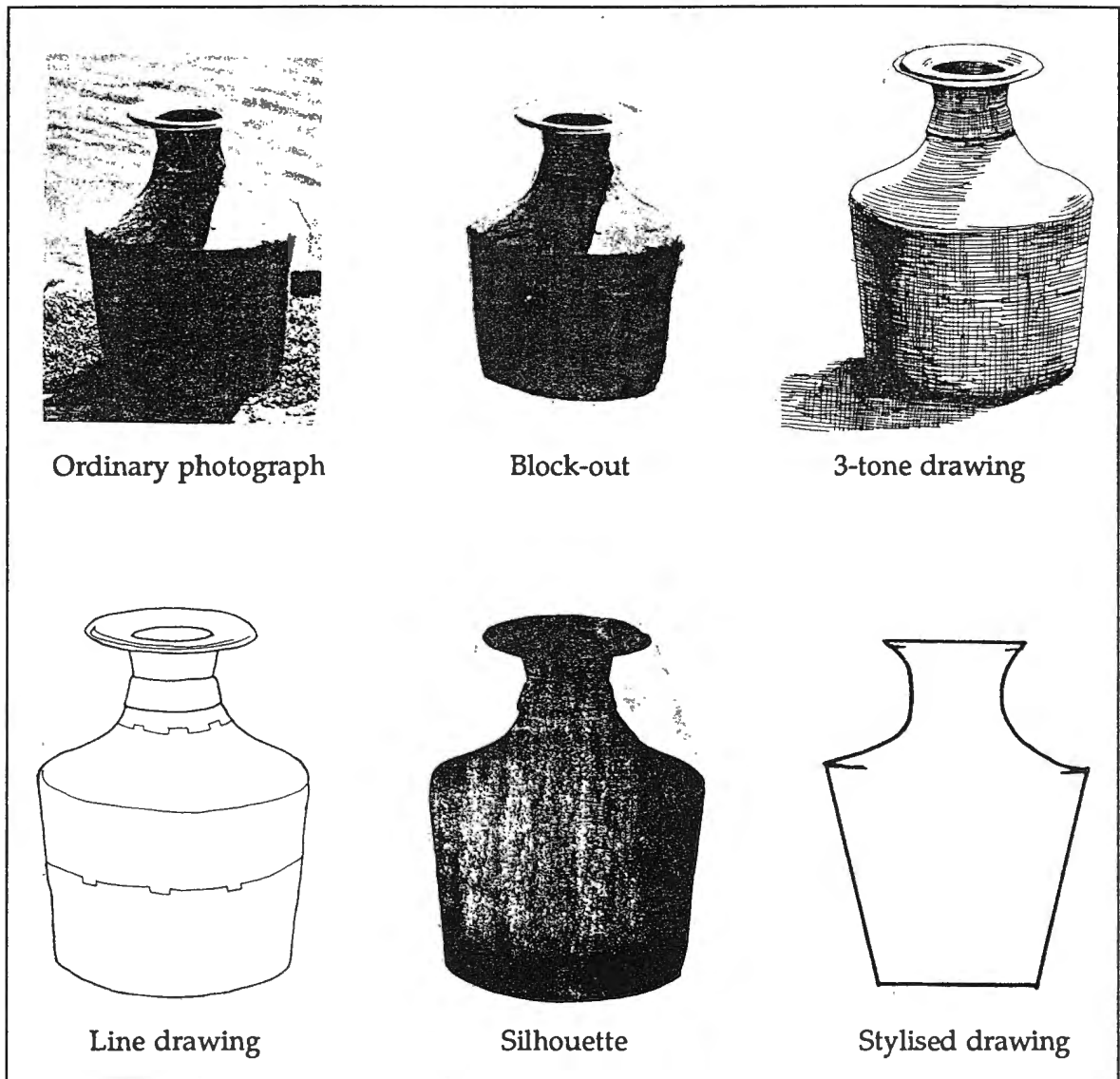
This chapter focuses on Development Communications projects in Nepal, and on their effect on communities in the Middle Hill region, with particular reference to women. The projects concern three areas: visual literacy (the decoding of pictures), pictorial space (the decoding of perspective) and video literacy (understanding moving images). They were conducted by Fussell & Haaland, David Walker and George McBean, respectively.

#### 6.2 Visual Literacy

In 1976, Fussell & Haaland were commissioned to carry out an extremely important visual-literacy study in Nepal for UNICEF and the National Development Service of the Nepalese government. The study was conducted with over 400 villages, comprising 43% women and 57% men. It covered 6 Middle Hill districts and 3 terai districts. Its aims were to try to find out what type of picture - outlined, black-and-white, three-toned or photographic - was most easily interpreted or decoded by rural audiences.

The various illustrations of a single cooking pot, shown below, demonstrate six different styles of representation. The results of the visual-literacy study carried out using these illustrations were published in *Communicating with Pictures in Nepal* (1976):

"The most effective style of picture is clear, realistic without essential background and that three-tone drawings or blockouts are better than more 'simplified' pictures. The more stylised a drawing is the less success it is likely to have." (Fussell & Haaland, 1976, p.42)



This important discovery helped development agencies and change agents in both the design and the production of such educational materials as posters and flipcharts. Now, the relevant situation, or development message, could be described by using three-tone pictures. Another observation gained from this work, one which was later taken up by David Walker, was that:

"The very idea of a drawing conveying a message struck them [the villagers] as strange. The conventional western use of a down-turned mouth to represent sadness clearly cannot be relied on to communicate its meaning in the circumstances in which this study was conducted." (Fussell & Haaland, 1976, p.25)

Fussell & Haaland therefore highlighted the danger of assuming that a given target audience will accurately decode a given development message. Using a happy - i.e. smiling - face or sad facial expressions on instructional posters or other drawings in order to indicate the good or bad consequences of certain actions does not automatically ensure that they will be correctly interpreted by the audience. Here, the *encoding* of the signal, or the *semiotic* functions of communication as expressed in Jakobson's model, have to be recognised.

Fussell & Haaland also recommended that posters should express their message in *words* as well as pictures, and that the words should be large enough to be read by children even if the actual message is intended for adults. This in itself, according to Fussell & Haaland, would encourage literacy, not to mention the communication of development ideas, amongst villagers of different generations.

While Fussell & Haaland uncovered the visual, representational form that pictures should adopt, David Walker now extended this research to investigate the interpretation, by members of local communities, of *perspective* in pictures.

### 6.3 Pictorial Space

In his research in *Understanding Pictures*, David Walker tried to assess whether the perception of depth, through the depiction of pictorial space or perspective in a picture, can be spontaneously understood or whether it needs to be learnt by rural audiences. In the conclusion to his study, he reveals that:

"Perspective information was understood at an intuitive level by the majority of villagers tested and could not be conclusively applied to the interpretation of spatial relationships of pictures." (Walker, 1979, p.xi)

What Walker discovered was that when villagers were asked to describe or interpret a picture, they could identify its content and meaning more through a recognition of the

objects than through any actual interpretation of the principles of perspective present in the picture, and this suggested that the interpretation of pictorial space is an active process which calls for conscious awareness of projective principles. It would seem therefore unrealistic to present Nepalese villagers with pictures that contain sophisticated techniques of perspective or pictorial space and expect that the relationship between the objects in the pictures will be correctly interpreted.

An example of where caution should be applied in the production of visual materials is in the case of maps and diagrams. These can be made so simplified or schematic that they approach the abstract symbolism of writing, and hence they become unclear to, and are misunderstood by, the target audience. Walker shows that pictures of arrows and crosses found in Western culture are arbitrary conventions which we, as Westerners, are accustomed to decoding automatically. Therefore, one of the major tasks which faces communicators designing visual materials both for rural-development purposes and for DSC material is to differentiate between those aspects of pictures that derive directly from perceptual principles and those that are arbitrary and therefore abstract. It is important to know whether the villagers have conceptual as well as perceptual tools for "decoding" the messages.

According to Walker, pictorial communication in Eastern rural societies is, to a large extent, limited to concrete subject matter. Therefore, the pictures that are most effective in these communities are those that represent a state of affairs - like that of a horse eating grass - which is, firstly, easily recognisable by the audience and, secondly, easily decoded. A state of affairs, in other words, where the picture's iconic quality is emphasised more than its symbolic qualities. (For instance, a cross, when interpreted as a device for representing a negative idea, represents the symbolic use of an arbitrary convention.) In agreement with Fussell & Haaland's own conclusions, Walker also points out that unless rural audiences understand the particular convention in hand, it is potentially dangerous to try and use such abstract symbolic devices.

A good example of this theory at work was later discovered in the case-study project *Communications for the Future* (CFTF). The contents of the slide set used in this project included a slide which presented the message: "How not to lift the top off the bee hive". Originally, the picture on the slide was to depict the lid's being incorrectly lifted off the hive, and a cross was then going to be drawn over the picture. The communications team of CFTF realised, however, that this approach only served to reinforce, rather than to prohibit, what was shown as a negative action. This, they saw, was firstly because the specifically symbolic use of the cross might not have been understood or "decoded" by the audience, and secondly because the visual image of the incorrect action of removing the lid could have been reinforced in the minds of the audience by mere virtue of its appearance in the slide set. Walker sums up this danger by expressing that there is:

"an important limitation of pictorial communication. It is to a large extent limited to concrete subject matter." (Walker, 1979, p.31)

and that, in conclusion, pictures are good for depicting proper nouns, generalisations of concrete things, spatial relationships and the relative status of things.

Abstract concepts, actions and logical relationships are not easily interpreted through pictures, a fact which reinforces Fussell & Haaland's own findings. It is perhaps here that *videos* can now play a role in conveying more emotional, more subtle and more abstract messages that those that can be contained in a poster or slide set.

Finally, Fussell & Haaland, in an experiment involving a TB poster campaign, concluded that the frequency - i.e. the number of times - with which a poster is viewed is the key to "decoding" the poster's message.

George McBean's study for UNICEF, *Rethinking Visual Literacy - Helping Pre-Literates Learn* (1989), incorporates conclusions from both Fussell & Haaland's and Walker's research.

## 6.4 Video Literacy

McBean and his team from UNICEF set out to discover how quickly pre-literates learn to interpret pictures, as a result both of increased exposure and of pictorial methods of recognition. McBean's study covered 480 pre-literates from 16 villages in 8 districts of Nepal. Of these, at least 70% were female, and they, therefore, represent a higher proportion of Nepal's pre-literate population. The respondents were visited 6 times during 3 months, and in each district 2 locations were chosen, one as the control village, the other as the experimental village. In the control villages, illustrations of TB were shown to the respondents, and comments were recorded thereafter. In the experimental villages, however, these briefings were now followed by a further educational phase aimed at improving pictorial interpretation and understanding. According to McBean, the most significant finding of the research was that although all the villagers improved their level of visual literacy, in the experimental villages, the ratings were *twice* those of the control villages.

Increasingly, when worked out according to gender, the visual literacy rates also revealed that the men scored consistently higher than the women in both the control and experimental villages. Moreover, the difference between male responses from the control and experimental sites was consistently greater than it was for women between these two sites, suggesting that the men benefited more from the educational phase:

"Such findings are consistent with social practices in Nepal which tend to limit the role of women to the household and farm and to discredit their role in decision-making and education." (McBean, 1989, p.11)

Fussell & Haaland claimed that the use of colour in anything but a realistic way would lead to no end of possibilities for misinterpretation, and an interesting difference between Fussell and Haaland's and McBean's studies is that while Fussell & Haaland found that the visual-literacy scores for items like pots, fruit and vegetables were considerably higher when they were illustrated in *black and white* rather than in colour, McBean, on the other hand, found that the visual-literacy ratings connected with the perception of familiar, and



even of quite abstract, illustrations were much higher when these illustrations were rendered in *colour* rather than in black and white.

However, where McBean does agree with Fussell and Haaland is on the fact that:

"The research strongly confirmed the statements of other visual literacy researchers concerning the importance of exposure to visuals as the single most important factor in determining understanding." (McBean, 1979, p.19)

Accordingly, pictures and, therefore, flipcharts and other Development Support Communications materials also should be three tone in quality and should not contain any arbitrary, symbolic devices (not, at least, until training commences and various possible signs are then introduced and explained).

Pictures requiring perspectives should be used with caution, and should really be confined to descriptions of noun objects, not of intangible concepts.

McBean's work also illustrates the gender difference between men's and women's ability to "decode" development messages from pictorial representations. He states that any Development Communications programme should be aware of this difference when presenting communications.

In 1989, as part of the *Re-thinking Visual Literacy* study, McBean conducted the first-ever field test on video literacy in Nepal. By using 3 educational videos produced in 3 different formats - documentary, soap-drama and animated cartoon - he was able to determine which format best conveyed a particular development message to the rural audience. The first, *Sanu*, was a twenty-minute soap-opera, about *Nun Chuni Pani* (Oral Rehydration Solution); the second was a ten-minute cartoon which stressed the importance of changing to clean drinking water; and the third, *Water Pure and Simple*, was a twenty-minute documentary about a water-supply project conducted by the Nepalese government with UNICEF's support. The survey interviewed 52 pre-literate people, and once again the majority were women who had never seen television before.

McBean, as has been mentioned, took to the rural village the Nepalese drama *Sanu*. The main message of this video was the importance of using oral rehydration solution (ORS) to cure diarrhoea; and it rejected the traditional, and often fatal, alternative method of reducing a child's water intake. *Sanu*, as it turned out, was clearly the most popular with 80% of the respondents, and 65% reported that they had learnt more from this video than from either of the other two. Moreover, 70% now were able to give the correct measurements for making ORS, which consists of a salt, sugar and water solution.

With regard to the second video - the animated cartoon - that was shown, 65% of the respondents realised that the subject was about clean drinking water; and 80%, moreover, not only mentioned the child's being ill with diarrhoea but also understood that this illness resulted from drinking polluted water.

Not surprisingly, the third video, the documentary, was the least popular programme amongst the villagers, the programme which the villagers found the most difficult to understand. About 65% realised the programme was about a drinking water project, but nobody was able to name the district where it took place, and only 13% identified it as being somewhere in the hills nearby.

In conclusion, McBean summarises the results by declaring that:

"Overall, the investigation reinforced the view that the moving image is a very compelling method for communicating information, and that this is enhanced if the information is presented dramatically, either in real life or cartoon form. Yet the evidence is strong that efforts to communicate information to them through this medium, with soap-opera style drama, seem likely to meet with success." (McBean, 1989, p.20)

## **6.5 Conclusion**

In conclusion, Fussell & Haaland show that it is three-tone drawings that are most easily understood by the target audience; Walker shows that an understanding of perspective cannot be assumed; and McBean shows that story-based dramas are one of best formats for conveying development messages on video. Finally, frequent exposure to the visual image is shown by both Fussell & Haaland and McBean to be a crucial determinant in the effectiveness of Development Communications.

## Chapter 7

### The Practical Application of the Development Communications Process Model and its Use in the Communications for the Future Case Study

#### 7.1 Introduction

This chapter introduces the author's project/case study, *Communications for the Future*. The case study uses the DCPM as a framework for implementing the project in the field. By means of field work, this model is illustrated, tested and evaluated. Problems and omissions are then identified, and recommendations are made for improving the DCPM as a practical tool.

The justification for testing the validity of this model comes from the claim that:

"The methodology perfected by the FAO through long experience is currently regarded as a model for international reference in all spheres of rural development." (Coldevin, 1987, p.12)

If the DCPM is to act as a blueprint method for establishing Development Support Communications programmes for NGOs and international agencies around the world, then the analysis of its actual use and practicality in the field is of vital importance.

The Development Communications Process Model is based on three components. The first and most important component is the mainstream communications model itself. This is now supported by two sub-group components: a Management Plan and a Staff Plan. The diagram below illustrates the relationship between these components, and its designer, Coldevin, points out that the interdisciplinary nature of the model is intended for application to all DSC operational areas and channel delivery strategies:



On this premise, the author decided to use the DCPM, as opposed to Jakobson's model, for designing the CFTF case study and implementing the case study in the field.

The objectives of the case study *Communications for the Future* were as follows.

1. To test the practical application of the DCPM in the field and monitor its appropriateness as a model structure for NGO's dual desire to set up a communications unit and to implement DSC in the field.
2. To set up a communications unit at the Thakani Resource Centre in ActionAid's project area.
3. To produce a variety of educational materials, two projected (a slide set and video) and one non-projected (a flipchart) to disseminate information on a particular income-generating activity for women: beekeeping.

The two supporting sub-components of the DCPM, the Management Plan and the Staff Training Plan, must now be described before going on to illustrate the main Development Communications Model, for they play an important role as structures in their own right.

## 7.2 The Management Plan

The major steps and key points in the Management Plan are included in the following table:

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<b>Management Plan</b>	
<b>Steps</b>	<b>Key Points</b>
1. Develop a list of activities for each phase of Development Communications Process.	Determine which activities will take place, then dates and duration; determine individual and team responsibility; plan for monitoring and progress within set times; establish communications network to encourage two-way information flow between and among all institutions and people involved in project design, material production, implementation, monitoring and evaluation.
2. Implement staff training where and when required.	Analyse where existing skills are inadequate to perform required jobs, identify trainers and determine duration of training.
3. Project major activity costs with approved DSC Budget.	Projections should include major budget items for: evaluation activities, media development and staff training.

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To fulfil Step 1 of the Management Plan, a timetable of action was drawn up by the author at the very beginning of the CFTF project/case study (see Appendix II). It showed firstly how the objectives of the CFTF were identified, secondly who the members of the

communication team were, thirdly the precise date by which separate activities in the project had to be completed, and fourthly who would be responsible for carrying out these activities. This timetable was then distributed to the members of the team, as well as to the Director of ActionAid, Neil Walton, and other sector heads. This meant that from the outset of CFTF, every individual knew not only their own personal area of responsibility but also those of the different teams. The communications network which was set up to facilitate this process was the Communications Unit itself, with the Director/author of the thesis being a point of reference for each activity.

To fulfil Step 2 of the Management Plan, an initial survey of training needs had been conducted by the author in her first visit to AAN in February 1987. Discussions with Thypten, Neil Walton, Rosie Russell and the Head of the Women's Sector revealed that there was, in AAN, a complete lack of training in communication techniques and of any comprehension about the role that a Development Support Communications Unit could have in field operations. At this stage, one member of the sponsorship department, Ghaneshyam Chetri, seemed to be the perfect person to represent the Communications Officer during the period of the CFTF project/case study. Dates for Ghaneshyam's training as a videocameraman and a Communications Officer were laid down in the Timetable and Plan of Action in January 1989, with a clear space left for other members of the communication team whose training schedules were yet to be confirmed.

To fulfil Step 3 of the Management Plan, the overall budget for sponsoring the establishment of a Communications Unit had been outlined in the author's fund-raising document, shown in Appendix I - Communications For The Future. It was agreed that all the internal costs of production, such as the media-development costs, would be met by AAN. AAN was responsible for meeting the costs of processing the slide film, for donating a contribution to the editing cost of the video and for commissioning the artist to draw the flipchart. Training costs were incorporated into the existing annual, sectorial budgets. The author was responsible for overseeing the donation of all the relevant equipment to the project team, which included the TV, VCR, solar panels, batteries, videos, tapes and slide

film. Fund-raising letters were sent to all major companies concerned with distance learning, Development Communications and solar power. Eventually, through a number of different sources mentioned in Chapter 1.4, all the necessary equipment was donated to the project, including batteries from Chloride Solar, and enough finance for the transportation of this equipment into Nepal had been raised. BP Solar's television and solar panels were shipped out to India, the batteries came over land from Bombay and the solar manpack and video camera were carried out by the author herself.

The author has a few critical observations to make about the Management Plan in general. Firstly, it does not mention or discuss the transfer of knowledge from the manager to the communications team. Secondly, it fails to use either the word "team" or the word "participation", and thirdly, it seems, even at this stage, to be taking a top-down approach to management and training.

### **7.3 The Staff Training Plan**

The Staff Training Plan is more precise and less detailed than the main Development Communications model because the FAO believes that with staff, one is dealing with an audience which is much better defined and hence easier to organise. Many of the lengthy elements involved in the "needs analysis" phase of DSC, which include, for example, contacting busy rural women farmers living in remote areas - can be quickly identified by supervisors and staff members themselves. The same relative simplicity extends to designing, producing materials for, and evaluating staff training programmes. It must be noted that the CFTF case study was primarily focusing both on training women to adopt a new income-generating activity and on training ActionAid's staff members in the conceptual understanding and production of Development Support Communications materials. The proposed plan which follows is adapted from a United Nations Development Programme Model.



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### Staff Training Plan

Steps	Key Points
1. Conduct needs assessment.	i) Determine skills needed to perform various DSC activities, ii) identify individuals for teams responsible for each task, iii) analyse where existing skills are inadequate and select trainees.
2. Formulate training objectives.	Set these so as to take account of weak areas development, in terms of required skills.
3. Select training format.	Individual or group; workshop, seminar or short course; concentrated or spread out over length of project.
4. Prepare curriculum content.	Particularly at field level; content should be simple, with easy-to-do and practical exercises.
5. Develop presentation support media.	Use simple, low-cost, easily manipulable media.
6. Conduct training.	Monitor closely to ensure modifications can be made while courses are in progress.
7. Evaluate training.	Check how well training is reflected in job performance.
8. Plan follow-up action.	Plan for continuing, job-oriented training to meet new demands, media and audiences.

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An important consideration that was included in the staff training programme within the CFTF project/case study was that, at the field level, extension workers should be made aware of the kind of non-verbal interpersonal-communication skills that would help to support technology-transfer projects. For instance, it had been noted that, during training programmes, the women usually sat at the back of the classes and contributed very little

to any open-floor discussions. Therefore, in the beekeeping training course, the women were made to sit at the front of the room, and were greatly encouraged to participate in verbal discussions and demonstrations.

The stages below show how the Staff Training Plan was implemented by the author during the CFTF case study/project.

### **1. Conducting the Needs Assessment**

The Needs Assessment was conducted in February 1988 during the author's first visit to AAN. It was clear that one, key person was needed who would be trained both as ActionAid's Communications Officer and also as the key resource person for the CFTF case study/project itself. Ghaneshyam Chetri, from the sponsorship department, was identified by ActionAid's management as the perfect person for this position, as he already had some experience of video production and was very familiar both with photographic equipment and with duplication (see the Management Plan). Other members of the sponsorship and education sector in AAN were also identified as possible team-members for the new Communications Unit. With reference to analysing existing staff skills, AAN had never undertaken such a communications project, and it was obvious that all the members of the unit would have to undergo a certain amount of basic training in order to harness their existing skills for use in the communications project.

### **2. The Formulation of Training Objectives**

The following training objective was outlined by both AAN and the author as central to the communications project: the training of a single Communications Officer who would be responsible for the maintenance and upkeep of all the communications materials at the Communications Unit in Thakani, and who would also be involved in the reviewing and development of DSC material after the CFTF project had been completed.

### **3. The Selection of The Training Format**

The training format was devised in two ways by the author. Firstly, Ghaneshyam received one full week of intensive personal video-training on the MC7 video camera, plus a day's training at the Development Communications Project Centre under Richard Friedericks. This consisted of unifying directional terms like "tilt down" or "pan left to right", so that Ghaneshyam, who would be cameraman on location, could understand the director's terminology during the shooting, and vice versa. Secondly, the other members of the communications team were trained during the whole of the CFTF project. For instance, before devising a video story line for the unit's own beekeeping-training video, the communications team assembled to look at a number of other videos that had been produced by UNICEF and the DCP on development issues such as leprosy and oral rehydration. After viewing these videos, the team discussed how well the development message had been portrayed and whether or not they themselves could convey the message more clearly in AAN's own motivational video. At this stage, discussions on the emotive function of a given message were discussed, as the team and actors in the video wished to introduce the video story with a well-known song. The lines of the song were adapted to the subject of women's empowerment and development (see Appendix III). The possibility of achieving the desired response (i.e. motivation to adopt beekeeping as an income-generating activity) was also debated by the members of the unit.

### **4. The Preparation of Curriculum Content**

The curriculum content for the video-training programme for Ghaneshyam came from The Video Unit Ltd Production Course Manual, the VCR Workshop Small Format Video and Richard Friederick's production notes for the DCP. This material was adapted for use in the specific training circumstances of CFTF, and the author ensured that it was suitable for field-level learning, and hence primarily practically orientated.

### **5. The Development of Presentation Support Media**

Before designing any of its own materials for the CFTF project, the unit analysed existing communications materials that had been produced by other NGOs working in the field.

For instance, Carey Osborn, from the Save The Children Fund - UK in Nepal, ran a series of workshops on *Low Cost Teaching Aids* which had taught field workers how to duplicate and blow up pictures, and how to construct simple models for educational use while working in the field. Discussions were then held back at AAN as to whether these techniques would be of interest or of use to the CFTF project.

Another example of developing presentation support material involved the use of existing film strips, that AAN had already collected, to show how an idea such as breast-feeding can be developed with pictures. Some of the material received by AAN had come from Ghana in West Africa, and this enabled the team to discuss the important concept of producing local materials of direct relevance to the target audience's needs, and to their ability to "decode".

#### **6. The Conducting of Training**

As stated previously, there was no formal training course devised, except the one for Ghaneshyam. If he had any queries, or needed the training manuals to be modified due to language difficulties, then he could discuss these directly with the author.

#### **7. The Evaluation of Training**

Part of the immediate training evaluation was conducted merely by assessing the team's ability to produce the DSC material within the given timetable, and seeing how the unit went about solving the problems which arose during the production stage of the CFTF project. Some examples of these problems ranged from a) the safe transportation of the equipment up to Thakani - especially where porters had to carry dangerous, wet batteries filled with acid; b) the changing of the film schedule to suit the weather changes involving strong midday winds - which meant that the recording of sound on the MC7 video camera was virtually impossible; and c) subsequently changing the format and timetable of the women's beekeeping-training programme at very short notice. When it comes to working in developing countries, no given situation can ever be predicted with certainty, and

therefore adaptability to changing environments and situations is of primary importance to any field communications programme.

#### **8. The Follow Up Plan of Action**

The follow-up plan of action for the CFTF project was to conduct a two-day communications workshop programme in Thakani for all the members of the CFTF team. This would include emphasising the functions of communications described by Jakobson, which, in turn, ensures that the materials are made culturally acceptable and understandable (see Appendix VII). This would also include a psychological analysis of communications taking place. Finally, it would also include training the development workers to assimilate, and work with, the needs and visions of their target audience before going on to launch a communications campaign.

The author's own observation of the Staff Training Plan is that it has failed to take into account the trainer's understanding of how to interact with the target audience. In connection with Section 7, on evaluating training, it should be noted that the team, or trainees, have to learn through experience how to interact with the target audience so as to ensure both that proper feedback is occurring in the field, and, furthermore, that they are *receptive* to it, and are not just learning the technical process of material production.

## 7.4 The Process Model

The central part of this structure is the Development Communications Process Model which is illustrated below.

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### The Development Communications Process Model

Steps	Key Points
1. Needs assessment.	Establish major development needs through a variety of methods, such as field surveys, consultation with specialists, examination of records, reports and work samples.
2. Problem formulation.	Prioritise needs, select the most important, and identify key developmental goals to be addressed; determine if communications support is needed; analyse whether the gap between existing and desired behaviour is resource-based (supplies and services) or communication-based (information, attitudes or skills) - or both.
3. Situation analysis.	Assess: existing policies and programmes, communication resources available and supporting institutions.
4. Target audience analysis.	Refer to existing documentation on the knowledge, attitudes and practice baseline survey.
5. Communication objectives.	Select only tasks that are amenable to solution through communication; specify objectives in terms of: target audiences, type of change expected, in what situations the activities will take place, and what criteria will be used to measure success.

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|----------------------------------|---|
| 6. Production of prototype.      | Decide on message-design approach, develop message concepts and select channel-delivery strategy: single or multiple channels; interpersonal reinforcement; group or mass audience - or both.   |
| 7. Formative evaluation.         | Pre-test prototype materials, with sample of target audience, for their attention-getting power and comprehensibility; check appropriateness of channels selected, and check mutual reinforcement possibilities; revise material, where required, and retest.   |
| 8. Production of final material. | Pay careful attention to message-design factors uncovered in formative evaluation.  |
| 9. Distribution and monitoring.  | Check for delivery-systems constraints, as regards viewing and listening conditions and dependability of equipment used; monitor how well programme-content is used, and where practical, "in-course" changes could be made to improve the system; monitor both relations between media used and the feedback system between farmers and media producers. |
| 10. Summative evaluation.        | Measure impact of communications strategy by means of KAP summative-evaluation procedures; use results as feed-forward information for future production decisions and channel selection.   |
| 11. Review and replanning.       | Plan for continuity, adjustment and adaption to changing audiences, project needs and opportunities.  |
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The needs assessment that took place prior to the CFTF project was achieved over three visits to Nepal and AAN, in February 1988, November 1988, February 1989. During the

first visit to ActionAid Nepal, in February 1988, a series of discussions were held, with senior members of staff, that looked at the possibility of setting up a Communications Unit at Thakani. AAN, although wanting to move forward in the area of communications, had no formal structure for Development Communications, nor any systematic resource centre to deal with the few audio-visual resources that already existed, such as film strips and photographs.

The first step was to conduct a brief field visit to assess the type of programme currently being conducted in the field. Here, a particular emphasis was placed on a) day-care centres and b) women's income-generating projects. Both in February and November, attention was paid to these aspects, and the most important discovery made by AAN was that although a women's section had already been created within the organisation, nonetheless, and all too often, women's issues were still being overlooked by other sectors such as agriculture and forestry. Therefore, it was acknowledged that a new approach was necessary if women's development were to be monitored throughout all the programmes in such a way as to ensure the greater integration of women in the overall project. Consequently, the aims and goals established at this stage were outlined in the report as follows:

- 1) To establish a Communications Unit in the Thakani centre.
- 2) To have trained an AAN staff member as a communications officer.
- 3) To have produced at least one video, based on an income-generating activity for women.
- 4) To have produced a series of slide tapes, posters and flipcharts which complement the video on the women's income-generating programme.
- 5) To ensure the effective use and durability of solar panels in the project, and the efficient maintenance of all other equipment.

The situation analysis that took place prior to the CFTF project involved talking to members of the women's sector about existing policies and programmes and devising a new approach to integrating women more efficiently in AAN's programmes. In



relationship to what was available for audio-visual purposes, a few slides had been brought along by members of the office, and the response to the video equipment was very positive: it was thought that it would be very useful during the training session in Thakani. The author also expressed the need to enlist the help of the target audience in the actual process of production of the material, so as not to restrict them to a viewing of the final product. This was a key approach taken by both Martha Stuart Communications and Worldview International Foundation, and one which assisted in the success of their DSC projects. Furthermore, Neil Walton mentioned that the success of CFTF would greatly depend on the willingness of field workers to use the audio-visual technology in the field, and this point was subsequently included in the staff's training programme in the field.

The equipment needs of the project were also discussed at this juncture. It was confirmed that World Neighbours had supplied AAN with five Solar Opix 100-slide projectors which could be used during the follow-up stage of the project, and the specific equipment needs for the CFTF project were outlined as follows: a photographic camera, video camera, solar panels, rechargeable batteries, TV set, VCR unit, flipcharts and VHS tape-film for the camera. These were supplied by the author, with other basic equipment provided, as necessary, by AAN from their Kathmandu office.

The needs assessment that was carried out in 1989, at the beginning of the *Communications for the Future* project (CFTF), are as follows:

#### **7.4.1 The Needs Assessment**

The first week of the project was designed to establish the level of knowledge reached by the five women participants who had attended the Himalayan Bee Concern training course in November 1987. In particular, the author wished to clarify how successfully the women had managed their frame hives since the training, what theoretical understanding of

beekeeping had been gained from the course and, finally, what kinds of problems they had encountered in the last year while managing the hive.

#### **7.4.2 The Problem Formulation**

This was achieved by the control questionnaire presently shown in Appendix VI, and from this the following points were clarified: that the women wanted a longer course, as they found five days was insufficient time to assimilate all the points and information; and that, instead of its being held in Kathmandu, they wanted it to be relocated to the field. (The first training course had been held at the Himalayan Bee Concern Centre in Kathmandu). The women also stated that they would have liked very much to see the use of pictures and videos during a training course, since, on their initial course, there had been no projected visual educational material of any kind. Finally, all the members of the control group seemed very positive about the use of the frame hive, and yet only two members of the group had actually used this device for harvesting honey (one 1.5 kg, the other 2 kg). The gap between existing and desired behavioural patterns was identified as communications-based, i.e., as involving the need for information and for changes in attitudes and skills, as opposed to being resources-based, which would have required extra supplies and services.

#### **7.4.3 The Situation Analysis**

At the outset of CFTF, it was understood by both AAN and the author that a precise knowledge, attitude and practice (KAP) survey could not be conducted within the framework of the case study. However, both the knowledge and the attitudes of the women *were* tested by questionnaires during the formative-evaluation stage of the programme, and a rough guideline was drawn up by which to gauge the type of change required to conduct the CFTF project.

- a) The long-term aims were that women in the Sindhupalchowk district would become more confident, and better integrated into AAN's projects.
- b) The conducting of CFTF would encourage the adoption of modern beekeeping techniques amongst women as a means to creating an income-generating activity, and this in turn would result both in higher production of honey and in long-term confidence in beekeeping, as a financially and emotionally rewarding source of income.

However, only the shorter-term objectives could actually be monitored and analysed within the context of the thesis. The monitoring and analysis of long-term objectives were conditional on the adoption of the recommendations outlined at the end of the thesis.

#### **7.4.4 The Target Audience Analysis**

In the needs-assessment stage of the project discussions, it was decided that women should be the target audience for CFTF material, and that the training courses should be co-educational, but with a predominant number of women. The target audience amongst the women were thought to be those who already had farming and maternal commitments; this would normally include women in the 19-35 age group, but no one would be excluded from the training course because of age or gender differences. To enable them to target the group of young women and girls, who are most at risk from abduction by brokers, AAN also wanted 14-17 year olds to attend. The Gurungs and the Chetris were the ones most likely to come forward for training, but Brahmin women in particular were also identified as a special-needs group. The social, cultural and religious restrictions (mentioned in Chapter 3) on women from Brahmin households had the effect, as ActionAid's nutritional survey revealed, that children from Brahmin households were affected by having a low intake of high-sugar and high-energy substances. If encouraged to adopt beekeeping, such households would now have a regular supply of honey to supplement their normal food supply.

The level of success both of the CFTF project and of the DCPM that it used, was monitored by means of the questionnaire analysis, personal observations, staff interviews and comments, but it was also reflected in the actual number of women who adopted beekeeping as an income-generating activity.

#### **7.4.5 The Communications Objectives**

The communications objectives involved in the supplying of a video, slide set and flipchart were as follows.

The objective behind producing the *video* was to encourage the target audience to, firstly, attend a beekeeping training course and, secondly, to want to become beekeepers who used the new frame hives. The importance both of the role of local participants in the video-production process, and of the concepts of deprofessionalisation and locus of control would also be illustrated.

For the slide set, the main objective was to give detailed training in all aspects of beekeeping, as well as to include important messages on the role of women in development. This medium would be responsible for the major part of the knowledge-transfer stage of the communications process.

Finally, the flipchart was designed for practical, follow-up training in the field that would reinforce the knowledge gained at the training course and ensure, moreover, that it was being put into practice. The knowledge of the trainees would be reinforced by the visual reminders and guidelines that were laid down in the flipchart.

#### 7.4.6 The Production of the Prototype

The development of the message-concept was determined by monitoring the control-group questionnaire - visiting both the Himalayan Bee Concern Centre and BETRESP - by conducting discussions with staff members of AAN and also by using the research conducted by Fussell & Haaland, Worldview International, McBean and Walker (outlined in Chapter 4) as a guide to types of medium appropriate for the dissemination of information. As a result of these discussions, the following media or forms were chosen through which to conduct the training message: a campaigning and motivational video, an in-depth-training slide set and, finally, a back-up flipchart.

The *emotive* function of the communications process was designed to be entertaining, with a strong human and emotional response being elicited from the live drama in the sequence. The effectiveness of this emotive function was made clear when the video *Bees and Chameli* was shown and many women actually cried, they were so moved by the story. The purpose of the *conative* function here was to encourage both enthusiasm for beekeeping and a desire to participate in the project. The form of the *referential* function, i.e. the content of the message, was kept quite general: no detailed training information was depicted in the video, though an extra scene, on simple training, *was* included during the shoot. The *phatic* function of the message was acting like a challenge, the throwing down of a gauntlet, to take up a new idea, while the *metalingual* function was playing on the metaphorical parallel between the importance of the queen bee in a colony and the women's role in community development. Finally, the *poetic* function was the song that acted as the theme music throughout the video.

Again, Neil Walton suggests, if the target audience hears the message from a number of sources, then the creative effort involved in producing the initial message can, accordingly, be exploited several times (*Personal Communication*, 1987).

So, once the message and the medium had been decided upon by the Communications Unit, the next stage of the DCPM was to conduct a formative evaluation of the material.

#### **7.4.7 The Formative Evaluation**

The only medium which could possibly be pre-tested was the slide set, and although the circumstances were not ideal for this purpose, the slide set was successfully tested amongst a sample of the target audience. The results from the pre-test stage were invaluable - as a guideline for the final production both of the slide set and of the video and the flipchart.

The pre-test took place at a lady health-care-worker meeting where over thirty-four women and six men were present. The slide set lasted approximately thirty minutes. After the showing, an open discussion was held in which some very interesting suggestions and comments were made, and questionnaires conducted. Firstly, it was pointed out that more information was wanted on the whole subject of beekeeping, as well as on the marketing of honey after production. The audience then talked about different ways of producing bees wax and different techniques for harvesting the honey, both of which had in fact been omitted in the slide-set production. These topics *had* been considered by the communications team for inclusion in the slide set, but, at the design stage, they were omitted because it was thought by members of the unit and the author that no more information than that presently given could readily have been absorbed in the present circumstances. There was the danger that the slide set, which was made up of fifty-two slides, could have run on for too long; any additional materials, it was thought, would have jeopardised the interest and concentration of the target audience.

The open discussion at the pre-test stage also brought up the question of whether the queen bee was more important than the king. (In Nepali, the queen bee is called a *rani* and the worker a *rana*. There is no "king", as it were, in the bee colony, only a *drone*, a male

worker bee.) This question provoked laughter and indignation. But it also showed a high degree of awareness of gender-related issues, which implied that even in the pre-testing stage associated with the audio-visual materials, the process of conscientisation and awareness-building about women's role in development was already occurring. One lady health-care worker actually had a open disagreement with the local panchayat leader - not the usual kind of confrontation that would take place in a public forum.

It would seem, therefore, that the slide set can be as long as it needs to be, and should not be confined to any one specific length of time. Secondly, the slides should include the marketing aspect of honey production, and not be confined to showing just the new techniques of beekeeping involving frame hives. Thirdly, the slide set itself should act as a springboard for wider discussions, as the resultant teaching and awareness-raising goes beyond that which is generated by the message contained within the communications material itself, i.e. the slide set.

As regards the pre-testing of the video, it was found impossible to make more than one video within the time span of the CFTF project.

Once the initial script had been written, a meeting was held between senior staff members to discuss the video's content and story line. The Senior Women's Officer, Urmila Simkhadas, wanted to include specific elements that would give the video a wider, more universal, appeal, and also to incorporate aspects of gender issues that went beyond just those pertaining to beekeeping. Other subjects suggested ranged, for example, from kitchen gardening and sanitation to the communal concept of passing on information about schemes from one village to another.

All the topics were deemed important elements, a fact which directly supported Karen Speth's comments as well as justifying the team's own aim to use video as a broad, motivational tool. Subsequently, although the video appeared to be focusing on one main

message - the introduction of frame-hive beekeeping - *other* messages and abstract concepts pertaining to a wide range of women's development needs were also implicitly present.

Another important aspect that emerged from this preproduction meeting was the fact that it was quite important to put across the dangers of immigration to the city on the part of household heads, as well as to stress the difficulties this creates for women by leaving them often in a very vulnerable position. This particular point emerges in a subtle way throughout the video *Bees and Chameli*.

#### **7.4.8 The Production of the Final Communications Materials**

##### **a) The production of the slide set**

After the pre-test of the slide set, the communications team, following suggestions from Fritz Hans at BETRESP, redesigned the set to include a number of extra slides and to incorporate some of the suggestions - such as marketing the honey - which came from women during the pre-test of the set. The extra slides depicted close-up pictures of flowers with pollen, bees being put manually into the new frame hive, honey being sold in a jar, bees swarming, the queen gate and dogs.

At one point, a debate occurred as to whether or not to make a cassette tape, with a fixed script, for the slide set. In the end, because the team wanted to keep this medium as flexible as possible and open to constant restructuring, as demands from the audience change and the training sessions become more sophisticated in their content, this particular suggestion was not taken up. One of the major advantages, indeed, of slide sets is that they can be easily added to at later stages in the course of a project.

##### **b) The Production of the Flipchart**

The author, along with the communications team, made sixteen rough drawings of the key points that were deemed necessary for managing a modern frame hive. These rough



drawings were then passed on to a professional artist from UNICEF, Sumjit Ranjit. Ranjit used the already-tested three-tone representational style, highlighted by Fussell & Haaland, to draw these pictures. Although flipcharts are primary materials of a *visual* nature, a simple script can also be written to accompany the flipchart so as to allow for the fact that if one member of the family is literate he or she can read and benefit from the instructions and texts provided with the pictures. This is what was done in the present case, thus following Walker's recommendation that posters should also have written words to further convey and emphasise the development message. It would have been advantageous, of course, to have had an in-house artist who could have produced posters and other back-up visual material for the project.

### **c) The Production of the Video *Bees and Chameli***

At the beginning of the shoot, a production schedule was drawn up by the author and the communications team which gave the team a week to complete the shooting of the video, and a week to edit it.

During the first morning of the shooting, changes to the script had to be made, for Ranju Gurung, who played Chameli, was worried about portraying a mother given that she was actually unmarried. She considered it unsuitable and offensive to have herself portrayed as married even if only in a drama. Consequently, the set-up depicted in the drama was changed to that of a widowed brother who had left his sister in charge of his children. The communications team realised that it was very important to be sensitive to local customs and traditional patterns of behaviour, and to acknowledge that although the video amounted to nothing more than a drama shown for development purposes, many villagers who would have been seeing the video for the first time might well have interpreted the story as a real-life one. Naturally, this is also one *positive* advantage to using video as a communication tool, but at the same time it is important to prevent the actors and those participating in the drama from having to endanger their reputations by contravening local social customs.

During the first day on location, high winds developed at about 11 o'clock in the morning. As a result, when a simple microphone, attached to the camera, was first used, the sound resolutions were picked up, and these distorted the wild track and the sync sound. Therefore, it was necessary to change the shooting schedule so as to allow it to start earlier in the morning.

Another change to the video script involved altering the language used to suit the learning abilities of the different actors and village women partaking in the production. Mrs Tikaram, in the fourth scene where she is accepting honey from Chameli, had a crisis of confidence because she was speaking in Nepali, as opposed to her local language of Tamang. During the shooting, Jaya adapted the script to a simplified Nepali which she would find more easily memorable. This maximised both her sense of participation in the production of the communications material and her involvement in structuring feedback channels. Furthermore, during the shooting, the actors were continually asked for their comments on the scenes, and on the script content. From these discussions, Ranju, Bishnu and Jaya decided to add on an extra scene. In the part of the video when Chameli's bees had absconded and Bishnu, "Durga", suggests that Ranju, "Chameli", go and receive further training from AAN, a new scene comprising a simple training instruction was included. Consequently, the video now bridged the gap from being merely a motivational tool to being a simple training one as well.

The editing of the video was conducted on a two-machine editing suite using VHS standard equipment at the Development Communications Project Centre in Kathmandu. A week had been allocated for this process, and as it turned out, the editing was successfully completed within that time period. The only area of difficulty was that a number of cut-away shots (extra shots that can be inserted in the video) had not been covered in the shooting of the video, and, therefore, some last-minute, close-up shots of flowers and bees were taken at BETRESP. The hand-over policy in the decision-making process was one deliberately adopted by the author, and its effect was that by the last day of both the shooting and the editing, the production decisions were being made by Jaya

and Ghaneshyam and other members of the team. This was part of the process of hands-on learning, designed to try and demystify the use of video and other audio-visual materials by transferring the locus of control completely to the communications team and the actors. It was unfortunate that none of the actors could have been present during editing, but logistically it would have been impossible to house them all in Kathmandu during that particular week.

#### **7.4.9 Distribution and Monitoring**

All DSC materials were distributed at the beekeeping-training course which took place in Thakani from 20 to 22 March 1989. The video was used on two occasions, firstly as a motivational tool on the Sunday before the training was due to start - in order to encourage women to attend the training - and secondly as an evening's educational showing during the course. The slide set was used during the two-day training course by the beekeeping trainers, Tanka Rai and Sedai, both as a source of detailed information and as a briefing to the target audience on bee management. The flipchart, which was designed as follow-up visual material for the trainees, was distributed not at the end of the training course but after they returned to their village.

It must be noted that the original training course was scheduled for three days, but due to local social unrest the course had to be shortened. Unfortunately, a group of brokers and robbers had taken over one of ActionAid's rural centre Haibung, close to Thakani. They had issued a death threat against Ranju Gurung, who played Chameli in the video, and had held a member of ActionAid's field staff at knife point. Combined with this, they had also threatened to attack the Thakani Training Centre at night. These incidents naturally put many of the staff members in danger, creating considerable tension and jeopardising the effectiveness of the beekeeping training course. The reasons for this attack were unclear, but in Chapter 3.5 it was noted that many women in AAN's project areas

face the threat of abduction from brokers. Indeed, on one occasion during this period of unrest, Ranju herself narrowly escaped being abducted by the same group.

However, during the course, the Communications Unit did manage to carry out two further questionnaires, one for 8 women participants who had watched the video, the other for 10 women participants who had seen the slide set during the training course. (Some of the latter had also viewed the video on the previous day).

The points raised from the questionnaire connected with the video were extremely interesting; and in effect they recommended the modifying of some approaches to the use of that particular medium. Although none of the 8 women had ever been to school, and although only 1 could read a little Nepali, 5 had travelled to Kathmandu to see a feature film once before, and 5 had kept traditional bees in wall hives in their homes.

A number of questions were designed to find out how easily the audience had followed the story of *Bees and Chameli* after only one viewing. As it turned out, 5 participants had remembered the name of the heroine and 7 remembered what Chameli used the honey for that Durga had given her. However, no one could give the reason why Chameli had to borrow money from a local moneylender in the first place. The team realised that after showing the video they would have to clarify this point to the audience as it was obviously not made clear enough in the script. About 4 respondents understood that when Chameli's bees absconded, she needed to learn more about beekeeping and to go and get training and help from ActionAid. With regard to its effectiveness as a motivational tool, 7 out of 8 participants said they would like to attend a training course for modern hive management, and all 8 agreed that it was a good income generating occupation for women.

The results of the interviews conducted after the screening of the slide set showed that the answers to each question were much more detailed than the responses to the video questionnaire; and it would seem that the participants had little difficulty in interpreting

the pictures (though two women quite honestly responded that they were unable to read the English words written on the side of the modern, frame hive). Indeed, one respondent, when asked what the advantages of the frame hive were, gave six different answers, which included: there was no risk to the comb; the hives protected the young larvae; they were easier to clean; and they produce more honey, and hence generated a better income.

This in itself illustrates a remarkable degree of comprehension of some of the basic advantages to modern hive management. All 10 respondents, what's more, knew both that honey was kept in the upper chamber and that the hive should be regularly cleaned, and over 8 could correctly define the words "pollen", "egg", "swarming", "queen cell" and "pollination". Once again, the terminology and concepts of modern beekeeping seemed to have been well grasped by those participants interviewed. It would seem apparent, therefore, that both the video and the slide set succeeded in achieving their purpose of firstly promoting and secondly informing the target audience about modern beekeeping techniques.

#### **7.4.10 The Summative Evaluation**

The summative evaluation included a long-term monitoring of the Communications Unit, as well as of the effect of the audio-visual material on the target audience. The results arising from this process were recorded mainly by members of the Communications Unit themselves, and the author's suggestions were subsequently made in 1991. A discussion held in 1991 between the author and Yadav Raj Gurung, the head of the income-generating unit at ActionAid Nepal, uncovered a number of interesting facts arising from the promotion of beekeeping as an income-generating activity for women:

- 1) Honey production remained slightly behind the production forecasts, and the marketing of honey in Kathmandu had not even started.

- 2) There had not been a big enough change in the number of people moving from beekeeping to bee managing/keeping; hive management, however, *was* now being conducted.
- 3) Although training periods for women had been adapted to accommodate both their individual needs and the reality of their household responsibilities, no further beekeeping training had been conducted amongst women since the 1989, two-day course.
- 4) The motivation amongst women for beekeeping was still high, with many still demanding modern frame hives.
- 5) One village, Mahankal, enjoyed a very successful period of honey production, and this is probably due to the fact that the village is located close to a forest, and so had an abundant supply of bee flora.

As regards both communications materials in general and the use of the slide sets, video and flipcharts, CFTF has achieved all its major objectives:

- 1) The video unit at Thakani has been operating successfully for over two years, while the video *Bees and Chameli* has been used by other sector heads in ActionAid as part of their training programmes, and has been circulated to Save The Children - UK, UNICEF, BETRESP and UNICEF.
- 2) The equipment donated by BP Solar International and Chloride Solar for the *Communications for the Future* project had succeeded in generating sufficient power for the Communications Unit to operate in the field.
- 3) The slide set was duplicated and used for training by other staff members at ActionAid.

- 4) The flipchart was distributed to all members of ActionAid's beekeeping project.

#### **7.4.11 Review and Planning**

The review-and-planning stage of the project process occurred in May 1991, and consisted of the preparation of a follow-up communications workshop for staff members of ActionAid in Thakani. The main objective of the workshop was to brief all sectors of AAN on how to incorporate Development Support Communications into their own project-programming and development work. This briefing included a detailed breakdown of the Development Communications Process Model, along with the promotion of the method of, firstly, absorbing the indigenous knowledge of the villagers and, secondly, being more aware of how communications work on a non-verbal and psychological level. To be included, here, are Jakobson's functions of communication, which, however subtle, are vital parts of the communications process (see Staff Training).

Moreover, the communication team decided to prepare a questionnaire for participants in the 1989 beekeeping-training course in Thakani. The questionnaire would ask the female participants about the level of their honey production since the training course, hive management, social confidence, involvement in other income-generating activities, whether they could remember the Development Support Communications material - i.e. video and slide set - and, finally, whether they still possessed and used their flipcharts. This questionnaire was to be conducted after the follow-up training workshop.

It is important to look both at why honey production was lower than expected and at what effect the DSC materials had in conveying properly the messages concerning beekeeping. Perhaps one key point here is that the mere exposure to, and the frequency of diffusion of, a message are crucial factors ensuring its adoption. The fact that the course was cut short, and that AAN has not held any other beekeeping training courses since 1989, has limited both the degree of exposure of the materials and the target group's

access to them. BETRESP's report for AAN highlighted that good initial, and good follow-up, training are absolute necessities if the effective transfer of knowledge is to be ensured (BETRESP, 1990).

Another important point is whether or not the team really achieved the participation of members of the target group for long enough in the Development Support Communications process. If the locus of control - which can be changed through the use of slide sets and videos as opposed to plays and songs - still ultimately remains in the hands of the newly trained team, then with projected media it might be impossible to achieve full audience-involvement, not only at the design and participation stage but also at the follow-up and distribution stage. Are the target audience able to have constant access to the materials they help produce? And if so, would this increase the transference of knowledge? The flipchart was meant to act as the follow-up piece of material, but it was only distributed *after* the training course and perhaps was not referred to often enough by the participants.

Finally, however, it must also be observed that beekeeping is a very complicated income-generating activity, requiring a high degree of skill and commitment, and it is dependent on many environmental factors which are out of the farmers' control. Given that the successful adoption of it as an income-generating activity is dependent on a number of external factors (bee flora, climate, construction of hives, predators, etc.), it might be the case, therefore, that although the DSC material contained all the relevant training messages, beekeeping itself was not the best activity around which to base the CFTF case study.

Another consideration is that the building-up of a truly participatory communications-process takes longer than three months, and should therefore be viewed as an ongoing process, developing and growing over a number of years.



## 7.5 Conclusion

In this chapter, the framework of the DCPM has been used both to describe the CFTF project and to break down the different activities and steps taken to carry it out. Significant omissions and problems have been identified in the DCPM, and these, it is stressed, should be addressed in any project using Development Communications in the field. Firstly, the DCPM neglects the importance of the functions of communication. Secondly, it fails to recognise the need for participation on the part of the target audience in the actual production of the communications materials. Finally, the tone of the model emphasises the "top-down" nature of dissemination of information rather than the "bottom-up" approach which is preferred by the author, who stresses the importance of including these aspects in Development Communications models of the future.

## Chapter 8

### Conclusion

This chapter is split into three sections: results, conclusions and recommendations. The results cover two areas, firstly the success of the CFTF case study in establishing a Communications Unit, and secondly the effect of the DSC materials on the target audience. Specific conclusions are then drawn both from these results and from earlier discussions, and recommendations are then made to AAN and to other NGOs wishing to establish a Communications Unit. These conclusions and recommendations were drawn up by the author during her last visit to Nepal in May 1991.

With regard to the technical aspects involved in the Communications Unit, all the equipment has worked very well over the last two years. The solar panels have successfully generated all the energy necessary to power the TV and VCR. The portable, solar manpack was invaluable, during the CFTF project, for recharging the video-camera batteries in the field, and has continued to be used, since 1989, in the production of other videos. During the whole two years, there have been only two technical faults with the VCR, and these were soon rectified once the VCR had been brought to Kathmandu for repair.

From a production point of view, the Unit, since the end of the *Communications for the Future* project, has continued to produce a number of DSC materials. These include four videos, one play, three slide sets, a series of development songs and a poster/calendar. This represents a major step forward for the communications team, showing that it is capable of producing both projected and non-projected educational materials for field work. The unit has also been utilised by staff members of ActionAid: seminars and staff-training courses have been recorded, and then the results played back to a group, and relevant discussions then held. The video has had, therefore, a dual role, assisting in the training both of staff and of AAN's target audiences. The equipment now housed at the unit in Thakani has expanded to include eighteen videos, numerous slide sets, film strips

and three solar-powered slide projectors. The Opix projectors were found to be very useful, as they were highly portable and could take both slides and film strips.

The communications team seem also to have successfully grasped the basic tenets of the DCPM involved in the production of the DSC materials. For instance, all the materials produced in the last two years by the unit have been pre-tested in the field; secondly, all the content was made relevant to the different sectors in AAN, and was adapted according to local needs; and thirdly, the team sought to find out from the villagers what their needs and perceptions were in relationship to the type of materials which should be produced.

The results drawn up from the presentation of the beekeeping-training materials are as follows. The video was shown on two occasions, and on both, the questionnaires that followed showed that the audience had understood the basic premise of beekeeping as opposed to beehaving, and that they were also fully motivated towards taking up beekeeping as an income-generating activity. Results from the slide-set questionnaire, by contrast, showed a higher degree of detailed knowledge-transfer, in terms of the concepts and terminology relating to beekeeping. The fact that the pictures showed, blown-up, both the inside of the queen cell and the different types of bee (i.e. queen, drone and worker) made these very aspects of beekeeping much more easy to understand. The slide set was projected onto a large, portable, white-paper screen, and was easily viewed by an audience of forty persons. The flipchart was distributed to all the participants in ActionAid's beekeeping-training course, but no actual questionnaire has yet been conducted on the response to this material.

With regard to the effect the DSC materials have had both on women's development in ActionAid's project area and on the level of honey production, a number of interesting results can be drawn. The women participants greatly enjoyed participating in the production of the video and slide set; and appearing in these productions increased their self confidence. Many of the comments recorded after conducting the video questionnaire showed that the participants could really relate to the medium because of feelings of

familiarity towards the dress and the location shown in the video. By May 1991, 15 beehives were fully operational (mainly near areas of abundant bee flora), and the demand for hives was still strong. However, many bees were still absconding, and BETREPS, in their report, put the failure to prevent this down to the need for further initial, and better follow-up, training in the field. The honey produced still seems to be used only for home consumption or as a barter good, and the marketing of the product in Kathmandu, or other areas, has yet to take place.

The conclusions which can be drawn from the above results are as follows. Insofar as it incorporates the approach recommended by Coldevin and the FAO for establishing a communications campaign, the DCPM is an appropriate and useful tool for producing DSC materials. It represents a good framework, therefore, for implementing the project in the field.

However, during the implementation of the DCPM in the field, it became clear that there was one significant omission in the Model. This was that it neglected the importance of Jakobson's functions of communications. For instance, the song that opens the video, and acts as the theme music throughout, played an vital poetic function in the video since this song became a tune that was sung by women on the beekeeping training course, and it spread across the villages. However, at all levels, the functions of communication were very subtly included in the production of the materials, and this made them culturally more relevant as well as more appropriate to the needs and abilities of the target audience.

The video had acted as a very good motivational and basic training tool, encouraging the adoption of beekeeping and illustrating its appropriateness to the lives of women living in ActionAid's project area. Moreover, the slide set had not only been an excellent medium for the transfer of detailed knowledge about beekeeping to the target audience, but it was also easily operated by members of the Communications Unit. Of all the materials, it was the *video* that the communications team took most pleasure in producing; it was considered more enjoyable and glamorous to produce a video than to produce slide sets

or other materials. Another reason the participants preferred watching videos was because of their lifelike effect and novelty value. However, what the results of the questionnaire did show was that *more* information concerning beekeeping was absorbed and decoded through the slide set than through the video. Despite their preference, the members of the Communications Unit felt that slides were a more effective DSC material than the video, especially in terms of both the cost and the time factors involved. At the same time, they appreciated that these media had different objectives.

The fact that there were so few technical problems with the unit suggests not only that solar power is a suitable source for generating equipment in the field, but also that the use of projected materials in remote rural areas without electricity is something that can be achieved.

With regard to changes in women's development, in the integration of women in rural development programmes and in the use of beekeeping as an income-generating activity, a number of key issues emerged. It is important, firstly, to view women's development from a gender-orientated perspective, in that the different gender roles must be taken into consideration at the time when an income-generating programme for women is implemented. Beekeeping and the marketing of honey can be performed by women and are appropriate for women, but the man's role (especially on the marketing side) must also be taken into consideration. And men might also play an important role in catching absconding bees. Therefore, training materials, although they can focus on women, must also include men, and especially when discussions on marketing are taking place.

Secondly, the production of honey is probably not as extensive as it could be, and there are two main reasons for this. Firstly, the frequency of exposure of the target audience to images affects the speed of absorption both of an idea and of changes in a particular field of practice. Therefore, one training course alone is not seen by the author as enough to ensure that all the methods of modern hive management are transferred to the group immediately. It is necessary to show the audience the same materials (as contained in the

video and slide set) *a number of times*, so that over a period of time they may become totally familiar with the course material. Secondly, better follow-up systems should be put into practice by ActionAid, including, here, using the flipcharts so as to ensure that any on-the-spot difficulties with hive management can be addressed as quickly as possible.

Drawing on these findings, and on earlier arguments in the thesis, the author's recommendations for ActionAid, for the Communications Unit and for the women's income-generating sector are as follows:

1. The unit should immediately conduct a questionnaire amongst the members of the March-1989 beekeeping-training course in order to assess the following points: the extent of hive management amongst the women participants, their social autonomy, their involvement in decision-making processes both within and outside the home, whether they can remember the training course and how the DSC materials were used in it, and what difference beekeeping has made to their family income.
2. From the results of the above questionnaire, lessons can be learnt that would help to improve the use of video in the field. Furthermore, other kinds of communications material, such as puppets and posters, may also be found useful to the beekeeping campaign. The author recommends that a second training course be held for the participants of the March-1989 course in order to reinforce the techniques of beekeeping and hive management. From then on, six, monthly, short refresher courses should be held.
3. The Unit should strengthen its links with other organisations' communications units, and develop a body of knowledge to which all organisations within Nepal can gain access. In the years to come, the Unit could expand to act as a Development Support Communications consultancy unit for other NGOs operating in Nepal, thus spreading the Development Communications Process Model's

approach (together with the recommended adaptations) to other project-teams around Nepal.

4. The Unit should run a communications workshop, each year, for staff members, in order to emphasize the importance of communications within the project, and to stress its use in the field. These workshops would also recommend different ways of including the villagers in the process of producing communications materials. The use of role-playing, songs and of drama, for instance, would help to convey various development messages.
5. Women should continue to be targeted as key participants of all AAN's development work, and no negative images of women should be portrayed in communications or other developmental, educational materials.
6. Even if the use of the particular communications material does not lead to the adoption of a new practice, the actual process of participating in the design and production of the material will serve, in itself, to increase women's confidence and level of awareness of the training issue. This whole technique should, therefore, continue to be encouraged.

The recommendations made by the author to other NGOs wishing to produce Development Support Communications in the field are as follows:

1. Communications should be made a priority in all development programmes. This means allocating a substantial budget to this sector each year, and ensuring that a communications sector is established using trained staff within the organisation.
2. A systematic approach should be adopted towards such communications models as the DCPM so that all topics concerned with communications are covered. However, the model should incorporate the functions of communication as laid out

- by Jakobson (1958); and it should also include, wherever possible, a number of individuals from the target audience in the make-up of the team that designs and produces the communications materials.
3. The needs and perceptions of the target audience should be heeded, and it should be assumed that the communicators have as much to learn, in the process of communications, as do the receivers.
  4. Within any communications campaign, there should not be a bias towards one form of Development Support Communications material over another, but rather all forms should be considered. If the same message is received through a number of different channels, this will not only increase the frequency of exposure of the message, it will also widen the villagers' access to that message.
  5. Members of the communications team should be trained to understand their target audience both from a psychological level and from a developmental perspective. Only by trying to place themselves in the position of those with whom they are trying to communicate can they hope to adopt an effective approach. This may well mean having to adopt a new type of listening based on openness and not on presupposition.
  6. A high level of awareness of gender issues is essential if any kind of integrated, development programme is to succeed. The status, role and active participation of women in development projects have to be taken into account if long-term sustainable development is to be achieved.
  7. Appropriate income-generating activities are recommended as a vital entry-point into the area of women's development. But the introduction of beekeeping for this purpose should be evaluated carefully according to its appropriateness to the given environment and the programme itself.



The aim of this thesis has been to evaluate the FAO's existing model of Development Communications through a report of field work carried out, and to test any subsequent modifications required. During the course of this undertaking, it has been the author's wish that practical as well as theoretical lessons will have been learnt. It is hoped that these lessons will be useful to NGOs, local communities and, ultimately, to the women themselves who are involved in integrated and sustainable development projects.

## APPENDICES

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# **Appendix I**

## **Communications for the Future**

Thesis title: "The potential use for audio-visual technology for development educational purposes."

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## **1. Introduction.**

As part of my M.A. Thesis with the Centre for Overseas Research and Development, Durham University, I shall be setting up a small audio-visual unit at ActionAid's regional office in Thakani in Nepal. This field work will take place from January 1989 to April 1989, and will constitute the primary research for my M.A. Thesis. What is unique about the project is that I shall be using solar panels to generate the audio-visual equipment in the field. By trial and error, I shall test the feasibility of making a totally self-sufficient communications unit that could, ultimately, operate anywhere in the developing world.

### **1.1 Objectives of the Project.**

The aim of this research, firstly, is to establish a small audio-visual unit, at the new Thakani Resource Centre, which would include flipcharts, posters, a video, a television and slide-tape/film-strip projectors. With this equipment, I, along with two colleagues from ActionAid Nepal, will establish an audio-visual campaign designed to cater for the women living in and around the area of Thakani. The major objective of the audio-visual campaign is to introduce an income-generating project which ActionAid has already tried and tested in another area. And a further aim of the project is therefore to compare the levels of success enjoyed by local women adopting and understanding the new income-generating programme, introduced using audio-visual techniques, with the one which was established using more traditional forms of communication.

### **1.2 Beneficiaries of the Project.**

- a) Above all, the rural women in ActionAid's development area, but also the community at large. (Rough estimates are at about 7,000 families).

- b) ActionAid Nepal's staff members (108 full-time and 100 part-time), who will have access to all the equipment, which can be used both in training seminars and in their own areas of work.
- c) ActionAid Nepal as an organisation. All the audio-visual equipment which will be used in this project is going to be donated to ActionAid Nepal at the end of the four months of research. If the project proves successful, then it will act as a blueprint for encouraging the establishment of other communications units in ActionAid's Regional Offices in Asia, Latin America and Africa.
- d) The Institute of Child Health in Great Ormond Street, currently launching a child-health video-education series called *All Nations Child Health Video*. The outcome of my research will be of direct interest not only to the Institute but also to many other organisations helping to sponsor the research.

## **2. ActionAid Nepal**

### **2.1 Introduction to ActionAid and the Project Area**

ActionAid is an international charity that operates in over 14 countries worldwide. ActionAid Nepal was established in 1983, and works in the Sindhupalchowk district of Nepal, north-east of Kathmandu. The main aim of ActionAid is to assist people in building a self-sustainable process of social change and economic growth by concentrating on the most disadvantaged groups in the Middle Hill region. This aim has been achieved by the establishment of multi-sectorial programmes of integrated rural development which include programmes in the fields of basic education, agriculture, community health and economic development.

The geographical location of ActionAid's project area comprises one whole Ilaka in the Sindhupalchowk district. This is the above-mentioned Middle Hill region of Nepal. Although it is relatively close to Kathmandu, there are no roads connecting this project-area to the capital. The environmental conditions of this region place considerable constraints on ActionAid field workers, for it can take up to three days' walk to reach some of the more remote project-areas. Lack of access to the remote areas often increases communication problems, and it makes reaching many of the communities on a regular basis very difficult. There are approximately 7,000 families, in the project-area, whose average annual income is about 5,370 Rs., which is well below the government's estimated poverty line. The majority of the community's activity consists of smallholder, mixed farming, based on crop production on the terraced hillsides. The subsistence farmers, some of whom own livestock as well, are very dependent on the weather and on family labour for the success of their agricultural operations.

## **2.2 Existing Audio-Visual Material for Development Education at ActionAid.**

At the moment, ActionAid has no audio-visual material. To date, they have depended solely on informal seminars and group meetings for the dissemination of information. Occasionally, during staff training courses and seminars, films such as *The Fragile Mountain* and *The Soil of the Land* were shown to members of the staff for educational purposes, and for its entertainment value. These, however, are 16 mm films which had to be hired or obtained from other international aid agencies, who were often reluctant to release them for more than a day or two.

Secondly, there is no official photographer or communications officer at ActionAid, though black-and-white photos and colour slides have been taken by various members of the field staff throughout the five-year programme. These photos have been used in printed material both in Nepal and in the U.K., but they are still unclassified and are in a state of relative disarray. Recently, ActionAid has ordered a number of Opix slide and film-strip

projectors which are solar-charged and battery operated. These can be easily carried into the field by individual staff members; and they will prove a vital part of the equipment used for the audio-visual campaign.

### **3. Communications Techniques.**

#### **3.1 The Use of Flipcharts, Posters and Slide Tapes.**

More traditional forms of visual communication, like flipcharts and posters, represent good media for introducing the visual image into educational techniques. As stated above, very little has yet been done at ActionAid in terms of developing visual aids, and, therefore, during my first month of research, I will produce on-the-spot communications materials, in the form of posters and flipcharts. If the rural community is now exposed to these, the jump from having seen virtually no visual aids in the field to understanding a video presentation is facilitated.

#### **3.2 Why Use Video?**

My aim in setting up a small video unit is to monitor the real impact of video, and of the accompanying audio-visual material, on a rural community that has not been previously exposed to any visual images. In order to assess this effectively, I am going to base the campaign around an income-generating project for women. By evaluating how well the new project has been adopted, I can then monitor the impact that the audio-visual campaign has had on certain groups. There has been much written about the effectiveness of audio-visual material in the field, but little academic research has been done to substantiate these claims. The purpose of using video as an educational tool is not to replace the personal contact between field workers and rural communities but rather to



enrich it. Therefore, communications media act as a support to field workers' efforts. So, the questions which will be asked are:

- a) Is video a good format for in-depth training in the context of new programme initiatives?
- b) Do the advantages of portable video outweigh the costs and technical difficulties that occur in using it?
- c) Is the use of video a good method of finding out how people are changing and developing within a given community?
- d) Can the use of video make a difference to in-house training for ActionAid's staff, and help them in developing role-playing techniques?
- e) Does video act as a gathering mechanism, i.e. as an added incentive for people to congregate at the local resource centre?

#### **4. Women in Development.**

##### **4.1 The Need to Make Audio-visual Equipment especially for Women.**

Women's contribution to economic and social development is still constrained by their limited access to education and information, and this hinders their full participation in the development process. It has been shown by Acharya & Bennett that rural women's total work-burden is greater than men's and that women generate more income than men for the total household economy. They are also primarily responsible for the farm enterprises, both in terms of labour contribution and managerial skills.

However, most training has been focused on men as the producers and providers for the family, often ignoring the important role women play in household subsistence. The low level of female literacy has a negative impact on their access to knowledge, and although the national average of 18% represents a substantial increase over the last thirty years, it is still way behind the male illiteracy rate of 52%. Experience has shown ActionAid that it was not enough to create a women's section within the organisation, since, all too often, women's issues were overlooked by the other sectors, such as agriculture and forestry. The new approach adopted this year is to have one senior member of staff looking at women's development throughout all programmes, in order to ensure a greater overall degree of integration in the context of projects undertaken.

#### **4.2 The Importance of Income-generating Programmes.**

The importance of using income-generation as a starting point for women's development can hardly be overemphasised. Most rural women have little time to spare, and very often, participation in traditional programmes, like family planning and health care, is a luxury they cannot afford. But productive, village-level employment can be perceived as giving cash benefits to the whole family, and in due course it will also encourage both the development of literacy and the participation of women in other community programmes. A number of sources examining family consumption patterns have indicated that women spend more of their income on the health and feeding of the family than do men. Therefore, the enhancement of women's contribution to production and income represents a sensible way of insuring an improvement in the health and welfare of family members. Consequently, one of the main videos I intend to shoot next year I would like to concentrate on a new income-generating project that ActionAid is trying to promote in the area.

## **5. The Method of Setting Up an Audio-visual Unit.**

### **5.1 Unit-establishment and the Pre-production of Audio-visual Materials, January 1989.**

At the beginning of January 1989, arrangements must be made for all the equipment to be taken up to the Thakani office. For the first month, I shall be preparing flipcharts, posters and slide sets on the subject of the video campaign for a women's income-generating programme. Also, during this time, having already decided on the subject matter of the video (with the help of an interpreter as well as the new communications officer), we shall hold discussions with the field workers in order to determine the best way of approaching the filming. Questions as to whether songs and role-playing should be included must be discussed, as well as the women's own level of perception and expectation. Visual-literacy rates are relatively low, and this must be taken into consideration, alongside practical considerations as to workloads and traditional customs.

Pre-testing the video and other audio-visual equipment is essential if we are to ensure that the audience is receiving the meaning, or message, intended. Research has shown that some rural populations have difficulty interpreting some of the visual images presented to them, so it is important that the video is as "localised" as possible. In the pre-testing stage, I shall record the feedback on the video on a response sheet, and then alter the video so as to take account of the women's suggestions.

### **5.2 Production of the Main Video, February 1989.**

I shall shoot and edit the video with the help of the new communications officer, and shall then use the new equipment (solar-powered television and VCR) to play the video to the group of twenty women involved in ActionAid's attempt to start an income-generating programme. I shall monitor their reaction to this video, as well as their adoption of the

new ideas, or even of the income-generating activity, over the next two months. Also, during this period, I shall shoot a video during one of ActionAid's staff meetings. This will be played back to the staff and used to monitor their own teaching and communication techniques.

### **5.3 Production of Alternative Visual Materials, Mid-March to April 1989.**

From mid-March to the end of April, I shall be involved in making a series of slide tapes and film strips to be used in all areas of ActionAid's programme. These could be used in agricultural, forestry or health-care projects, and will be targeted so as to help the whole community. The material made will be specifically for the Opix projectors and slide tapes.

### **5.4 Evaluation of the Project.**

In April 1989, I shall carry out my first evaluation of the project, as well as a communications-impact study. This will include a documentation of the difficulties and successes that have occurred over the last three months.

In August 1989, I shall return to the project-area and conduct a final evaluation and impact-study which will include a report both on how the equipment has been used in my absence and on what new material has been produced since April.

## **6. Summary.**

By April 1989, I will therefore aim:

- a) To have established a unit in the Thakani Office.
- b) To have trained one of AAN's staff-members as a communications officer.

- c) To have produced, certainly, one video on income-generation for women and, possibly, another on in-house training for members of staff.
- d) To have produced a series of slide tapes, posters and flipcharts which complement the video on women's income-generating programmes.
- e) To have ensured the effective use, and durability, of the solar panels used in the project, as well as the efficient maintenance of all other equipment.

### **Sub-appendix 1.**

#### Necessary Equipment.

1. Video camera/JVC, or National Panasonic MC7, plus tapes.
2. Small, portable solar panels to be used, in the field, for recharging the video-camera batteries.
3. Portable television, purchased in Kathmandu and run off batteries.
4. Video cassette recorder: National Panasonic.
5. Solar panels and battery box, off which the unit can work, comprising:  
Solar array 2 x 1245 solar modules connected in 11 and mounted on stainless-steel structures; battery box which houses 12P 137 solar lead acid battery, a BPR1 solar module regulator and a 130 VA volt inverter.
6. Flipcharts.
7. Photographic camera: Pentax Zoom 70; plus film.

## Sub-appendix 2.

The budget for the research project.

1.	Transportation of Equipment:	
	a) From U.K. to Nepal	£300
	b) From Kathmandu to Thakani (Porters' fees)	£350
2.	Equipment:	
	Photographic camera: Pentax Zoom 70	£199
	Video camera: National MC7	£1,099
	Solar panels - with donated, rechargeable batteries	£700
	TV set	£300
	VCR unit	£300
	Flipcharts, £19 each x 2	£38
	Maintenance	£100
	Film for camera: 36 Ex 100 ASA (35)	£105
	VHS tapes for the video camera	£100
	Cost of hiring VHS editing suite in Kathmandu	£150
	TOTAL	£3,091
3.	Living expenses over a four-month period, and personal research budget:	
	Return flight, London-Kathmandu	£500
	Food and accommodation, @ £10 per day for four months	£1,200
	Insurance, worldwide, for four months	£270
	Medical expenses	£60
	TOTAL	£2,030

4.	Miscellaneous:	
	Stationery, telephone, telex and fax	£150
	GRAND TOTAL	£5,621

Please note that all the equipment will be donated to ActionAid Nepal at the end of the research project.

### **Sub-appendix 3.**

#### References:

- a) Dr Dutton - Director of the Centre for Overseas Research and Development,  
Durham University.
- b) Rip Hodson - Executive Director ActionAid.

**Appendix II**  
**The Timetable and the Plan of Action for**  
**Establishing the Audio-visual Unit at Thakani.**

**Objectives.**

1. To make one flipchart, one slide set and one twenty-minute video on beekeeping, to be used in women's training programmes in the field.
2. To establish a resource centre at Thakani which will house the audio-visual equipment to be run off solar panels.
3. If time permits, to re-edit and re-shoot some material for the women's video, which has already been half shot, and, also, to use video equipment in staff training seminars at Thakani.
4. By the end of April, to have a trained communications team at ActionAid.

**Dates of Project:** 29 January-6 April.

**Personnel:**

Charlotte Bannister	C.B.
Prakash S Adhukari	P.S.A.
Jaya Prakash Shrestha	J.P.S.
Ghaneshyam Chetri	G.Ch.
Shyam Shrestha	S.S.
Him Sedai	H.S.
Tanka Rai	T.R.



**Proposed time table for the project:**

<b>Period of Time</b>	<b>Personnel</b>	<b>Activity</b>
30 Jan.-5 Feb.	C.B., P.S.A.	General research on the project. Visit organisations concerned with A-V productions and beekeeping.
5 Feb.	C.B., P.S.A.	Meeting with Urmila to identify those to be involved in the project.
6-9 Feb.	C.B., P.S.A.	Visit to Haibung and Thakani to interview women beekeepers and take pictures for the slide set.
10-12 Feb.	C.B., P.S.A., S.S., G.Ch., H.S., J.P.S.	Meeting to discuss the format, design and production of the slide set and flipchart, and also to allocate areas of responsibility and expertise in the production of the video.
13-18 Feb.	Whole team	Production of slide set and flipchart. Commissioning of artists to draw the picture.
14 Feb.	C.B., P.A.S.	Meeting with Urmila and Meena to discuss the women's participation and content of the material, and also to establish which women can assist in the field.
16 Feb.	C.B., G.Ch., S.S.	One-day video workshop, with Development Communications Productions team, on handling the MC7 video camera.
17 Feb.	Whole team and T.S., H.S.	Pre-testing of slide set in Haibung.
20 Feb.	C.B., S.S., G.Ch., J.P.S.	Final meeting to discuss the production of the slide set and video.
21-24 Feb.	C.B.	Writing of handbook on slide set, flipchart and video production for AAN.
26 Feb.-3 March	Team and T.S.	To Thakani and Haibung to shoot the video.

6-10 March	C.B., G.Ch., S.S.	Editing of video at Development Communications Productions/INF, plus voice-over recording of script.
12-17 March	Whole team	Setting up of A-V unit at Thakani. Install TV, solar panels and VCR. Training for team, and cataloguing and maintenance of A-V material.
14 March	Whole team	Showing of video, as a motivational tool, to a group of twenty women who want to become involved in beekeeping. Carrying out questionnaires.
20-24 March	Whole team, income-generating staff and women's officer	Beekeeping-training course for local women. Use of slide set and flipchart in training, plus carrying out of final questionnaire.
26 March-1 April	Whole team and AAN's staff members	Making video of staff seminar and playing it back in staff training programme. Taking extra footage for women's development video.
5 April	Whole team	Final meeting in Kathmandu.
1-6 April	C.B., P.A.S.	Write up report of the project.

Please note that not all the members of the communication team will be needed throughout this period. At our team meeting on the 10th/12th, we will be able to establish more clearly individual areas of responsibility and activity. Also, note that I have not included Sunday in the timetable. This is so that, at the end of each week, we will have one day to catch up on things not covered during the week, and also to hold any further meetings or discussions.

Each week, I will make a specific timetable for Ghaneshyam and Shyam which will include all the changes in the above programme and all the points and activities not covered here.

## Appendix III

### The Script of the Video *Bees and Chameli*

Cast:

Chameli ..... Ranju  
Durga ..... Bishnu  
Bajai ..... as herself  
Tanka Rai ..... as himself  
Chameli's brother ..... B Gurung  
Young Aunt ..... Ranju Gurung  
Her friend ..... Bishnu Nagarkoti  
Old moneylender ..... Mrs Tikaram  
AAN trainer ..... Tanka Rai

#### Scene I. On the Hillside.

Bajai: O Chameli, don't you know how to return after you have taken? Where is the money?

Chameli: Don't be so angry Bajai! How can I forget? As soon as Sanu's father returns, I shall give it to you.

Bajai: Now when is Sanu's father going to return, and when are you going to repay the money? If Sanu's father does not return, when are you going to repay the money? I like to help my neighbours when they are in difficulties, but what to do? For you, all the money that I give is like giving a dog some meat to borrow.

Chameli: Don't speak in that manner, Bajai! He has gone in the hope of earning 2-4 rupees, and will return again soon. After that, I myself will come and give it.

Bajai: Give it! You will give!... And in the big city there must be money plants from which you can pluck the money and bring it here! Where will he bring the money from? This is not the way of the villagers. What face are you going to show to borrow again and again? Think a little....

Durga: What was the money for?

Chameli: A couple of days back, when Sanu was ill for a month, I had borrowed some money for the medicine and food. Bajai is acting as though I will eat the money up.

Durga: Really! When is Sanu's father coming back?

Chameli: I don't know when. It's going to be 2 months, soon, since he has gone. The very month he went was the time Sanu became ill. What to do, unfortunate person that I am? Wherever I go, I can never stay in peace. He had gone hoping to get some more money, and now there is more trouble. What should I do? I wish I could repay Bajai's money. Is there a shopkeeper whom I can borrow money from?

Durga: What will you do borrowing money from the shop keeper? It is the same thing. Vegetable of stone, you can't eat it roasted or cooked.

Chameli: "What to do?" you can say! How can I repay this Bajai's loan? I cannot stand this night-and-day waiting.

Durga: If you agree to what I say, then start keeping some bees.

Chameli: Keep bees? Where? How can we keep bees, that fly? Like cows and other domestic animals?

Durga: Oh, didn't you know? It is easier than keeping cows and other animals. Come on, and get up. I will tell you about it on our way... You don't have to cut grass and feed bees. Nor do you have to clear up the muck. It is very easy. I have kept 2 hives. I manage my annual expenditure on salt, edible oil, and cloths out of this. If you take great care, then all your household expenditure can easily be got from beekeeping.

Chameli: Is that true?

Durga: Of course. Why not? Why should I tell you lies? I want to help you participate in a programme and in the community. Why don't you come to my house tomorrow, and I will show you everything.

## Scene II. At Durga's House.

Chameli: What are you doing?

Durga: Oh, you have come? I am cleaning the bee hive. This is the bee hive.

Chameli: Oh, so it is. I thought it would be in the roof.

Durga: That is the traditional method. See, here I used to have a traditional hive, and to keep them in the wall, but then I transferred the bees, and now I have two hives, one in my window and one here. Besides that, and

although bees are very small to look at, the bees are very hard-working and only live in clean surroundings. In the traditional hive, it is very dirty because when the honey is extracted, you get larvae too. And the bees find it difficult to work in these conditions. Like us having to work in the monsoon. Let us talk of you, and human beings. In our village house, if we kept our animals in the same place as where we cook and sleep, wouldn't that be difficult to work? The hive in the roof is working well, and is full of bees. But this one is new, so I can show you inside. You must always be careful when taking the lid off. There is where you extract the honey. Not a single bee dies.

Chameli: When do you extract the honey?

Durga: February, March, April and sometimes even May. If it is extracted clearly, then the honey can be taken out again in 15-20 days. But the bees must be happy and settled in the hive, which can take almost a year.

Chameli: Tell me, without lying, how much money you can make from a hive in a year's time.

Durga: I can't tell you the exact amount since I have not been saving, but let's say, over two years, one year to establish the hive, and by the end of the second year... maybe two thousand rupees.

Chameli: Two thousand? That is it, then! I shall keep bees! But where do I get a hive from?

Durga: Don't worry about that. Just say you want to do it and I will help you. There is a very simple training course you can go on.

Chameli: If that is it, then you can give me the hive and I will pay you back after selling the honey.

Durga: After the training course, you can get a hive and, over a period, pay back the loan. I have already paid back the loan on two of mine.

Chameli: Two!

Durga: Yes two. Why don't you have two too!

Chameli: No, no, I don't want to do so much at once. What if it gets spoilt?

Durga: Listen, for one and two the *same* amount of work is involved. Moreover, if you keep only one hive it is not at all profitable. Remember, you don't have to do any more than one hour's work per week, so that you can still look after the cattle; the children and I even keep a vegetable garden too.

Chameli: If that's the case then I will take two. And from time to time, you must keep on teaching me.

Durga: If you go on the training course, then you should teach *me* new things that you have learnt.

### Scene III. One Year Later.

Commentary: Durga is very happy. After bringing back two hives from the neighbours and taking the training course on beekeeping, she knows about things like: at what times the hives should be cleaned, and how to look after the hives. She has taken training in all these things, so it is not difficult for her to keep bees.

One day, when she was about to clean the hive, she could not see any bees in the hive, and she panicked.

Chameli: Oh what to do, I am finished!

Durga: Why? What has happened?

Chameli: There isn't a single bee in the hive!

Durga: What? How?

Chameli: I don't know whether to go back home and have a second look. Oh what to do now!

Durga: Don't panic. First, search for the bees.

Listen, if the place where the bees are staying is not nice, then they find it difficult to work and they fly away. That is why, once the bees are in the hive, for at least 20 days you must keep the queen gate on so that the queen does not escape. Through this hole, the other worker bees can come and go easily; but the queen cannot. The queen is the most important of all the bees, like women being the most important in the family. That's why after 15-20 days, when you can see that the bees are settled, the queen gate should be removed. Do you understand?

(With a swarm bag, they find the bees in the forest.)

Chameli: It was only due to you; otherwise I would be finished.



**Scene IV. Tanka Dai's House.**

Chameli: Tanka Dai!... Tanka Dai! Maybe he is not in.

Tanka: Who is it? Oh its Chameli! What brings you here today?

Chameli: All my bees escaped... Durga and I somehow managed to bring them back. I'm afraid they might escape again. That's why I've come for some advice from you.

Tanka: Oh, come upstairs. I'll show you what I've got, and explain it to you. I'm sure, you know how to handle it, you have learnt this before. First, you take this top off. This is for the bees to feed on, but sometimes some of the bees might try to escape. We have to look at the bees, and make sure they do not.

This is where the honey is kept. Just like you, I have also started keeping bees only recently, so there is no honey yet. There is no need for the lid now, but I will put it on just in case.

Now I'll explain to you why bees escape... come a bit closer. The main reason why the bees escape is that maybe things have not been working properly, maybe they had not settled in properly. Occasionally, we must check up on them. Now try to hold it yourself and lift it up. I also have put in a queen gate because I have not seen any newborn bees inside the bee hive. There has not been any sign of honey, either. In the absence of all these things, the bees may escape. That's why I have put in a Queen gate.

There *is* a little bit of honey.

Chameli: I can't see them laying any eggs.

Tanka: If you do not see any eggs, there is a chance that there is less honey because you didn't look after it or put in a queen gate like I did. We always have to take care of them. If we don't they may escape. Now, I think, you have understood the main ideas on how to look after a beehive.

Chameli: You said you have to clean the beehive frequently?

Tanka: This is one of the main facts. Bees are naturally clean insects. They can't stand dirty places. We have to pay a lot of attention to the cleanliness of the beehive. Now I'll show you how to clean the beehive. You hold this. Hold it from both ends, bring it here steadily... As you clean the beehive, you may come across a few crushed bees. We have to throw these away, as well. We have to clean the beehive in this way frequently. Now bring it back. Don't be afraid of bees. They bite rarely, and when they do they sacrifice their own lives. Put it away slowly and carefully, so that there are no chances of bees' being crushed. Mainly for the bees the cleanliness is important, but equally important is they are settled properly. We also have to see if there is enough food, and if the temperature is right. I'm sure you know this already. If you have understood all that I've said, I'm sure your bees will not escape again. OK?

Chameli: OK.

## Scene V. Bajai's House.

Commentary: One year later, Bajai was keeping two hives, and was able to sell honey both locally, to her neighbours, and also in Kathmandu for about 100 rupees per kilo. Chameli was happy to be able to give honey, even in the monsoon and winter periods, but also, this gave her great confidence, organising and handling her own money.

One day, Chameli decided to surprise Bajai.

Chameli: I came to pay back your money.

Bajai: Oh, the money... Have you bought it all?

Chameli: I have brought all of it. Here, take it.

Bajai: Ah, when did Sanu's father arrive?

Chameli: He has not come.

Bajai: Then who brought the money? How much has he sent? Sanu's father is very nice, and does not like to keep anyone's loan.

Chameli: No! How can he send? Anyway, I have not heard any news from him.

Bajai: But the money?

Chameli: The money is mine to repay you.

Bajai: Your money, how can you repay so much money?

Chameli: By growing insects.

Bajai: By growing what kind of insects? What are you saying?

Chameli: Bajai, by keeping bees and saving money. Now I will not have to take a loan of two hundred rupees.

Bajai: What? Is that real?

Chameli: See here! Now I will go. Oh, Bajai, I almost forgot. Here is a little for you to taste. Here, take it.

Bajai: What is it?

Chameli: It is honey.

#### **Scene VI. Chameli's Home.**

Chameli was selling honey to a customer. At that moment, her brother appeared, having returned from the city.

Chameli: Oh, so you have come!

Brother: What is this?

Chameli: It is a honey drink. You must be tired, and this drink will take away your tiredness.

Brother: Where did you get the honey from?

Chameli: Look here, didn't you see the beehives? I got it from them.

Brother: Where are the children?

Chameli: They have gone to school.

Brother: School?

Chameli: What would they do otherwise? Nowadays, we have to send them to school. Our father and mother didn't send us to school, and we are blind; and now you want your children not to go to school and thus become blind like us?

It's time they returned from school. They always return at this time.

Children: Oh father's come, father's come.

Chameli: To leave the children, your heart must be of stone. OK, you didn't think of me, but you should have remembered the children's faces. It's exactly two years since you left.

Brother: It is not that I didn't remember you all. What to do? I went in the hope of earning some money. But all the money I earned was just spent on eating. How could I return without earning some money? *This* is why I returned so late. It is not because I didn't love my home.

Chameli: Listen. Please agree to what I say. A hard-working person doesn't have troubles. You shouldn't be lazy. Look here, I kept bees, and the loan I had borrowed I have even paid back. I have also 2-3 rupees in cash. A hard working-person does not have problems because he works. Now I have

been sending your children to school. So don't think of going back. Whatever there is, we should live here simply. You can join some community training programme like me. Tailoring or carpet-weaving.

Brother: Yes. Now finally my eyes are open. In this village I thought I was unable to earn even a little money, and so *had* to go to the city. You showed me by proving otherwise. Now why should I go to the city? I am proud of you, because you have helped me to see a new way forward, and helped my children so that they will have a happier and healthy life. I will live here, and play in the dust of the village.

The End.

## Appendix IV

### The Slide Set for Communications for the Future.

1. Bee & flower.

This slide set is about bees and beekeeping. There are many different types of bee in the world, but the one that we can keep in Nepal is called *Apis Cerena*.

2. Bee & flower close up.

Bees make honey by collecting nectar from flowering plants, and this honey is something which we can use for many purposes.

3. Landscape shots.

In a country like Nepal, where do the bees live?

4. Nepali village.

In the houses of the villagers.

5. Village house.

In the house of villagers.

6. Wall-hive entrance.

And in the houses, they often choose to live either in the walls or under the roof.

7. Inside shot of wall hive.

This is what is called traditional beekeeping, as you don't have to do anything except provide the bees with a home.

8. Entrance to the hive.

This is another example of the entrance to the hive.

9. Inside the wall hive.

While the colony is making its *combs*, the wall hive is sealed off like this.

10. Village scene.

Many villagers in Nepal do keep bees in this way. Maybe you have three or four in your village.

11. Empty hive.

But when you come to harvest the honey from the colony, you know that, by doing so, you lose everything, for you kill off the *brood* and the young larvae. The bees will all leave the hive, and you must wait a long time for a new colony to inhabit the wall hive.

12. New frame hive.

This is the reason we are encouraging you to take the new frame hive.

13. Two frames.

These new hives are especially built with two frames: an upper, smaller frame, called the *super*, where the bees can store honey, and a lower, bigger frame where they can rear the brood. So with the new frame hive, you can remove the ripe honey without destroying the brood or pollen cells.

14. Brood attached to the bottom of the frame.

Here we see the brood frame, which is quite new and is attached to the bottom of the frame.

15a. Three bees.

Before we talk about hive management, let us see who actually lives in the hive and what the bees do. There is, in the colony, the *queen bee* - the biggest bee - who lays eggs. Then there are several thousand infertile bees called *workers*, who look



after the hive and the young eggs and collect nectar, and finally there are several hundred *drone* bees whose special function is to mate with the queen.

15b. Comb.

The bees live by making a comb that consists of hexagonal cells (made of wax secreted by workers' wax glands), and in these cells they rear the brood and store food.

16a. Different layers of the comb.

The comb-space is split into different areas. In the upper part is stored honey; beneath that are rows of pollen storage cells, and below that, finally, there are drone cells.

16b. Super chamber.

The super chamber is where honey is stored.

17. Brood frame showing eggs.

As already shown, the new hives have a special brood frame where the eggs grow and get fed by other worker bees, and where the larvae grows also. When the larvae are fully grown, the cell is capped, and this is called a *sealed brood*.

18. Worker bee coming from cell.

It takes 21 days for the worker bee to turn from an egg into an adult bee.

19. Comb filled with honey.

Bees collect nectar from flowers, and then store it in the *honey sac* inside their tummies. When they get back to the hive, they mix the nectar with a special juice, and this makes honey. Here you can see a comb full of honey which has been nicely capped (sealed). Combs filled with honey look white.

20. Whole hive.

Bees must be treated very gently, not like cattle. They need a proper home to live in.

21. Taking the lid off.

Even when taking the lid off the hive, you must be very careful not to kill or hurt any bees. The answer is therefore to do so slowly and gently.

22. Lid to brood chamber.

You must be very careful with the brood chamber, as that is where the young bees are growing.

23. Entrance to the hive.

This is the entrance to the hive, which should be as small as possible so that only *bees* can go in, and not other predators.

24. Close-up of hive.

This is a close-up of the entrance to the hive. This shows the queen gate, designed so that only the worker bee can get in and out of the entrance.

25. Inside the traditional hive.

What do you have to do to transfer a traditional wall hive to a new frame hive?

26. Close-up of colony.

First, you must find a strong, healthy colony which looks like this.

27. Smoker.

Take a smoker.

28. Action shot.  
And spray the colony with some smoke.
29. Brush.  
Then, with a brush, brush away the bees from the hive.
30. Taking the comb.  
And with your hands carefully take the comb off the wall.
31. Colony and comb.  
And then let the comb fall into a dish.
32. Comb and frame.  
Immediately place the comb into a brood frame which is empty but has a wire through it.
33. Tying the comb.  
Then tie the comb to the frame with some string and use a piece of paper too.
34. Cutting the string.  
Then you can cut the extra string. Once the comb is secure in the frame, the bees themselves will eat though the string.
35. Placing in the hive.  
Then, very carefully place the new hive frame into the bottom. It is very important that the queen bee is with the colony in the new hive.
- 36a. Queen gate.  
You should keep the queen gate on the hive for 7 days, but make sure you keep the hive close to the original wall hive.

36b. Placing the bees in the new hive can be done with your hands.

37. Frames.

Always make sure that the frames are 24 mm apart. Bees need their bee-space just like we need space in our home. Sometimes, if it get very cold, you might want to put the frames closer together to keep the bees warm.

38. Swarming.

Swarming occurs when the drone bees leave the hive to mate with the queen.

39. Queen cell.

You can often tell if the colony is about to swarm, as swarm cells will appear where the queen eggs are kept. It takes only 16 days for the queen to turn from an egg into an adult.

40. Swarm bag.

This is a swarm bag.

41. Swarm bag.

You can open the bag to catch the swarm.

42. Hive in the roof.

Where is the best place to put the hive? A south-east elevation can protect the hive from the wind, and the hive also needs some sun.

43. Sack over the hive.

In the cold, the bees cluster together to keep themselves warm, and they also eat more food. In the winter, you can insulate the hive by putting a sack over it.

44. Ventilation holes.

But bees also need to breathe, and so the hives have ventilation holes for when it gets hot in the summertime.

45. Harvesting.

The time for harvesting honey can vary, but if you have a good colony one can harvest maybe five or six times per year. The activity of harvesting can vary, in extent, from collecting individual frames to collecting the *whole* super chamber.

46. Honey extractor.

The combs are placed in the honey extractor and are spun so fast that all the honey comes out of them.

47. Honey strainer.

Once you have extracted the honey it must be strained through a funnel, with layers of cheesecloth, to make it pure and clean.

48. Honey storage.

Honey must not be kept in a warm place. Secondly, it should be stored in a water-tight container.

49. Honey pot.

This can now be sold. You should try to find the best market for your honey. That might even mean thinking about sending it to Kathmandu.

50. Hornets.

Bees, like us, need to be protected from predators, such as hornets and wasps, which like to eat bees.

51. Ants.

And ants, which crawl up the side of the hive.

52. Hive.

By placing the hives on stands and greasing the stands with oil, you will stop the ants from getting into the hive. Keeping the hive clean and well-managed will stop other diseases affecting the brood.

53. Dog.

Dogs can also help in keeping away martins.

54. Bee and hornet.

Always remember what an amazing and beautiful insect the bee is, and that honey can either be given as a medicine or exchanged for cash and other goods.

55. Bee and flower.

The bee will go from flower to flower to find the one with the most nectar, and it will help the pollination-process too.

## Appendix V

### The Text and the Pictures for the Flipchart

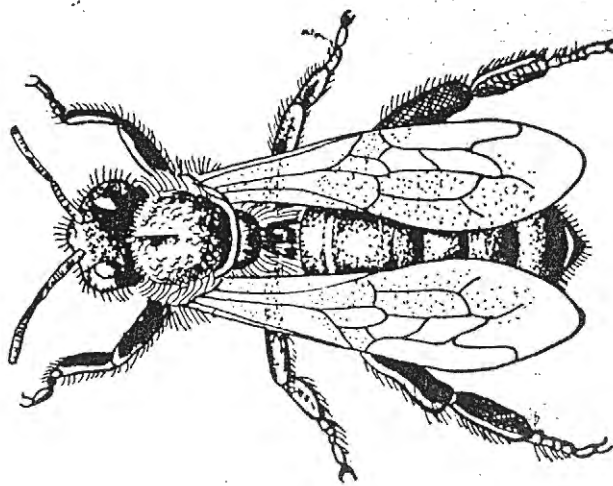
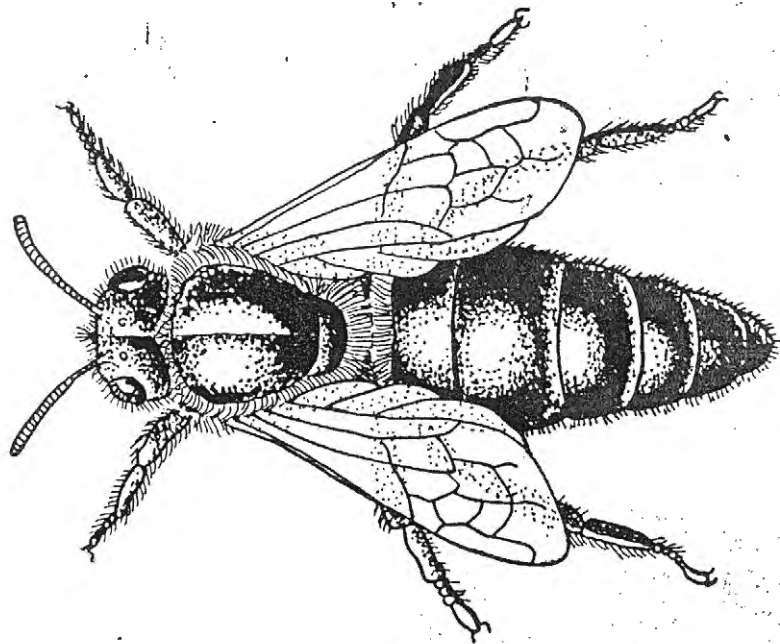
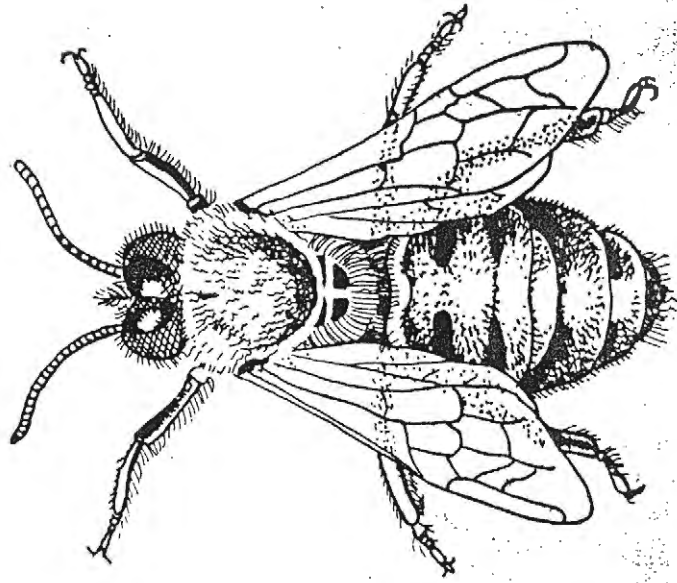
1. There are three types of bees which make up one colony of bees. The *queen bee* is the biggest and most important bee. She is the bee that lays eggs. Then there are several thousand infertile bees, called *workers*, who look after the hive, collect nectar and feed the young larvae. Finally there are several hundred *drone* bees whose special function is to mate with the queen.
2. There are many types of traditional hive in Nepal, but the most common are the *wall hive* and the *log hive*.
3. This is a picture of a new hive. There are two major sections to the new hive. One is the *super* chamber, the other the *brood* chamber. In the super chamber there are small frames in which the bees can make honey in their combs, and in the brood chamber the bees can keep the young bees and larvae, feeding them nectar.
4. These are two pictures showing how to transfer a bee colony from one traditional hive to a new hive. First, you must find a large, healthy colony, and then, with a smoker, you must spray the colony so that the bees fly off and you can see the comb.
5. Then, with a small brush, brush away the bees from the comb, and take a knife and cut a single comb off from the wall.
6. The moment you have cut off this comb, you should take the large frame - the brood frame - and place the comb in the frame. Then, with a piece of string, tie the comb to the frame. Place it in the hive.

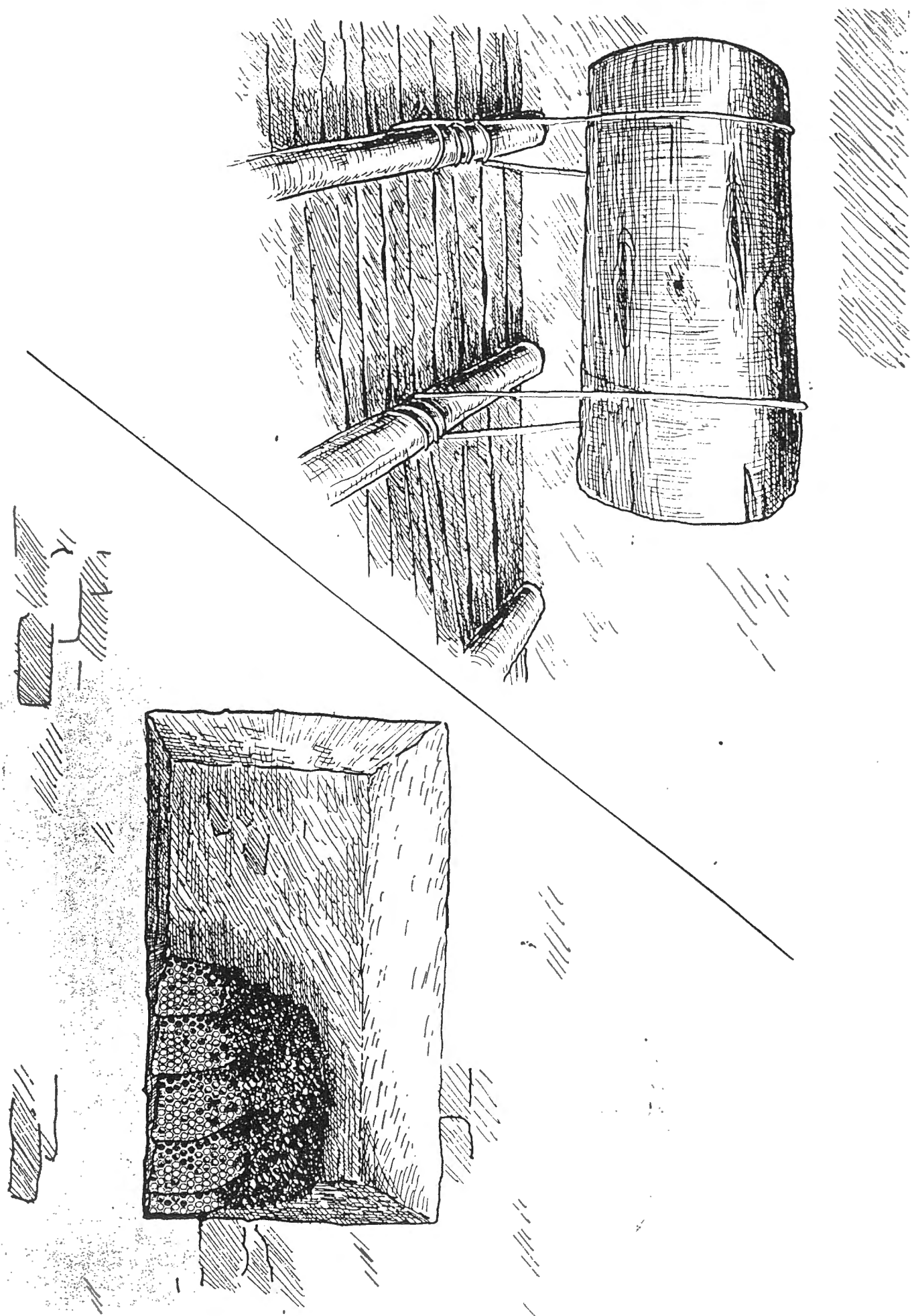
7. Once you have transferred all the combs and made sure you have the queen bee in the hive, place the queen gate on the entrance to stop the queen from flying away. You can keep the queen gate on for up to 15 days after transferring. Also, make sure that the frames are only a small distance apart from each other.
8. After one year, you should be able to harvest your first honey. This will be stored in the top, super chamber, and will look very white, while the brood chamber will have a yellow wax covering.
9. The queen cells look very different from other cells, and when you see many of these you can think about making another new hive.
10. Another sign that there are too many bees in the hive is when swarming occurs. This means all the bees are leaving the new home. If you take a swarm bag and cover it with sugared water, it is possible to catch the swarm and the queen bee and place the whole colony in a new hive. Don't panic!
11. To harvest the honey, you need two hot knives. One is used to cut the wax off the top of the honey cells while the other is heating up once you have taken the wax off.
12. Place the combs in a honey extractor - which you can easily use. If you turn the handle very fast, the honey will pour out of the comb, but will *not* destroy it. Once you have extracted the honey, you can put the comb back into the super chamber. Then you will have pure, clean honey which you can sell in the village, or exchange for other goods.
13. Hive management is very important. You must keep the hive clean and look after the bees carefully if you want honey. Place the hive on a high-up place, and put the stands of the hive in water pots. This will stop the ants from climbing up into

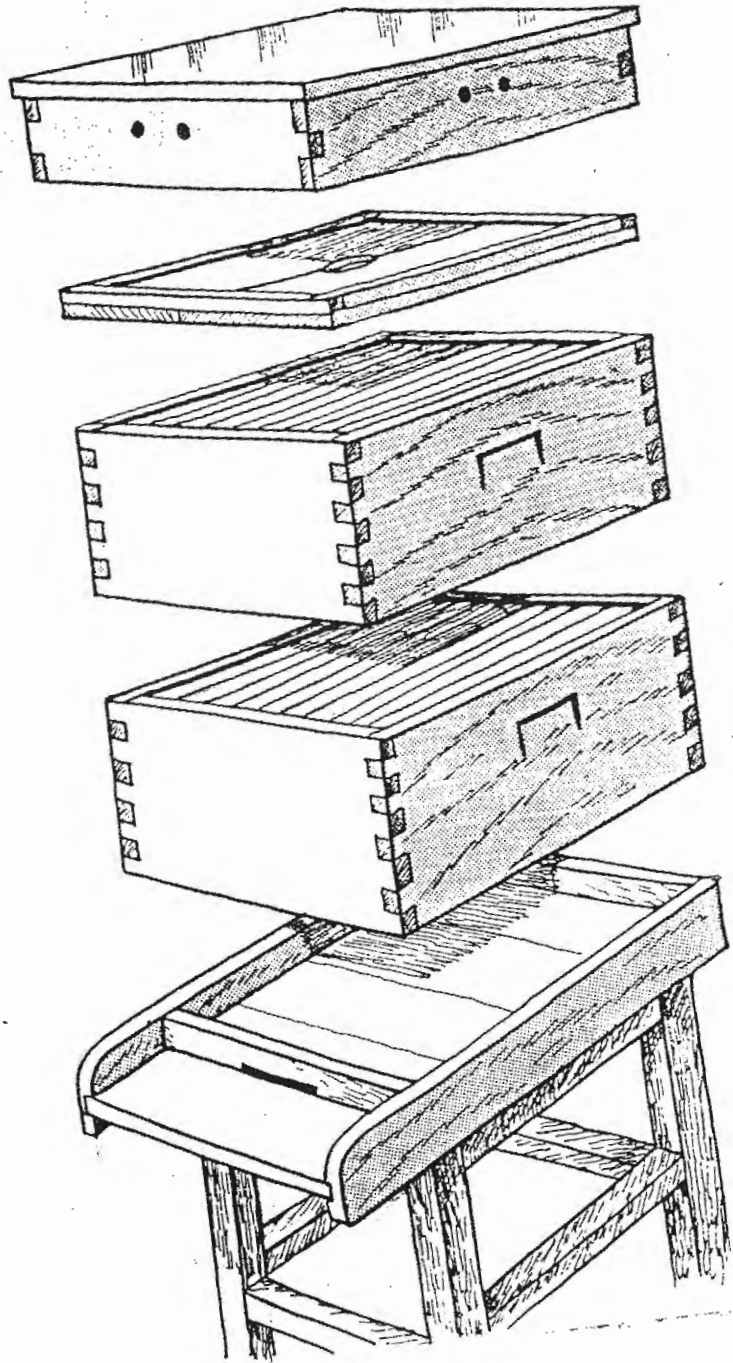


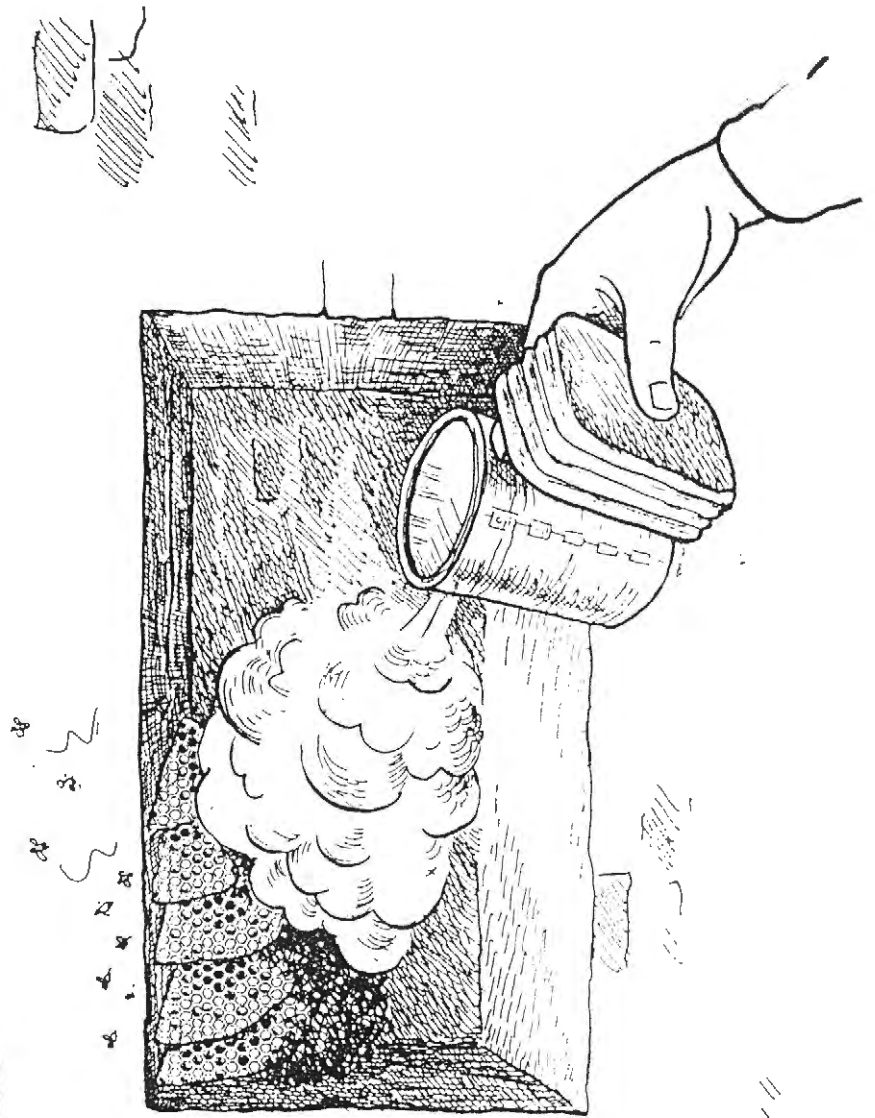
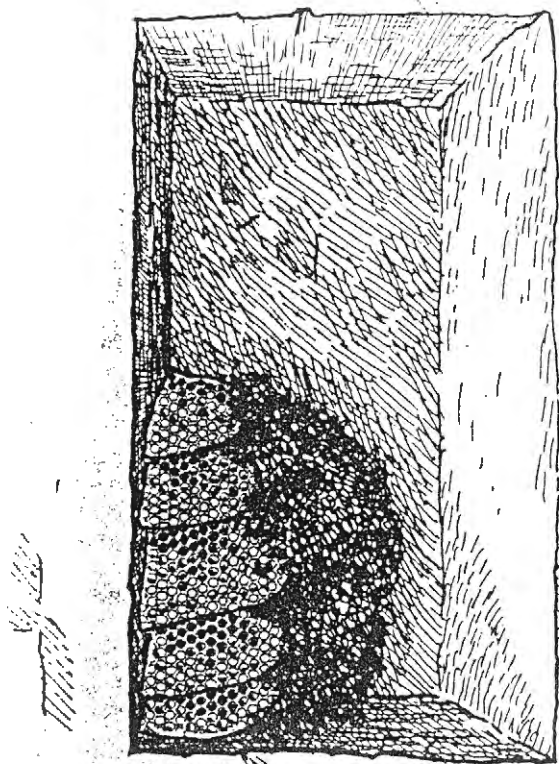
the hive and taking the honey. Also, in the winter it can get very cold, so cover the hive with some material to keep the bees warm.

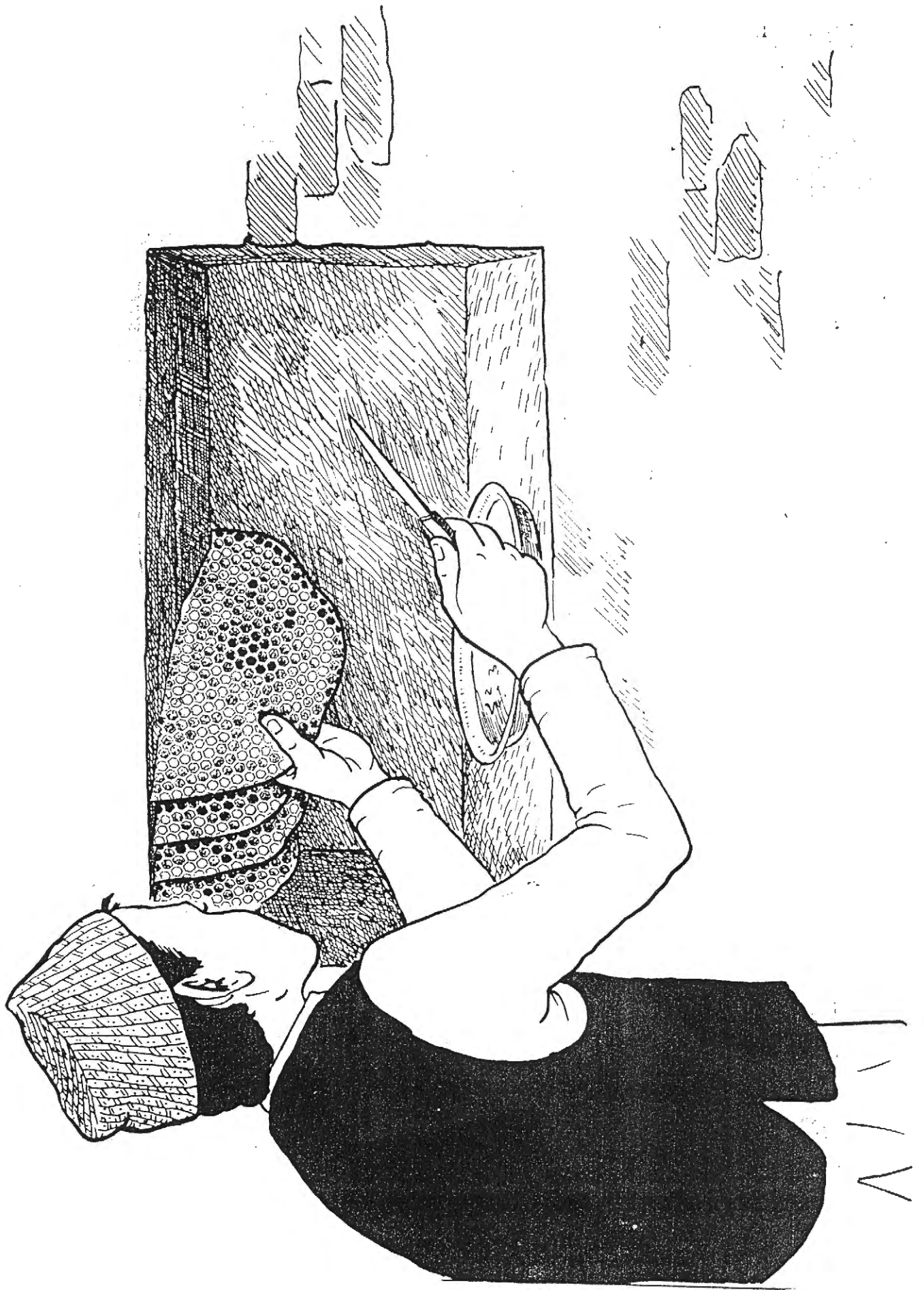
14. Finally, there are other animals who like honey just as much as us. Try to protect the hive both from hornets - who even eat the bees - and from martins who, at night, might attack the hive. By keeping a dog near the hive, you can keep martins away.

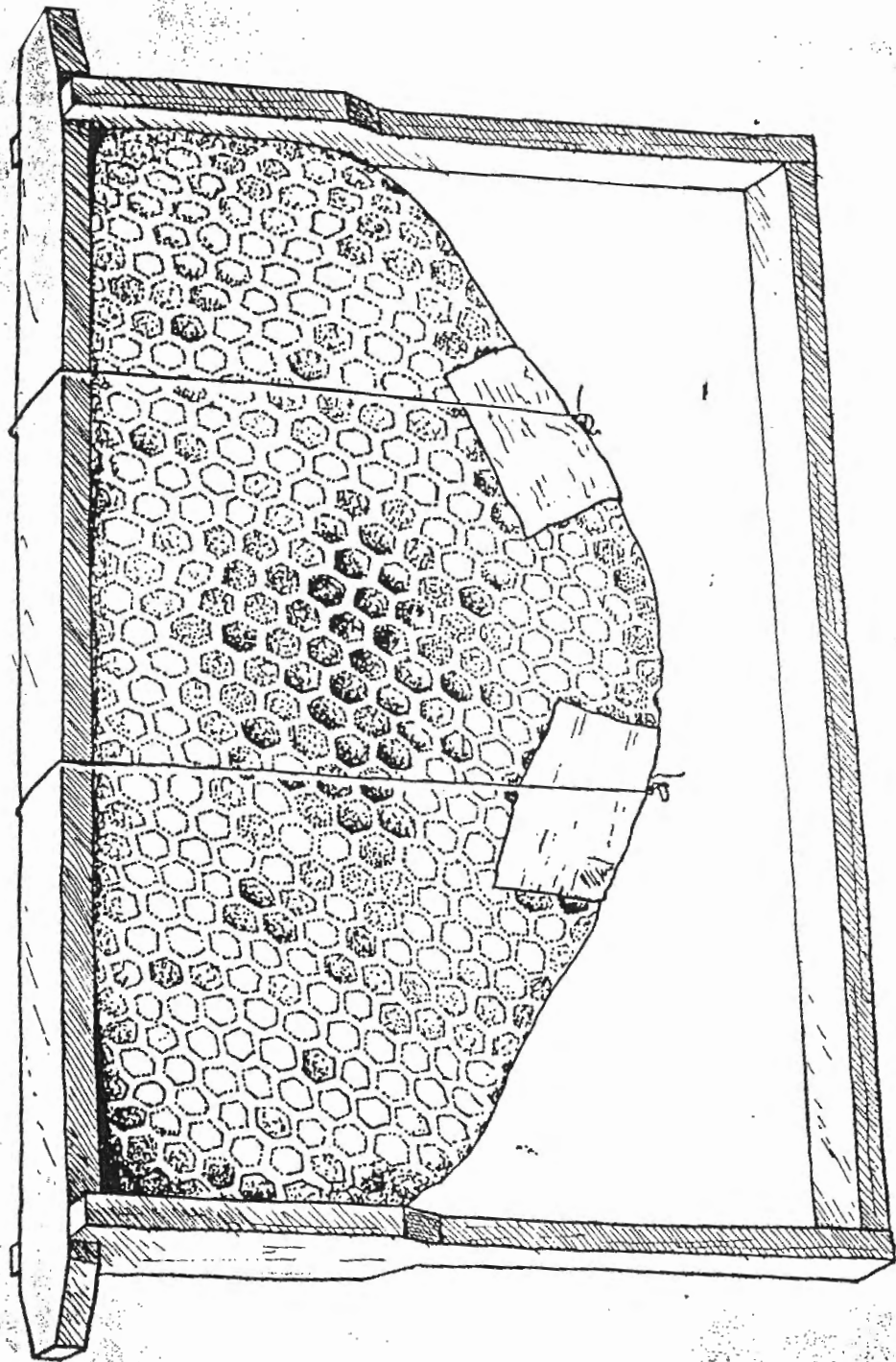




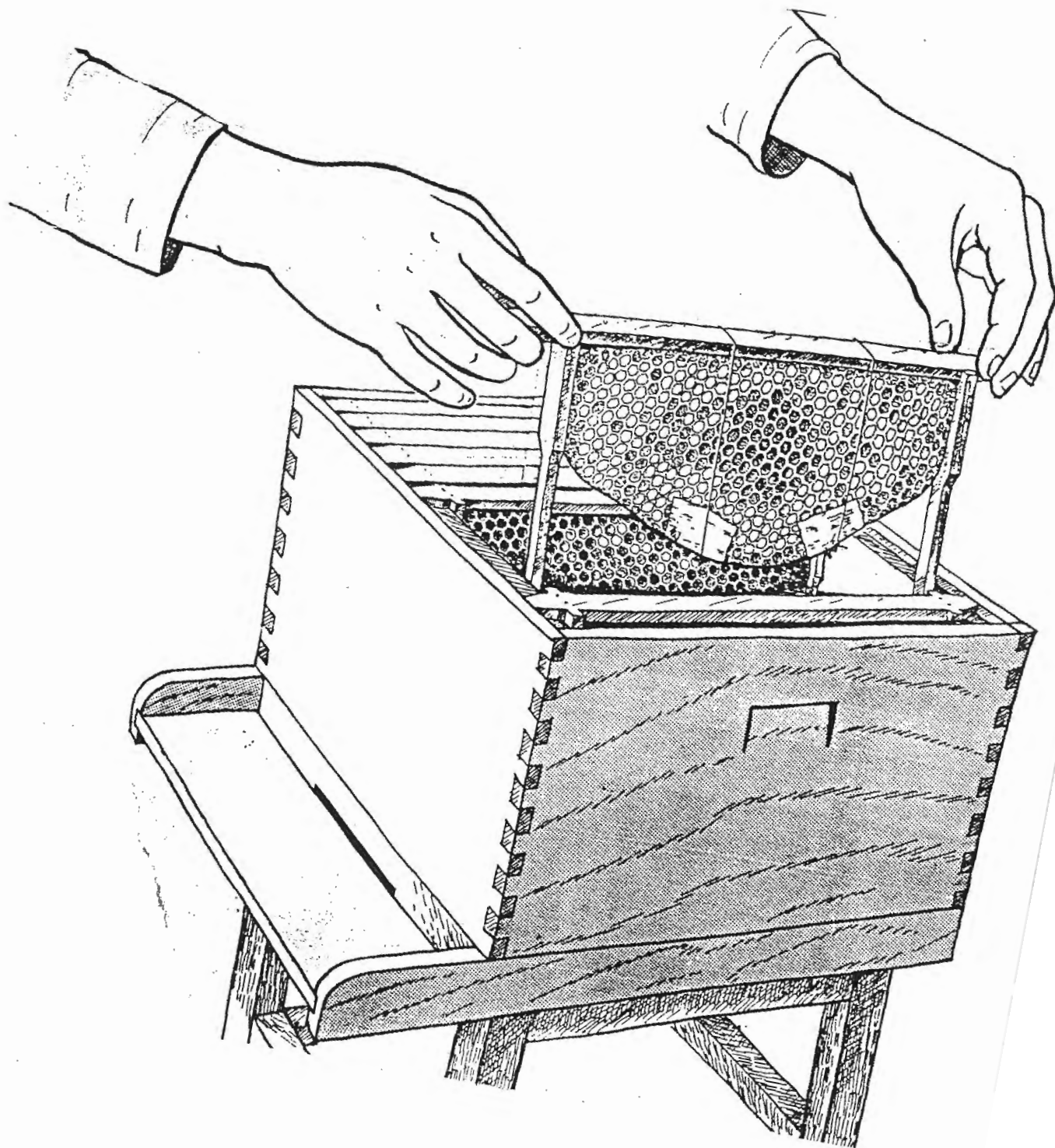




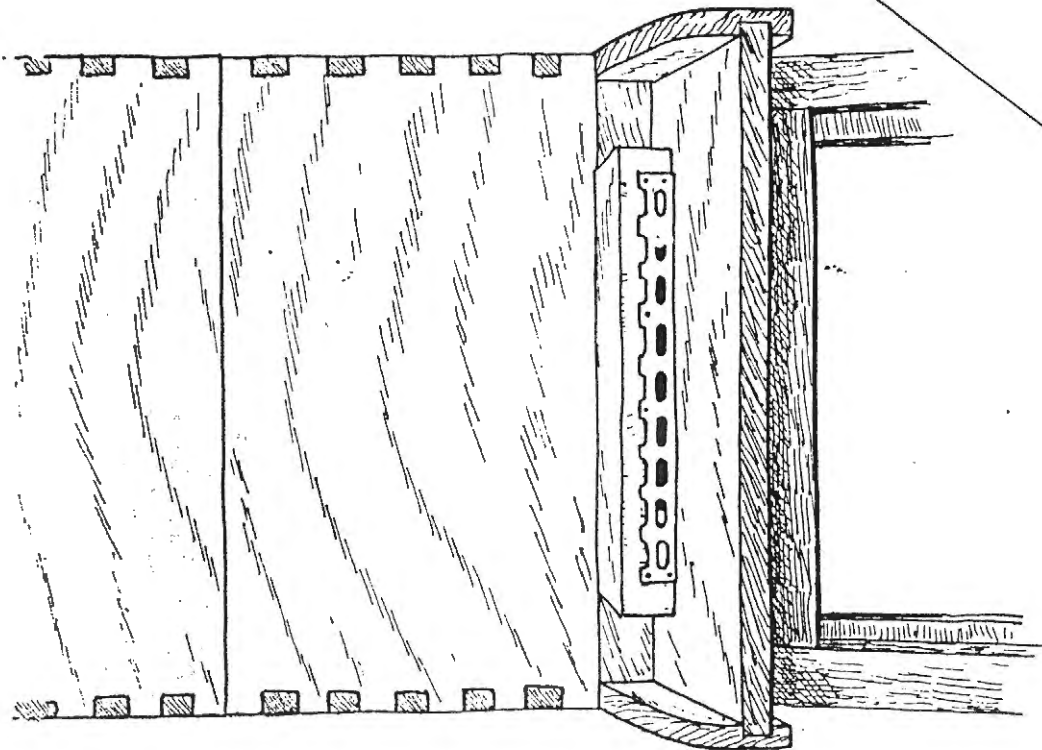
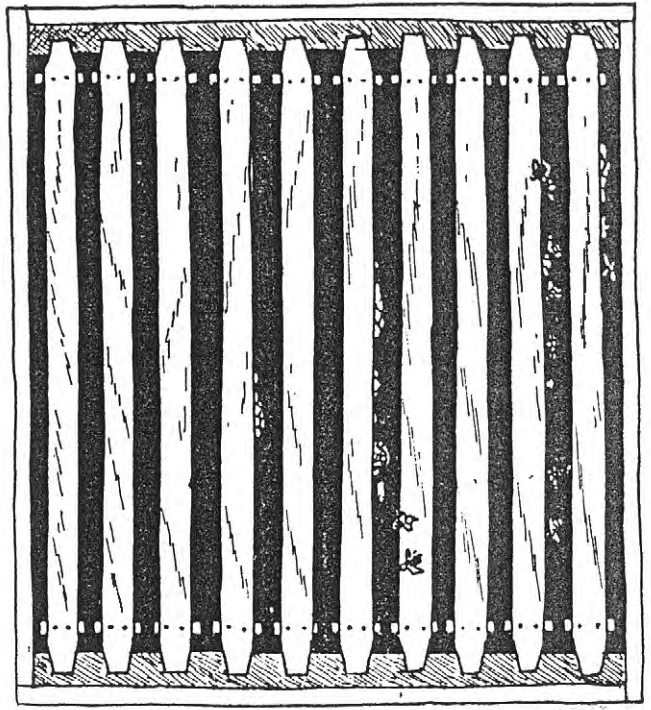


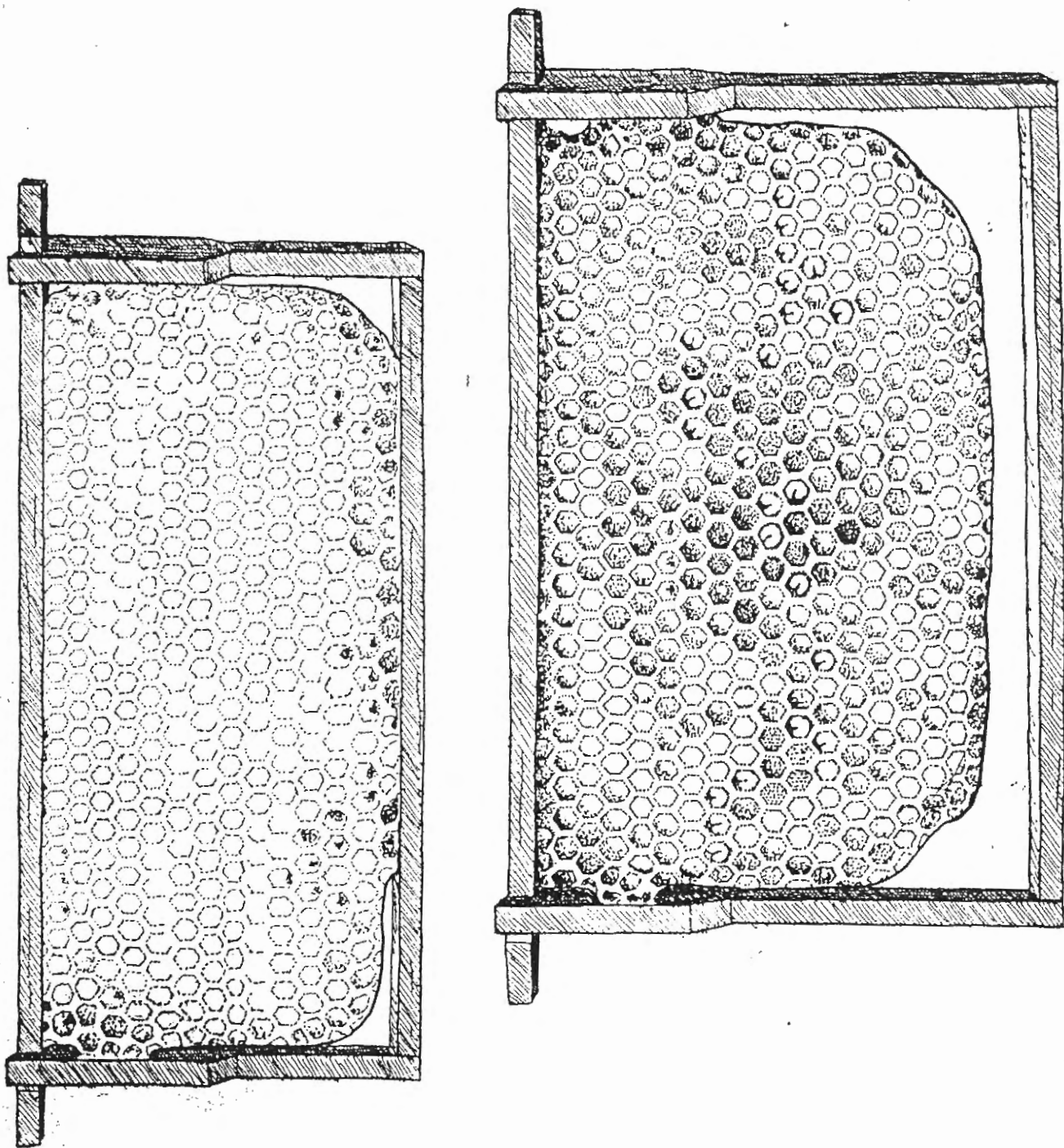


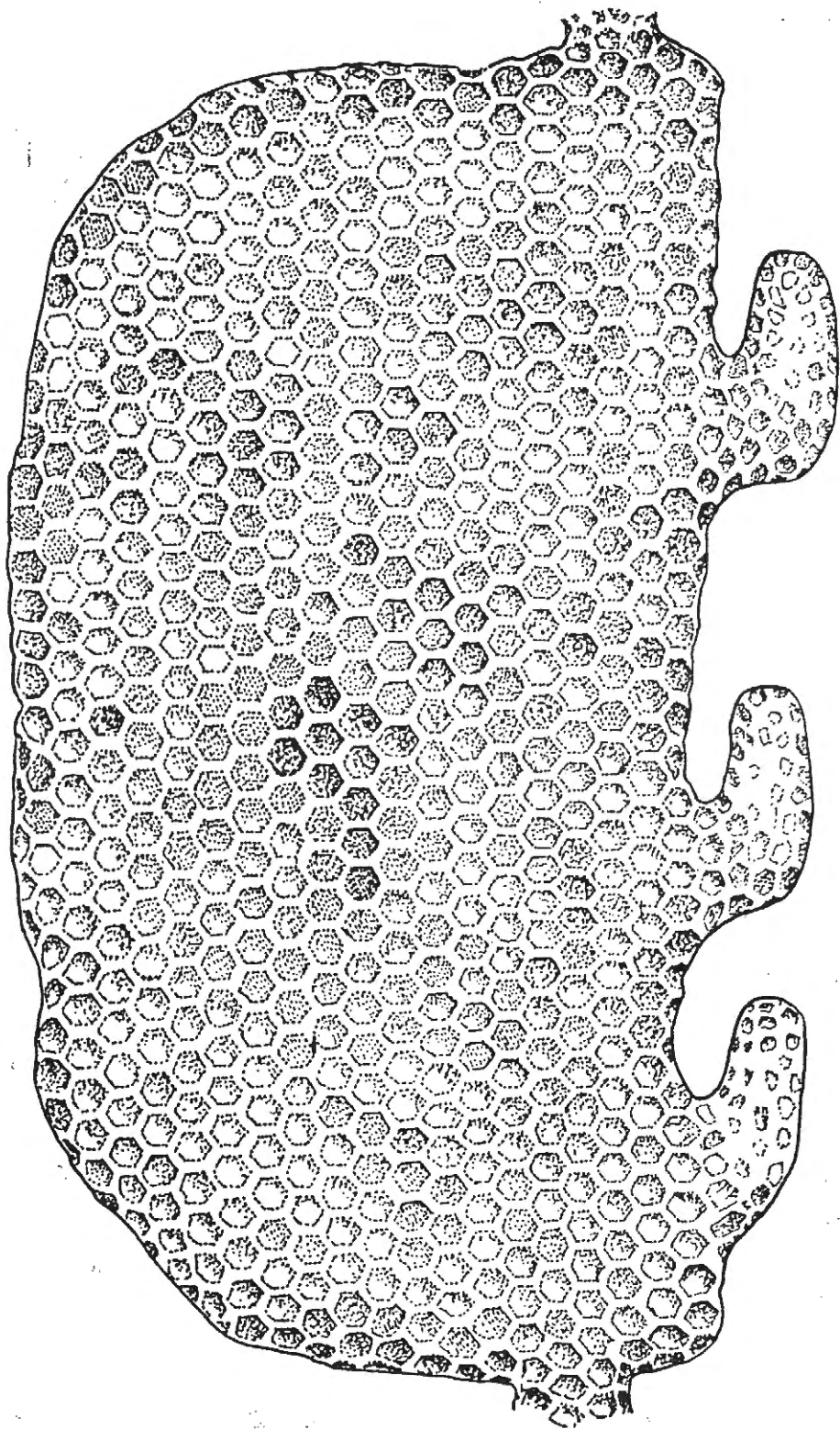


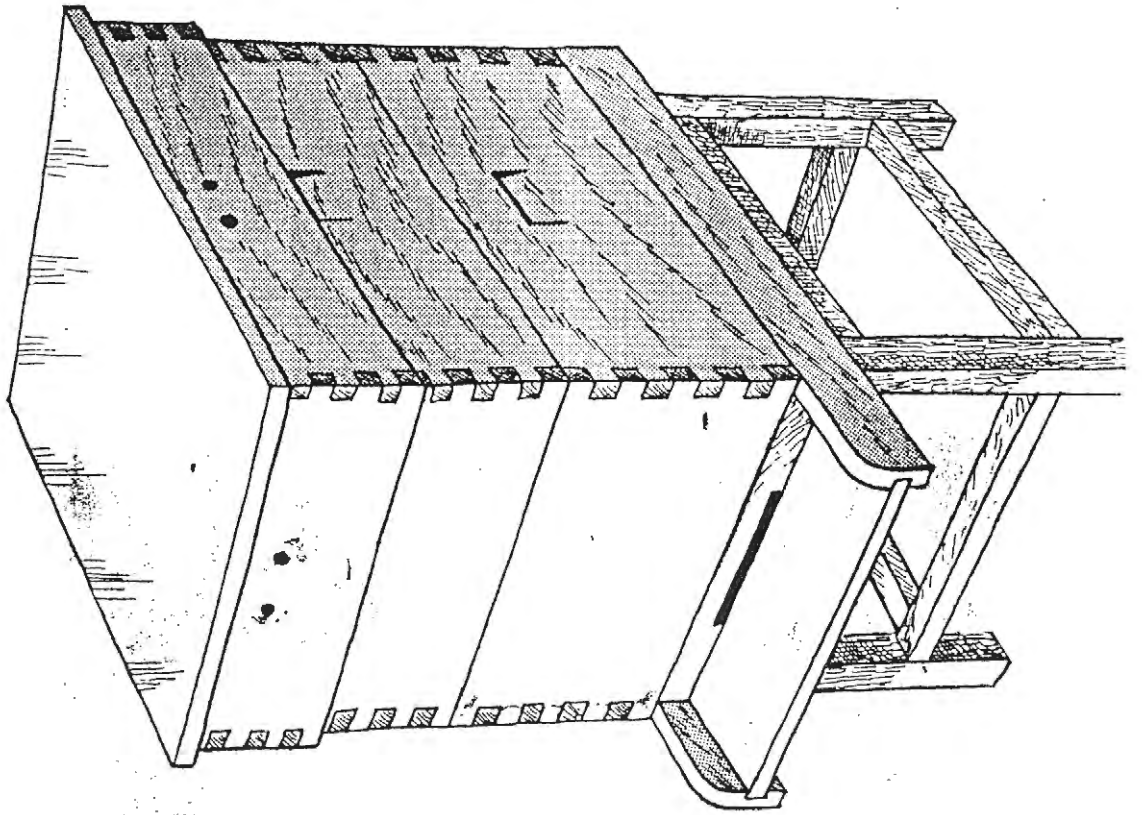


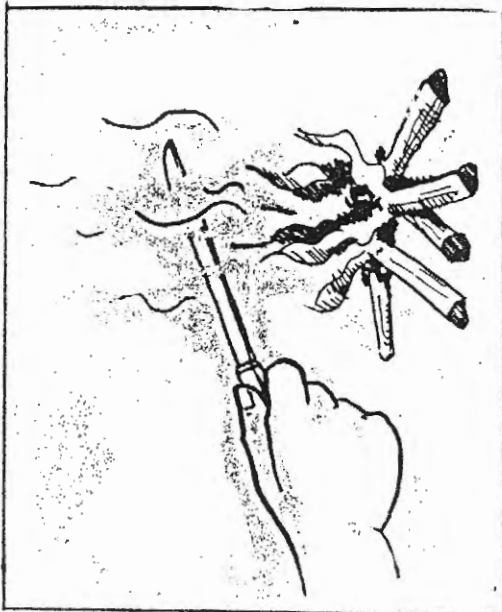
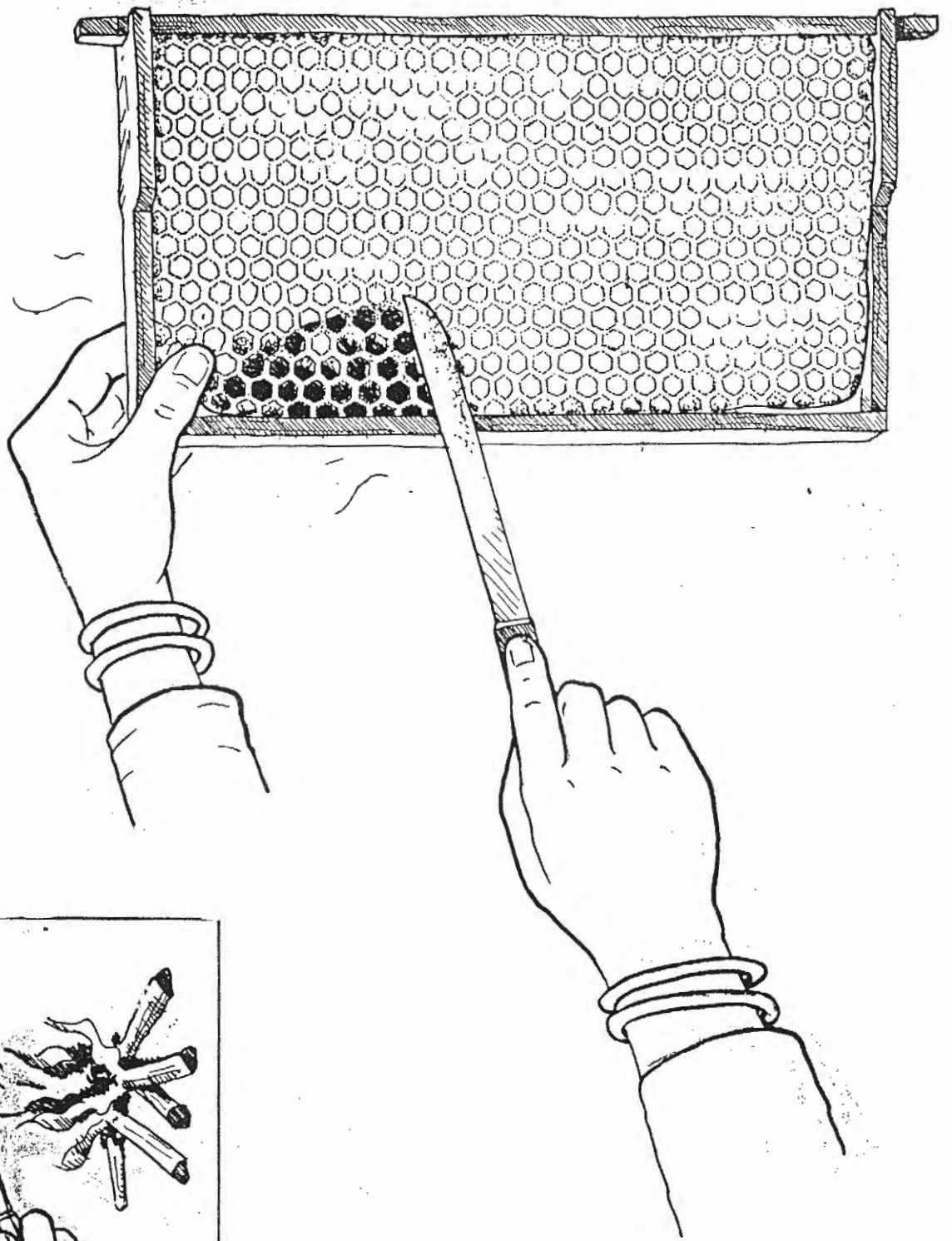


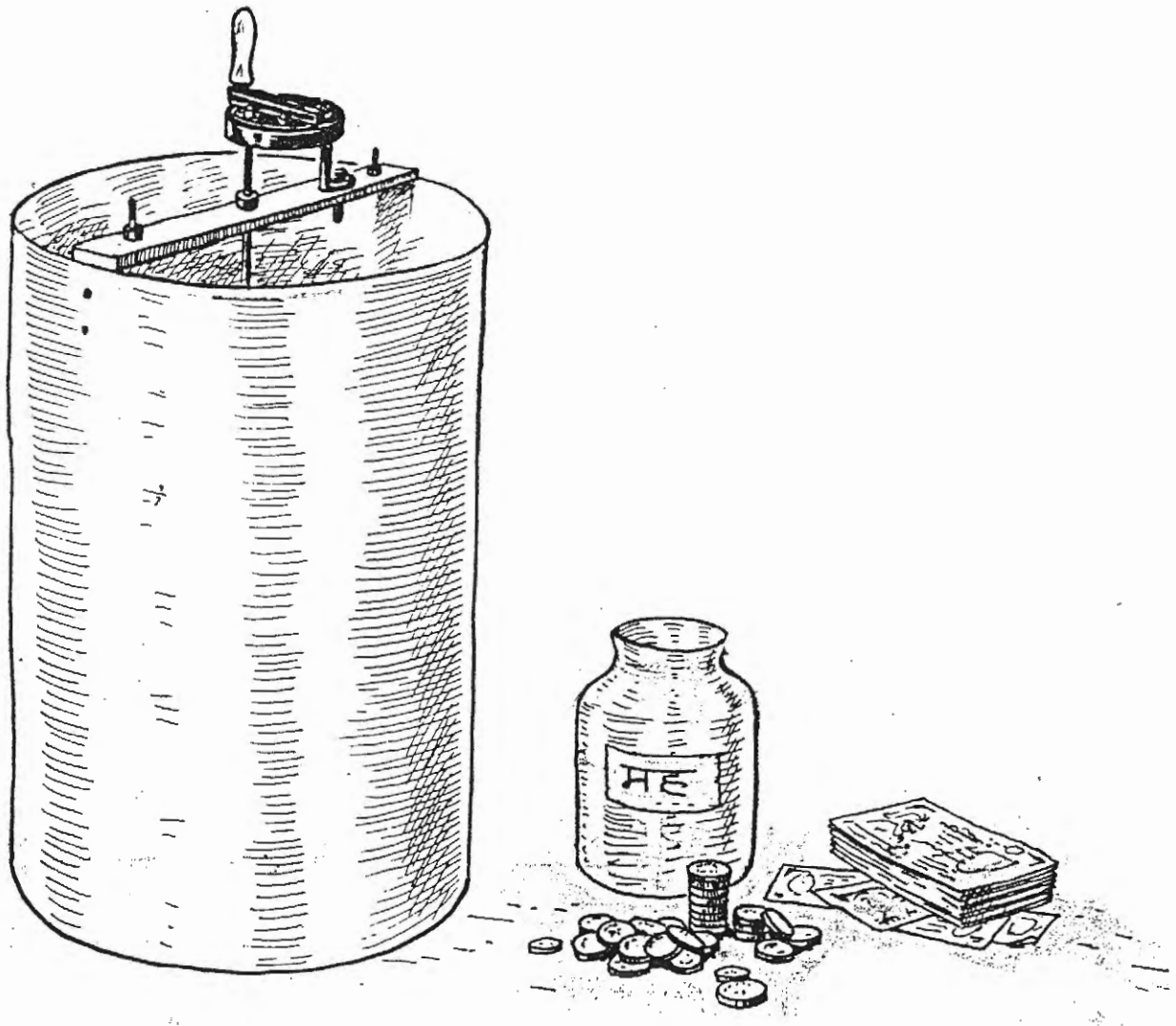


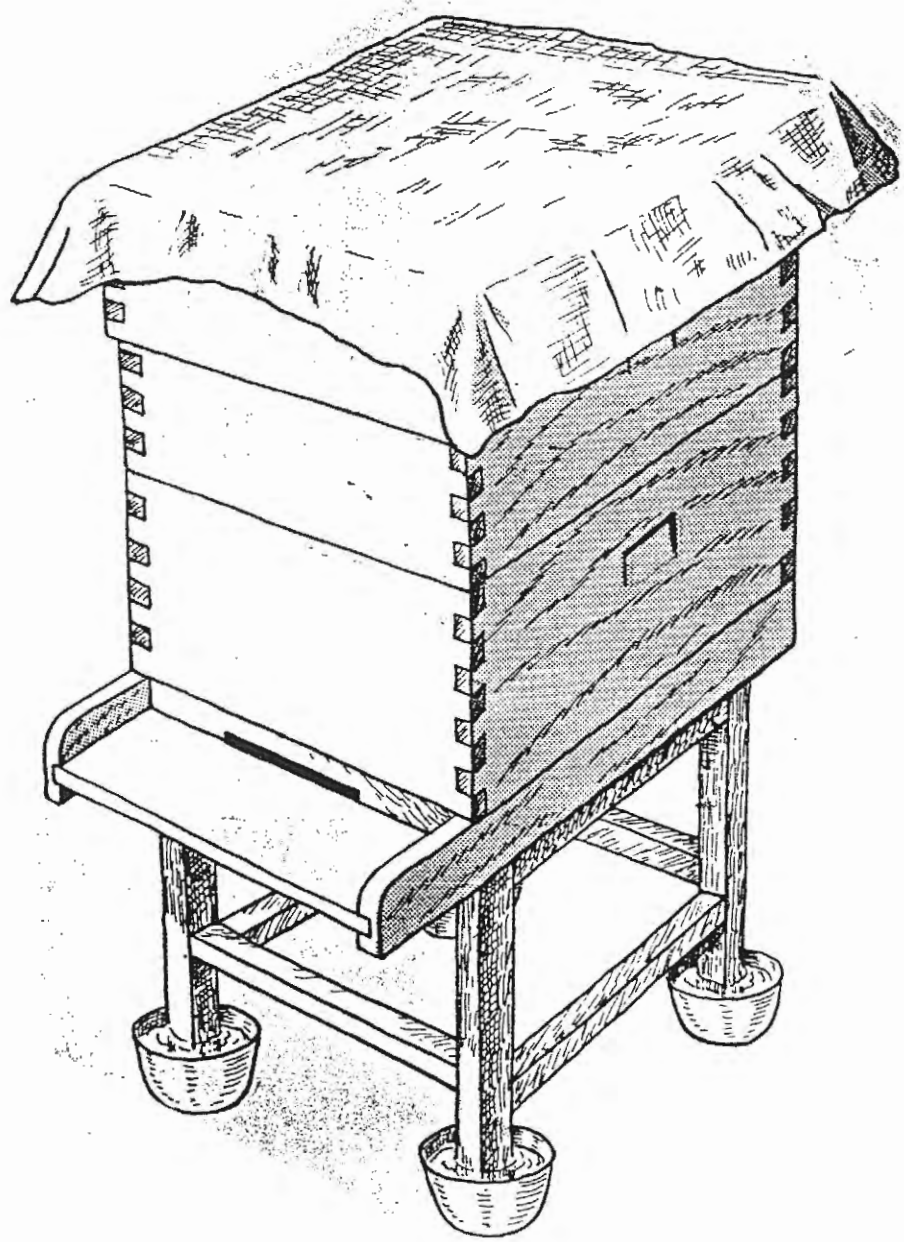




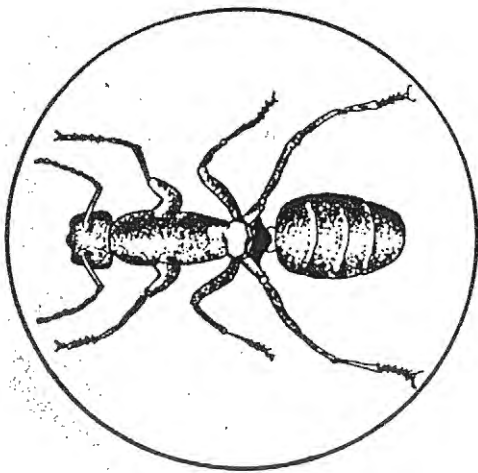
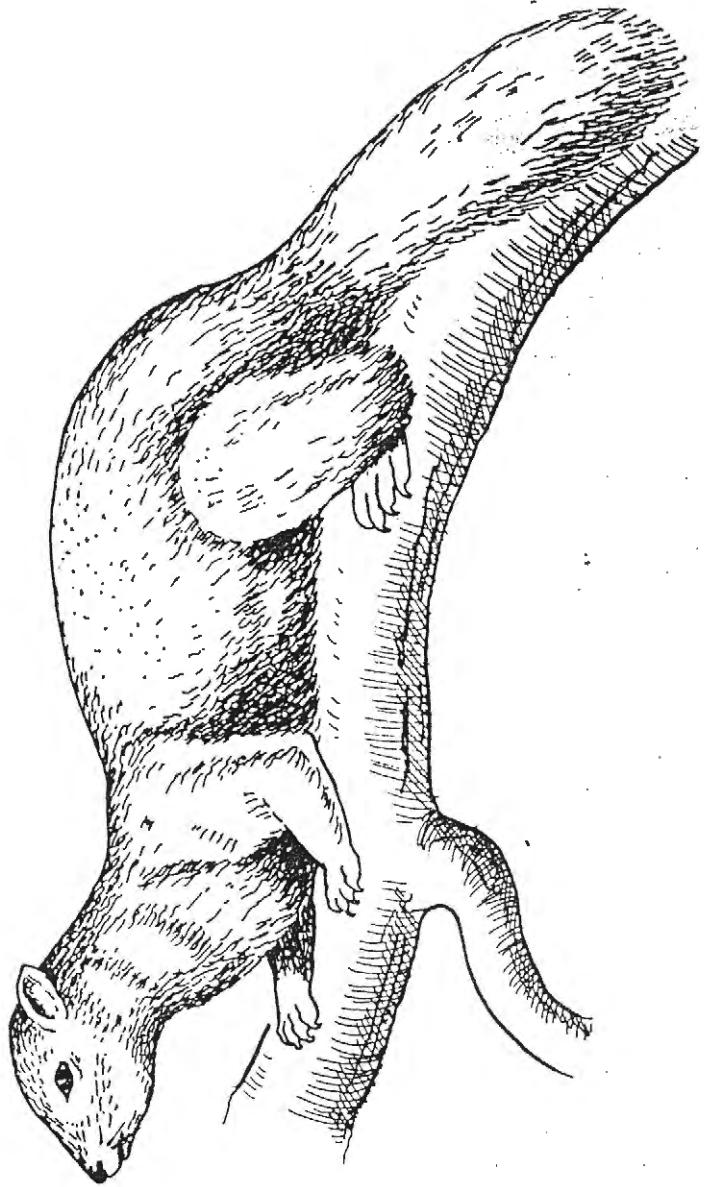














**Appendix VI**  
**The List of Questionnaires**

**1. Questionnaire for participants who have seen the slide set on beekeeping.**

1. Name.
2. Village.
3. Martial status.
4. Number of children.
5. Occupation.
6. Education:  
Have you studied in school? If so:
  - i) Numbers of years.
  - ii) Up to what standard?Have you attended AA Adult Literacy Classes?
7. Have you ever kept bees in a traditional hive?
8. Have you ever kept bees in a modern hive?
9. Have you ever seen a slide set before? If so:
  - i) When?
  - ii) Was it in Nepali?
  - iii) And what was it about?

10. Could you follow the slide set?  
Did you understand all the pictures, or were some difficult to understand?  
And if so, can you remember which pictures were not clear?
11. What are the advantages of the new hive?
12. What happens in the upper chamber of the new hive?
13. How far apart should the frames be?
14. Should you clean the hive?
15. What is the queen gate, and when should you use it?
16. What do you understand by:
  - i) pollen
  - ii) egg
  - iii) swarming
  - iv) queen cell
  - v) pollination?
17. How often can you harvest with a new hive?
18. How much can you make from the new hive after two years?
19. Did you enjoy the slide set?
20. If you have seen the video on beekeeping, which was better, the slide set or the video?

## 2. Questionnaire for participants who had watched the video on beekeeping.

1. Name.
2. Village.
3. Gender.
4. Number of children.
5. Education:  
Have you studied in school? And if so:
  - i) Numbers of years.
  - ii) Up to what class?  
Have you attended AA Adult Literacy Classes? If so:
  - i) How long for?
6. Occupation.
7. Have you ever kept bees in a traditional hive?
8. Have you ever kept bees in a modern hive?
9. Have you ever seen a video before? If so:
  - i) When and where?
  - ii) Was it in Nepali?
10. What was the name of the heroine of the film?

11. Why did she have to borrow money from Bajai?
12. Where had her brother gone?
13. What are the main uses of honey?
14. For what did Chameli use the honey that Durga gave her?
15. Why did Chameli's bees leave the hive?
16. What could she have done to prevent the bees from leaving?
17. Would you like to keep a new hive?
18. How much money do you think you could make after one year of keeping a new hive?  
And how much after two years?
19. Is it a good occupation for women; and if so, why?

### **3. Questionnaire for Tanka Rai and Sedai on the use of the flipchart.**

1. What are the advantages of the flipchart?
2. What are the disadvantages?
3. Will you use the flipchart in training when you have already used the slide set?
4. Will you give out the flipchart at the end of the training so that the participants have something visual to take away with them?
5. When you do follow-up visits to inspect the hives, will you take the flipchart with you?
6. What effect do you think the video has had on the participants?
  - i) Good effect? Explain.
  - ii) Bad effect? Explain.
7. What effect do you think the slide set has had on the participants?
  - i) Good effect? Explain.
  - ii) Bad effect? Explain.
8. What effect do you think the flipchart has had on the participants?
  - i) Good effect? Explain.
  - ii) Bad effect? Explain.

9. Which medium do you believe was most effective in explaining and describing the use of modern hives:
- i) video
  - ii) slide set
  - iii) flipchart?
10. Any further comments?

## **Appendix VII**

### **Communications for the Future - Two Day Workshop in Thakani**

#### **1. The Objectives of the Course.**

- a) To introduce and define the concept of Development Communications to ActionAid's staff members.
- b) To show how the Communications Unit can be best utilised by sector heads and staff members.
- c) To focus on different communications media for different development messages.
- d) To look at the concept of adaptability, and of forecasting for the future, in communications work.

This course will be geared towards sector heads from the head office plus the key field workers representing each section and each project area. Roughly twenty people altogether. The third day of the course will expand if necessary to include extension and front-line workers.

#### **2. Day One.**

9.00-10.00: Introduction to the course, and update on the history of the Communications Unit.

10.00-11.00: The theory of Development Communications: why it is important and what we mean by communications; a new type of listening.

11.00-12.30: What has already happened in Nepal. UNICEF's findings on communications and visual literacy. The findings and experiences of other agencies in Nepal.

LUNCH

2.00-3.00: What the different forms of Development Communications are, and which forms are suitable for which occasions. A focus on role-playing, puppets, posters, models and flipcharts. Mention made of the video and slide set.

3.00-5.00: A development campaign: picking one topic, such as pit latrines, and using the DCPM to follow through the campaign.

Evening: Viewing of Rapid Rural Appraisal video of a workshop in India, and discussions afterwards.

### 3. Day Two.

9.00-11.00: A new type of listening; successful and unsuccessful communications campaigns. What pitfalls to look out for. The key problems which often occur in Development Communications.

11.00.-1.00: Production of the group's campaigns, using the DCPM as a guide.

LUNCH

2.00.-4.00: Each group presents their campaign. Discussions following up on the campaign - what has been a successful/unsuccessful approach.

4.00-6.00: General discussions: review and evaluation of the course; how the unit will run in the future; how ActionAid Nepal will be the communications blueprint for all other ActionAid offices worldwide.



**4. Day Three.**

Could now gear the course towards a larger audience of ActionAid workers - front-line workers particularly.

## Appendix VIII

### Bibliography

Acharya & Bennett *The Rural Women of Nepal: An Aggregate Analysis & Summary of Eight Villages*. Nepal: The Centre of Economic Development and Administration, Tribhuvan University, Nepal, 1983.

ActionAid *Nepal Progress and Planning Report*. Nepal: ActionAid, 1988.

ActionAid *Nepal Progress and Planning Report*. Nepal: ActionAid, 1990.

Adjare, S. *The Golden Insect*. London: IT Publications, 1981.

Allam Iqbal Open University *Radio and Television in Distance Learning*. Pakistan: AIOU, 1984.

Akratanakul, P. *Beekeeping in Asia*. Rome: FAO, 1987.

Atienza, L. *VTR Workshop: Small Video Format*. Paris: UNESCO, 1977.

Bennett, L. *Dangerous Wives and Sacred Sisters: Social and Symbolic Roles of Women in Nepal*. New York: Columbia Press, 1983.

Belbase, S. & Bujracharya, D. *Rural Women in Participatory Communication, Workshop I & II*. Nepal: Worldview International, 1986.

Berrigon, F. *Community Communication. The Role of Community Media in Development*. Paris: UNESCO, 1979.

- BETRESP *Report on Beekeeping Survey in the Sindhupalchowk District*. Nepal: BETRESP, 1990.
- Black, N. & Cotrell, A. *Women and World Change*. London: Sage Publications, 1987.
- Boserup, E. *Women's Role in Economic Development*. London: Earthscan Publications, 1970.
- Brant, W. *North-South, A Programme for Survival*. Washington: Oxford University Press, 1989.
- Brown, L. *Preparing the Future, Women Literacy and Development: ActionAid Development Report No4*. University of Glasgow, 1990.
- Carr, M. *The Blacksmith, Baker, Roofing Sheet Maker: Employment for Rural Women in Developing Countries*. London: Intermediate Technology Publications, 1984.
- Cassen, R. & Associates *Does Aid Work?* Oxford: Clarendon Press, 1986.
- Chambers, R. *Rural Development, Putting the Last First*. London: Sage Publications, 1983.
- Clarke, R. *Wood Stove Dissemination*. London: Intermediate Technology Publications, 1985.
- Coldevin, Dr. *Perspectives on Communications for Rural Development*. Rome: FAO, 1987.
- Conroy & Litvinoff *The Greening of Aid*. London: Earthscan Publications, 1988.
- Danse, M. *Third World, Second Sex*. London: Zed Books Ltd, 1983.
- Dave & Pathok *Communication to Illiterate and Semi-literate Women. Experiences Using Various Media*. India: AWAG, 1986.

Denkelman, I. & Davidson, J. *Women and the Environment in the Third World. Alliance for the Future*. London: Earthscan Publications, 1985.

Desmond *Warning! AIDS Has Arrived*. Time, 1991.

Diaz-Bordenare, J. *Communications and Rural Development*. Paris: UNESCO, 1977.

Dunn *Appropriate Technology: Technology with a Human Face*. London: Macmillan, 1978.

Dunsmore *KARDEP - Rural Development in Hills of Nepal*. London: ODA, 1986.

Economist Intelligence Unit *Country Report India & Nepal, No 1 & No 2*. London: World Microfilm Publications Ltd, 1988.

Etienne, G. *Rural Development in Asia*. London: Sage Publications, 1986.

Evans, D. *Technology in Non Formal Education*. Massachusetts: Centre for International Education, 1978.

Frisk, J. *Introduction to Communication Studies*. London: Methuen, 1982.

FAO *Development Support Communications Status Report*. Rome: FAO, 1986.

Friedericks, R. *An Editorial on Video Use in Nepal*. Nepal: DCP of United Mission, 1989.

Fussell & Haaland *Communicating with Pictures in Nepal*. Nepal: UNICEF, 1976.

Goburn, B. *Nepali Adma: A Portrait of Nepalese Hill Women*. California: Ross Erikson Inc., Publishers, 1982.

- Grover, D. *An Analysis of the Situation of a Girl: Children in Nepal*. Nepal: UNICEF, 1991.
- Helmore, K. *Development Communications*. Christian Science Monitor, 1986.
- Hornick, R. *Development Communications*. London: Longman, 1988.
- ISIS International *Women in Development* Rome: ISIS International, 1983.
- Jayawerera, N. *Rethinking Development Communications*. London: The Asian Mass Communication, 1988.
- Jenkins, J. *Mass Media for Health Education*. London: International Extension College, 1983.
- Jumoni, J. *An Exchange of Experience*. India: SEWA, Ahmedabad, 1986.
- Karl, M. *Communication for Action: Rethinking Development Communications. A Guide to Audio-Visual Resources*. Rome: ISIS International, 1983.
- Kapoor & Anuradha *Women and Media in Development*. India: CENDIT, 1986.
- Khan, A. *Effectiveness of Media Radio and Television in Distance Education Systems*. Pakistan: Allam Iqbal Open University, 1984.
- Liddle, L. & Joshi, R. *Daughters of Independence: Gender Caste and Class in India*. London: Zed Books Ltd, 1986.
- Majupuria, I. *Nepalese Women*. Thailand: Craftsmen Press Ltd, 1989.
- Malik, M. *Traditional Forms of Communications & the Mass Media in India*. Paris: UNESCO, 1985.

- McQuail *Mass Communications*. London: Longman Group, 1975.
- McBean, G. *More Pizza Please - Development and Visual Aids Don't Have to be Studied*. New York: Development Forum United Nations, 1986.
- McBean, G. *Rethinking Visual Literacy - Helping Pre-Literates Learn*. Nepal: UNICEF, 1989.
- Morse, R. *Bees & Beekeeping*. London, Cornell: Cornell University Press, 1975.
- Mountjoy, A. (ed) *Third World Problems and Perspectives*, London: Macmillan Press Ltd, 1978.
- Pearce, D., Barbier & Markandya, A. *Sustainable Development*. London: Earthscan Publications, 1990.
- Rai, L. *Nepal's Communication Policy Now and Then*. Asia Mass Communications Quarterly Volume 14, November 3, AMIC, 1987.
- Rao, L. *Medium and the Message, An Indian Experience - Rethinking Development Communications*. The Asian Mass Communication, 1988.
- Roger, B. *Domestication of Women: Discrimination in Developing Society*. London: Tavistock Publications, 1980.
- Statistical Pocket Book of 1986*. Kathmandu, Nepal: National Planning Commission Secretariat, 1986.
- Seager & Olson *Women in the World*. London: Pan Books, 1986.
- Seddon, D. *Nepal, A State of Poverty*. Nepal, 1985.

Sen, G. & Grown, C. *Development, Crisis and Alternative Visions*. London: Earthscan Publications Ltd, 1988.

Schumacher, E. *Small is Beautiful*. London: Sphere Books Ltd, 1973.

Speth, K. *Report on Evaluation of Beekeeping Programme in the SFDP Project Areas*. Nepal, Kathmandu, 1986.

UNESCO *Rural Radio, Programme Formats*. Paris: UNESCO, 1979.

UNESCO *Mass Media, The Image, Role and Social Conditions of Women*. Paris: UNESCO, 1979.

UNICEF *Development and Use of Communication Aids*. New York, Southeastern African Region, 1986.

UNICEF *Children and Women of Nepal, A Situation Analysis*. Nepal: UNICEF, 1987.

UNICEF *The State of The World's Children*. Oxford: Oxford University Press, 1989.

Verma, K. *Women in Development*. Nepal: ActionAid Nepal, 1989.

Walker, D. *Understanding Pictures*. Massachusetts: MIT, 1978.

The World Bank *World Development Report 1989*. Washington: Oxford University Press, 1989.

The World Bank *World Development Report 1987*. Washington: Oxford University Press, 1987.

Yemi, H. *Trafficking in Women, The Untold Story in Nepal*. 1989.