

The Role of Communication in Social Forestry: The Case of Mwenezi¹

NETSAYI N. MUDEGE AND M. F. C. BOURDILLON

Sociology Department, University of Zimbabwe

Abstract

This article, based on participant observation in two villages of Mwenezi District, Masvingo Province, Zimbabwe, discusses the dissemination of knowledge about forestry. It looks at the role of the media, but points out that access to the media was limited. More important were local channels of communication. People are, however, selective in their acceptance of information they receive, particularly on environmental issues. Although technical knowledge is important to ensure the best use of the resources of forestry, the article shows how people interpret, modify, and respond to the information they receive according to how this information fits their perceived interests. Political issues, both at the national and the local levels, also affect the credibility of messages. Within a community, people respond differently, according to their status and their particular interests in the community. The article concludes that the successful transfer of technical knowledge on forestry for the use of local communities requires dialogue with the communities concerned.

Introduction

Although communication studies is a rapidly growing discipline, attention to its role in rural development rarely goes beyond mention in passing that lack of communication is a reason for failure of some projects. This research analyses the role of communication in, and its impact on, social forestry issues in the Mwenezi District in Masvingo Province, Zimbabwe.

We focus on how information is communicated through the mass media as well as through rural based communication systems. Rural-based communication differs from the mass media because it spreads from person to person, initiating from an official of an organisation or an individual within the village.

This article discusses the role of communication in facilitating the use of tree resources, how various communication systems and networks are used in order to influence the behaviour of various target groups as well as the

1. We wish to thank the Forestry Commission and German Development Co-operation for supporting the research financially and otherwise. We wish to thank the people of Mwenezi who gave so much of their time and attention to answer our questions.

effectiveness of these tactics. It also discusses the perceptions of differently placed individuals or groups of people on issues related to the use of trees and tree based resources.

We show how economic, political and social forces affect the ways in which any information is disseminated to, and received by, the audience. The credibility of any disseminated information depends on the creditworthiness of the source of the information. Whether the disseminated information is acted upon or not also depends on the audience and the conditions that the audience is facing. People receive with ambivalence environmental messages coming from the West, because people in the West and South have different environmental problems, which lead to different perspectives on the environment (Vivian 1994: 186; Amanor 1994: 6; Banuri 1993: 2).

This study places communication in the historical and social contexts in which individuals and communities find themselves. It pays attention to the different strategies people use, and how they process information, depending on social, economic or political circumstances (see Long 1989; 1995). Contrary to the assumption in the mass media and by environmental agencies that everyone, regardless of age, status and gender, will benefit equally from Natural Resource Management Projects, the reality is that some projects will benefit certain groups more than others. Therefore, it is important that those tasked with disseminating information should be sensitive to this fact and make every effort to factor in gender in the development and marketing of their programmes.

The study also takes note of Peluso's observation (1980: 12) that 'Peasant politics often includes protests against losing resource access – peasants have their own notions of morality, rights, criminality and subversion.' This approach is in harmony with a growing emphasis in communication studies on the social context in which communication takes place, as well as the individual's capacity for active selection and active retention (Boyd-Barret 1992: 143). Apart from individual strategies, the study also looks at how political structures determine the use of resources and how different material interests relate to conflicting perceptions of conservation (following Moore, 1993, on the Kaerezi resettlement scheme in Zimbabwe, and Nadkarni, 1989, on the use and management of tree resources in India). It places the uses of forests in the context of social relations, and, particularly with reference to newspapers, it places the politics of tree use in a wider social setting. The study also focuses on how cultural considerations can permeate the economics and politics of resource use.

Of importance is how different stakeholders signify the environment and how this affects the acceptance or rejection of environmental messages. 'People may invest in meanings as much as in the means of production and struggles over meaning are as much a part of the process of resource

allocation as are struggles over surplus or the labour process' (Berry 1988: 66; see also Hall 1992: 70; Hall *et al.* 1978: 59).

In many countries, forestry research is active in such areas as community participation in forest conservation, tree tenure, gender factors in tree growing and tree protection (Owino 1994: 3). Very little research has been done on the role of communication in social forestry. Most communication studies look at the role of communication in politics, how information is disseminated and how people in rural areas are persuaded to adhere to certain ideological positions (Ugboajah 1985: 166). Other discussions focus on how communication, particularly the media, is linked to colonisation and domination of the Third World by the west (Mararike 1998: 211-220). This study also pays attention to how the messages are received in order to assess their relevance and validity.

Mudege spent two months in Mwenezi, in December 2000 and January 2001 focussing on the villages of Gudo and Chomuuyu. She spent a further three weeks analysing the content of some mass-produced messages. She used non-random samples of 50 from each village, taking people who were physically accessible and willing to talk about their perceptions of the environment and their sources of information. She also interviewed a variety of officials and leaders, attended various forestry-related meetings, and organised four group discussions of issues relating to the research. One of these was with youths, who were generally excluded by their elders from discussions in the homesteads. Finally, she analysed the content of radio, television and newspaper messages and compared them with the felt needs of the people.

Background to Study District and Villages

Mwenezi District is located in the southern part of Masvingo Province. It is characterised by very low annual rainfall, periodic seasonal drought and severe dry spells during the rainy season, making rain-fed crop cultivation unprofitable. Total annual rainfall in this region is usually between 450 and 650mm and it is not unusual to get below 450mm of rain in some areas of this region. The natural woodlands in this region are characterised by drought resistant tree species.

Gudo Village

Relative to other villages in the district, Gudo village had the smallest population comprising around 470 individuals. A large percentage of the young males were reported to be working in South Africa as illegal migrants. Recently there had been very little immigration because of the scarcity of land for expansion and also because the area is agro-ecologically unfriendly.

The rivers, which supply the community with the much-needed water, are dry for part of the year. There are no dams in the area and there is one borehole containing very salty water fit neither for human consumption nor for irrigation. Many households find it difficult to meet their basic requirements of water.

The Christian ethic is very strong in the village. There is one dominant church in the village, the ZION church. The village head is also the head of the church. As a way of professing their faith, most men in the village abstain from the consumption of alcohol. Those who drink are able to purchase the local brew (*doro rendari*) only on Wednesdays (the *chisi* day where it is mandatory to rest), because that is the only day of the week on which people are allowed to sell the local brew.

The level of education in this village is very low. In the sample of 50 people, comprising ages between 18 and 72, only six people had attained 'O' level education. However, this might have been biased because the highly educated people had migrated out of the village in search of work.

Draught power is also a problem in the village in that only a few people owned a significant number of cattle and donkeys.² The majority of the villagers owned small livestock like chickens, goats and sheep. On the other hand, most people tended to under report the amount of livestock they owned. Although the aims of the study were properly explained to the villagers at a village meeting, the villagers still were convinced that the whole exercise was to assess the relative wealth of individual households for possible donor aid.

Chomuuyu Village

Chomuuyu village has a population of about 900 people or 158 households. Since land is available for expansion, immigration has been very high compared to Gudo, although the flow is slowing. This has also led to conflicts between *masvika* (the incoming people) and the *vana vemuno* (the indigenous or rightful heirs of the land). Settling of people on the border areas, such as in the Chiwi area, which had been a grazing area with lots of trees until 1995, is regarded as a strategy to guard against encroachment from other villages. Settling people in the Chiwi area has led to deforestation.

In Chomuuyu Village, 15 people, out of a sample of 50 people, had an 'O' level education. Traditional beer is always on sale in the village and is a lucrative source of income for Chomuuyu women. Women in this village also belong to rotating credit associations, which have provided women with some cash to invest in small livestock such as goats and sheep.

2. Participatory Rural Appraisal Report (2000) produced by the Forestry Commission on the six Social Forestry Project villages in Mwenzezi.

The village is bound by the Runde river to the north and west, the Pambe river to the east and Murawi river to the south. There are alternative resources to farming in the area, such as rich (but declining) fishing grounds around the Chiwi area. Wildlife is still found in this area.

Mass Media Available in Gudo and Chomuuyu

In Zimbabwe, Government, non governmental organisations (NGOs), and others have tried to influence public opinion through the mass media. In Mwenezi, the most common available forms of mass media are radios, television and newspapers. We analyse these media in relation to the management of trees as socially valued resources to meet human needs.

Radios

Due to the illegal circulatory migrant labour into South Africa in the two villages under study, many people owned radios. In their customary annual visits home for Christmas, the migrants bring with them radios bought cheaply in South Africa, which they then leave with their families or sell cheaply to other villagers on their return. Fifty-eight percent (29) of Chomuuyu residents and 42 percent (21) of Gudo residents owned radios. Most radio owners attested to listening to radio programmes relating to trees, the environment and natural resources, for example, the radio 2 programme *Miti Upenyu* (Trees are Life) and *Zvisikwa Zvesango* (Creatures of the Forest).

Eight people in Chomuuyu and 11 in Gudo did not listen to environmental programmes on the radio. They claimed that, at night, when the programmes were aired, they were usually tired from their daily chores and did not have the energy to listen to the radio. The high cost of batteries also militated against listening to environmental programmes as people listened only to news bulletins and select programmes, such as *Mitambo yemadrana* (featuring locally produced plays) and *Chakafukidza Dzimba Matenga* (discussing issues related to marital problems) in order to conserve batteries. Nevertheless, the majority of the villagers testified that they first heard of the Forestry Commission through the radio.³ Thus, the radio is a major source of information on the environment for the people of Gudo and Chomuuyu villages.

Those villagers who listened to environmental programmes on radio maintained that they obtained the following information from the programmes.

3. Uche (1987: 253) studied the diffusion of crisis information in Nigeria and found out that the radio was the first primary source of information for rural opinion leaders and then information could be diffused to the general populace.

- Thirty villagers were informed on the importance of trees including their use value, as well as the importance of trees in protecting the natural environment.
- Twenty-five villagers learned what is happening in other communities in terms of tree resource utilisation, getting new ideas in the process.
- Twenty-two villagers received information on what trees to grow, especially those that are fast maturing for quick returns.
- Eighteen villagers were encouraged by accounts of other communities that were benefiting from Social Forestry Projects.
- Nine respondents obtained information on what the law says about utilisation of tree resources.

Evidence suggests that, in these two villages, at least, radio programmes were more relevant to the needs of the local people than were environmental information disseminated in other media. Although some households did not have radios, the radio was the most important of all the mass media in starting or stimulating discussions related to natural resources, partly because people from the villages working in the cities often had access to radios and often disseminated information they heard on the radio to their families in the village.

However, there are problems with the information on forestry that is disseminated by the radio. For instance, there is a major emphasis on the growing of exotic fruit trees and gum trees, at the expense of indigenous trees. This is particularly worrying since it is not clear that these exotic species can withstand the severe droughts characteristic of this area. Pedzisayi Kure, a 65-year-old Chomuuyu resident, summarised the villagers' concerns by saying: *'Tinogona kupedzera tsvimbo kuma kunguwo idzo hanga dziripo'* [Lit. "We will finish all our throwing sticks trying to knock down crows (which are not edible), instead of aiming at pigeons present (which are edible) – in other words, this could be a misdirected and wasted effort].

Some radio programmes on environmental issues were so poorly presented and so unvaried that villagers shunned them, claiming that, after listening to one programme, there was nothing to be gained by listening to other programmes which were likely to be about the same issues. An analysis of the programmes confirmed the villagers' lack of enthusiasm for them. For instance, all programmes aired between the beginning of October 2000 and end of January 2001 were advertising the forthcoming National Tree Planting Day and informing people in the various Districts and Provinces of where the Forestry Commission in their area would be planting trees on the first Saturday of December. Even when the tree planting day had come and gone, programmes were still advertising the various activities of the Forestry Commission on the official tree planting day. Such irrelevant repetitions were obviously likely to put listeners off.

Television

Television was less available to the people of Mwenezi, as few households, five in Chomuuyu and seven in Gudo, owned television sets. These were mostly teachers, general dealer storeowners and retrenched urban workers. To minimise the cost of charging batteries, television viewing was in most cases limited to news, Monday Shona Dramas and *Mutinhimira Wemimhanzi* (a local musical programme). Moreover, most programmes on environmental issues carried by Zimbabwe television spoke to conditions from other countries and not to the reality of the Zimbabwean people and were, therefore, of little appeal to them.

The only programmes that were aired on ZBC TV1 that were of relevance to the rural people of Zimbabwe were the series, '*Around Zimbabwe*', covering, among other issues, causes of environmental degradation, such as tree cutting and soil excavation. Moreover, the role of trees in the environment was being underplayed in the programmes aired. Thirty, out of 90, programmes aired focussed on animals, while only 16 focused on trees. Out of these, only six were relevant to Zimbabwean environmental problems. The general neglect of environmental issues was also evident in the airing schedules on ZTV1 as shown by the fact that, although the series, '*Farm and ecology*' had 16 programmes, most of these were aired only as filler programmes. This meant, therefore, that television was not a very important means of disseminating information in these communities.

Newspapers

Newspapers were another source of information available to the people of Mwenezi. Although readership was very low for both villages (six people in Chomuuyu and four people in Gudo had access to newspapers), an inventory showed that the most widely read newspapers were *The Herald* and *The Chronicle* in the villages.

As noted, very few people in the villages had attained an 'O' Level education. Consequently, few could read English. This effectively limited the use of newspapers as a source of information for most people, since most of the newspapers were written in English.⁴ The few people who reported occasionally reading the newspapers were all male.

Mudege analysed the content of 110 newspaper articles on the environment from January 1999 to December 2000, from both government

4. Hadebe (1998: 121-134) studied the use of language in the Zimbabwean mass media. For Hadebe, the use of English obscures meaning. To facilitate communication by developing infrastructure "in the form of more publishing houses, radio and television stations is not the ultimate answer. While the multiplicity of these is necessary, what is of essence is what these institutions produce."

and independent papers, to assess whether the articles were congruent with the needs of the rural people.⁵ Eighty-three articles were published in 1999 and 27 in 2000. The results are presented in Table 1.

Table 1: Content Analysis of Newspaper Articles

Topic	1999 (N=83)		2000 (N=27)		Total (N=110)	
	No.	%	No.	%	No.	%
Conferences	20	24	4	15	24	22
Bills	10	12	2	7	12	11
National	39	48	12	37	51	46
International	5	6	2	7	7	6
Urban	22	27	8	30	30	27
Rural	17	20	5	19	22	20
Social Forestry	6	7	1	4	7	6

There were more environmental articles published in 1999 than in 2000 because the Global Summit on the Environment held in 1999 triggered many conferences and workshops. These events were of little relevance to the rural people because much of the discussion was on topics such as industrial, ozone, water and air pollution, which were of no immediate environmental concern to the villagers and which they did not particularly care about. The media were further stimulated in 1999 by the gazetting in Zimbabwe of the *Environmental Bill*, which provoked much discussion on its potential effects and weaknesses.

Moreover, of the 14 reports on the environment published in February 1999 and the four articles in 2000, most were focusing on urban agriculture and the dangers of stream bank cultivation in urban areas. Very few articles focused on environmental problems in the rural areas and even fewer discussed the fate of trees. In addition, the media so politicised environmental issues that it became harder to find objective reports in the media. Independent newspapers tended to blame environmental degradation caused by the indiscriminate cutting down of trees by war veterans who had occupied formerly white-owned farms as part of the Zimbabwe Government's fast-track land resettlement programme that began in 2000. On the other hand, government-owned newspapers blamed environmental degradation on historic landholding inequities and argued that land reform

5. We collected all articles on the environment in the months concerned from the following newspapers: *The Herald*, *The Sunday Mail*, *The Chronicle*, *Daily News*, *The Standard*, *The Independent*, *Tribune*, *Southern Star*, together with *Eland News Room* articles.

was essential in arresting environmental degradation. The politicisation of the environment in the media meant that contradictory messages were being conveyed to the people. Most villagers in Gudo and Chomuuyu refused to comment on the environmental situation in the nearby resettlement areas for fear of offending either the Government or the political opposition movement. Fear of falling afoul of the major political groupings discouraged reporters from covering environmental issues and resulted in a noticeable drop in the number of articles dealing with the environment featured in the media.

Similarly, little was being done to promote environmental conservation as conservationists and officers of the Forestry Commission felt it wiser to wait until the political tension in the country abated. Thus, in September 2000, a Forestry extension officer in Mwenezi noted that, while it was necessary to assess the environmental situation on the invaded farms, little could be done since the situation was still politically tense.

As shown above, a number of problems render newspapers a weak source of information on environmental issues in the two villages under study.

Access to the Mass Media

Table 2: Major Sources of Social Forestry Related Information

Village	Radio	TV	Gvt. Depts	NGO	Colleagues
Gudo (N=50)	10	7	50	45	50
Chomuuyu (N=50)	21	5	50	38	50

Although 90% of respondents said they owned radios, as Table 2 shows, only 31 of them said that the radio was one of their primary sources of information on social forestry. Despite this, radios are still an important source of environmental communication, as radio messages are then spread by word of mouth. This finding fits in with Wright's (1959: 51-52) hypothesis that mass communication messages do not always reach all members of their targeted audience directly but may reach one layer of society who, in turn, either pass the message on by word of mouth to persons who consult them or utilise the message in advice to others. In both Gudo and Chomuuyu, even those who did not have access to radios were well informed about environmental programmes that were broadcast on radio.

In discussing the various sources of information on social forestry that are available to the people of Gudo and Chomuuyu, it is important to point out that gender sometimes influences who can access certain types of sources. In the two villages under study, men tended to use government departments as sources of information more than women. This was because

of the distance between the villages and Neshuro Growth Point where the Forestry Commission and Agritex were based. The distance between Neshuro and Chomuuyu and Gudo is 25 and 20 kilometres, respectively. Most women were unwilling or unable to walk the long distances to utilise these departments because of the demands of domestic work.

On the other hand, women used NGOs and their local networks more, partly because NGOs often went out of their way to involve women in their programmes. For example, Care International had introduced a quota system in which a certain number of positions had to be occupied by women if any environmental project in the area was to be funded. Similarly, women also shared information on the environment in their social gatherings and day-to-day interactions with other women. Table 3 documents the major sources of information on the environment in Gudo and Chomuuyu and shows that meetings organised by the Forestry Commission were the major sources of information on the environment in the two villages.

Table 3: Sources of Environmental Information for Villagers

	First heard of Forestry commission	First heard of importance of trees	Current information sources
Radio	34	22	65
Television	—	—	11
Newspaper	8	—	10
Forestry Commission Meetings	41	20	75
Agritex	—	45	74
Other	17	13	25

A General Comment on the Mass Media

The mass media does not have a powerful, direct, and automatic influence on public opinion or behaviour as is usually assumed although it does facilitate inter-personal communication on environmental issues among the rural people. Furthermore, while the mass media plays a role in imparting values, people's behaviour and attitudes are mostly a result of lived experiences. There is evident in the fact that, women in Gudo Village who were interviewed for this study were knowledgeable about the danger of cutting down trees, in general, and cutting down trees within 30 metres of a river or stream, specifically. However, all the women admitted to cutting down trees and almost all of them had vegetable gardens within the prohibited thirty-metre range from the river. In year 2000, the Natural Resources Board arrested 18 out of the 20 women in the group for stream bank cultivation and indiscriminate cutting down of trees. What this shows

is that the women of Gudo Village cut down trees, not because of lack of information, but because of lack of viable alternatives. After all, the only source of water for watering vegetable gardens in Gudo Village was the river. Thus rural people do not follow the advice they get from the mass media blindly but act in ways that they believe will benefit them most.

In any case, some of the advice given by the mass media has not always been appropriate for the needs of the communities of Gudo and Chomuuyu. For instance, influenced by a radio programme entitled *Muti Upenyu* that emphasised the planting of exotic fruit trees that mature quickly, such as Mango, Pawpaw, and Orange trees, Esther Vanhaka, a 46-year-old traditional healer, established one of the largest fruit orchards in Chomuuyu and, in 2000, was planning to convert part of one of her maize fields into an orchard. She also planned to start a gum plantation. She said her idea came from the radio programme. She had no interest in planting indigenous trees despite the fact that she was facing increasing problems in accessing some of the medicines she required for her profession which were obtained from indigenous tree barks, leaves and roots and had to walk long distances to find such medicines.

Indeed, when asked which type of trees they would choose to cut down if they were asked to choose between the Mango, and the two indigenous varieties of the Mukamba and the Mukwakwa (wild fruit) trees, most people indicated that they would cut the indigenous varieties because the first did not benefit them in any way, while the second was over-represented in the area. This suggests that, while the mass media has worked well to increase the villagers' awareness of the importance of trees, the messages they received seem to suggest that exotic trees are more important than indigenous ones and that conservation means, primarily, the protection of exotic trees. Not surprisingly, forests of indigenous trees are disappearing, while villagers are busy planting exotics. Indeed, as an Agritex official lamented, 'People have cleared indigenous forests and planted exotic trees, which they also fail to care for very well. The message has been to plant very tall trees.' In Gudo, villagers cut down Mupane, Mupangara and Munanga indigenous trees in order to use the wood for fencing their new plantation of exotic Gum trees. Clearly, such an approach threatens diversity of plant species in the area. Tables 4 and 5 document the types of trees that villagers in Gudo and Chomuuyu cut and grow, respectively.

As Tables 4 and 5 show, villagers were destroying indigenous trees and replacing them with exotics, but because they were planting a tree for every tree that they cut down, as they were urged to do by the mass media, they felt that they were practising good environmental conservation.

Table 4: Variety of Trees Cut

Trees commonly cut	Reasons for cutting
Mukamba	Woodcarvings, making household furniture and cattle yokes
Mubherenga, Mubhangare	Fencing
Mupfura	Household furniture, cooking sticks and plates
Munanga	Building; also the species is considered to be bad for crops in the fields in which they stand
Mupane, Mususu	For fencing and cattle kraals
All indigenous fruit trees	For negatively affecting crop growth or if not producing edible fruits
Mutondo	Making sleighs
Munyii	Stools and hoe handles

Table 5: Varieties of Trees Grown

Trees commonly grown	Reasons
Mango	For fruits and cash
Pawpaw	Fruits and cash
Gum trees	Building poles and cash

Rural-based Communication Systems

Rural-based communication systems also played a vital role in the dissemination of information. The villagers received environmental information from various organisations based in their area as well as the several local groups that had been instituted to police resource use in the area. In Chomuuyu village, there was a select group of people known as *jengetai'vhu* (keepers of the soil). The villagers elected these people who were essential for disseminating information and facilitating communication within their villages. Their main role was to ensure that land was not degraded any further and to encourage people to reclaim land where degradation has already taken place. They encouraged growing trees and enforced the restrictions on cutting down trees. They convened meetings and acted as the eyes of the headmen and chiefs. They policed the area and reported any infringements of laws relating to tree use to the Chief.

Jengetai'vhus were, however, accused of favouritism and corruption by the people of Chomuuyu. One villager maintained that, although trees in the area were being cut indiscriminately, only a select few people were prosecuted, as relatives of the *jengetai'vhus* were allowed to go free. He also charged that the *jengetai'vhus* were also open to bribery. Several other villagers confirmed these perceptions. Because villagers felt that they were being

asked to make sacrifices that some sectors of the community were being exempted from, they were discouraged from practising conservation wholeheartedly. Consequently, although information on the need to conserve resources was available, the lack of transparency in the manner in which conservation laws were implemented undermined the villagers' confidence in the entire conservation project. Thus, social settings do influence the effectiveness of any communicated information. Whether or not people change their behaviour in accordance with the information they receive depends on the socio-economic context within which they live and operate.

In addition, the villagers' degree of motivation was crucial in determining the success or failure of agro-forestry projects. This was evident from the fact that, although Forestry Commission Field Officers had long been disseminating information about the importance of trees in both Gudo and Chomuuyu villages and made full use of the headmen to communicate with the villagers, they seem to have had more success in Chomuuyu rather than Gudo. In Chomuuyu, the agro-forestry community project known as *Gutsaruzhinji* and the gum-tree plantation started well. Villagers felt that the project was their own and ensured that grazing animals did not stray into the woodlots and agro-forestry areas, even before they received a fence from the Forestry Commission. In contrast, Gudo villagers were not enthusiastic about their project and did not protect their woodlots from stray animals until they received a fence from the Forestry Commission. The contrast in protection is the more remarkable in that the Chomuuyu *Gutsaruzhinji* project is located at the boundaries of the village in the grazing areas, whereas the Gudo gum tree plantation is located at the headman's homestead within the village.

Part of the explanation for this difference would seem to be the fact that the people of Chomuuyu seem to have embraced the project and made it their own, while those of Gudo Village only reluctantly took part in the agro-forestry project. According to Chidawa, a 28-year old woman in Gudo,

We joined the forestry gum tree project after the project was imposed upon us by forestry officers. We have been working for a year now and nothing has materialised out of the project. Initially we thought that we were going to receive fruit trees or a vegetable garden and we discovered a little too late that this was not so.

The apathy in Gudo may also have been the result of poor communication between Forestry Commission Officers and the villagers, for, until the last minute, Gudo villagers were not clear as to whether their project would be an orchard, a vegetable garden or a gum tree lot.

Conservation projects could benefit from tapping in on the people's beliefs and traditional values and making use of the system of taboos and bye-laws that were used to protect the environment in the past and seem to

be effective in some contexts even today. It is interesting, for instance, that Mount Nyuni in Chomuuyu, believed to be the home of the ancestors, has remained relatively unscathed, as people are not allowed to cut down trees from the mountain. These restrictions are reinforced by the general fear of vengeance from the ancestors should rules be flouted.

Sometimes, other considerations come into play. For example, trees were spared the axe in gold-panning sites along the Runde River in Chomuuyu mainly because illegal panners needed cover for activities. This is not to minimise the damage done to the environment through siltation and the destruction of younger trees by the panners or to claim that villagers are not aware of the damage they cause. The point is that gold panning is a major economic activity in Chomuuyu and provides the money for children's school fees and to meet other family expenses and, therefore, villagers continue to practise this economic activity even though they know that this damages the environment. This finding lends support to Robinson's (1998: 11) assertion that forests are being destroyed not out of ignorance or stupidity but out of poverty and greed.

Also protected from deforestation were places popularly known as *Kumabase* or *Kumabuyer*, where the gold panners and their illegal buyers needed cover from prying police eyes. Villagers did not, of course, admit to the linkage between their illicit trade and the conservation of forests and these and other sites, but claimed that this was the result of the fact that they were now working hard to protect their environment because they now were aware that *miti upenyu* (trees are life). What this demonstrates is that the preservation of trees in the villages depends more on the social and economic value attached to them rather than appreciation of the need for conservation for its own sake.

The emphasis on planting exotic trees, such as gum trees, as has been highlighted above, stems from the fact that, while villagers can exploit these trees commercially, they cannot cut down some indigenous trees that are protected by custom. For instance, traditionally, it is a taboo to cut down any wild fruit. Anyone caught cutting down a Mukwakwa tree in Gudo and Chomuuyu, without the headman's authorisation, is liable to a fine of a goat or its monetary equivalent as determined by the village court. All the villagers police each other to guard against unwanted behaviour and are quick to report any infringement to the headman.

In addition, the success or failure of conservation projects can depend on the reputation of the agencies that are promoting the projects. In other words, collective memory of past experiences can influence how enthusiastically the villagers receive new conservation ideas and proposals. Failure to deliver on promises in the past by an organisation would mean that it would not be taken seriously in future. According to Mukamba, an official of South Eastern Dry Areas Project (SEDAP) in Zimbabwe, an

organisation which co-ordinates environmental projects of different organisations, his organisation's past failure to fulfil its promise to top up Gudo villagers' financial contributions to enable them to procure cattle meant that when he returned to the village later with another project, he found that no-one was interested because, the villagers said, *Vanhu veSEDAP vanonyeba* (the SEDAP people are liars).

In rural based communication, social dynamics can determine who has access to information and who has not. According to Makamba, if NGOs and governmental organisations inform the villagers of meetings, the poor may not attend, not because they feel they will gain nothing by attending, but because their immediate needs often conflict with the long-term goals of environmental conservation. Moreover, the poor are sometimes not invited, apart from the fact that they often do not contribute to the discussions. In any case, when they do, their views are not taken seriously.

Villagers also have their own traditional ways of protesting and making themselves heard by the various external agencies. In one of the villages, for example, when some women were faced with imminent arrest from the Natural Resources Board for cutting trees, they stripped off their clothes in protest. The women were not arrested and the Natural Resources Board later moderated its approach to allow people to cut a few branches only from the trees.

Gender Issues

With regard to the role of gender in social forestry, it would seem that conservation projects have had varied impacts on women and men. In orchard projects, men comprised the majority of members, although collecting fruit was traditionally an activity of women. All benefited from improved nutrition in the households, but there was a price for women to pay. Women often found themselves burdened with extra labour duties without participating in the decision-making and unsure of who would reap the benefits. This made them resentful. The few women who were members of the projects in their own right claimed that they operated on an equal footing with their male counterparts and gained significantly in self-confidence, to the extent that women began to initiate their own projects.

Nevertheless, men still overwhelmingly dominated the social forestry projects. For example, in all the social forestry projects in Gudo, only one woman had a position in a committee, as vice secretary, while in Chomuuyu, there were only three female committee members, occupying the positions of vice secretary, treasurer and committee member. Because the substantive office holders were rarely away from the villages, the deputies never had any opportunity to exercise any authority. The consolation posts awarded to women in the committees only served to maintain the illusion that men and women were operating on an equal footing.

However, by 2000, women had begun to assert themselves more forcefully, refusing to provide labour for their husbands in the community projects and setting up instead their own orchards at their homesteads. Meanwhile, the ability to communicate with Agritex and Forestry Officers, as well as growing access to the radio and growing use of women's networks had enabled them to strengthen their knowledge about tree growing, tree maintenance, and possible markets. On their part, men had also benefited from the information they receive on gum tree plantation and had started to grow gum trees around their fields to ensure a future supply of building material. There was also a growing realisation that a good supply of gum trees might be essential, in the long term, to save indigenous trees.

What is evident from the above, therefore, is that, contrary to the assumption in the mass media and by environmental agencies that everyone, regardless of age, status and gender, will benefit equally from Natural Resource Management Projects, the reality is that some projects will benefit certain groups more than others. Therefore, it is important that those tasked with disseminating information should be sensitive to this fact and make every effort to factor in gender in the development and marketing of their programmes.

Attitudes

By the year 2000, technical advice on forestry issues was changing. In the past, Agritex used to urge people to cut down trees in their fields because of the belief that trees interfered with crop growth. Rural people followed this advice for years and only ignored the advice where wild fruit trees like Mukwakwa that benefited them directly were concerned. Now, the Forestry Commission promoted the idea of an agro-forestry garden in which trees and vegetables grow side by side. Villagers were, however, sceptical of this new wisdom.

There has also been a change in the villagers' attitudes to the role played by trees in their lives. In the past, people in both villages regarded trees as a source of fuel, building material and fruit. Any tree that failed to meet these requirements could be cut down without any remorse. At the end of the research, however, people were aware of other uses of trees such as using ingredients from trees in soap and jam making. This has increased the value of trees in people's minds but it was not clear whether this would result in positive behavioural changes.

With regard to the planting of indigenous trees, little had changed. Most people still believed that indigenous trees are *zvisikwa zvaMwari* (God's creation) and so should be left to self propagate. In both Gudo and Chomuuyu villages, the most frequently requested tree species for planting were Gum and Mango trees. Very few villagers have requested seedlings of indigenous tree species from the Forestry Commission. The Forestry

Commission delivered less than 20 Mutohwe and 20 Mutondo trees to both Gudo and Chomuuyu combined. In Chomuuyu, however, the Mukamba Nursery Project (still in its formative stages at the time of the research and composed of only five members), focused on growing indigenous trees like the Mukamba. People's attitudes also varied depending on where they are located on the social structure. This is exemplified by the different perceptions on how the controversial *Chiwi* area should be utilised. The headman started to settle people in this area, which was once reserved for grazing. A section of the Chomuuyu residents was opposed to settling people in the area because it was becoming deforested. The acting Councillor visited the District Administrator's office in an effort to convince him to order the headman to stop settling people in this area and to evict those who were already living there. These people cited the fact that the clearing of trees for settlement would lead to deforestation and to the siltation of *Runde* and *Pambe*. This group, however, was composed mainly of large cattle owners who were concerned about the shrinking size of grazing land. Those without cattle were not concerned with the settlement of people in the *Chiwi* area and sometimes even supported it, although they complained that the process was not sufficiently transparent. Although environmental information was being disseminated, people's behaviour is often determined by personal interests.

Discussion

This study has examined the role of communication in facilitating the use of tree resources and how the various communication systems and networks are used in order to influence the behaviour of various target groups. It has commented on the effectiveness of these tactics and also analysed the perceptions of differently placed individuals and groups of issues related to the use of trees and tree based resources, paying attention to economic and political factors that affect their decisions.

The study has argued that villagers strategised in their dealings with outsiders to influence decisions on tree utilisation and that peasants normally organised opposition or resisted individually if the outcomes of decisions did not favour them. Villagers continued to pan for gold, for instance, although this was against government policy and they knew that panning for gold was detrimental to plant life along the river.

Local social relations and economics of resource use determined how villagers received environmental messages. Previous association between the village and external environmental organisations can affect the credibility of the organisations, as shown by the reluctance of the people of Gudo Village to trust any SEDAP official.

Villagers accepted environmental messages when they could derive direct economic benefits from changing their forestry related behaviour, but if no

benefit was imminent, and worse still, if access to forest products was curtailed, villagers either simply ignored the message or resisted. In order to facilitate gold panning activities, they did not cut down trees along rivers, yet they cut down trees in areas such as *Chiwi* to facilitate settlement, or to expand their fields.

Although communication does not have an automatic and direct influence on people's behaviour, it still plays a pivotal role in facilitating the use of trees. People and groups do not necessarily adopt any information they receive from outside, but they retrieve information and act on it according to their perceptions on what is beneficial. Local relations are linked to wider geographical and social settings. However, these linkages are not simply relations of power in which certain people are able to dictate the actions of others. Behaviour is not determined by structures but by the perceptions of the concerned individuals. Peasants offer resistance against unpopular policy interventions and, in some cases, can even modify the policies during implementation to suit their own ends. Thus, information that comes from outside cannot be regarded as superior to any locally generated environmental information.

Community based social relations, like those based on gender, can have an impact on both mass communication and rural-based communication systems. In situations where women are marginalised from environmental discourse and only take part as labourers in resultant programmes, the programmes are likely to fail. If women do not perceive any benefits, they might withdraw their labour. Consequently, all environmental messages should show gender sensitivity or at least recognise the differentiating effects of development programmes.

In the study area, some groups of people were marginalised from both mass communication and rural-based communication systems and networks, limiting the ability of these to influence behaviour. Those with access to radios usually do not listen to environmental programmes. Sometimes, the poorest in the communities are not invited to meetings, although they are the ones who usually have to eke a living out of the environment.

Political issues have a pervasive impact on communication, especially relating to environmental ideologies and propaganda. Political considerations affect how disseminated information is received at the grassroots as well as how it is acted upon. If people at the grassroots do not appreciate the environmental messages they receive, they might claim that the information is biased or that it is representing the interests of foreigners. Therefore communicating information about the environment is not only about disseminating facts, but also about insuring that information appears as legitimate.

Local-level politics should also be taken into consideration when designing communication strategies. If people do not trust the bearer of the

message (for instance, where *Jengetaivhus* are regarded as corrupt), then the message is likely to be ignored by people. Local-level politics can lead to the distortion of messages because, at the local level, people do not consider only the communicated information but also who is communicating it. For effective communication, therefore, external organisations have to identify opinion leaders who garner the support of the majority in every village and utilise them in disseminating information. Because villagers also look into the history of the message bearer, environmental organisations should avoid forging alliances with people who have in the past failed to meet their obligations.

People in the two villages are differentially placed in terms of social status and gender, and consequently have different perceptions on the use of trees. The perceptions of villagers sometimes run parallel, sometimes contradict and are sometimes not related to the official messages on the environment. This means that before any messages are communicated there has to be extensive consultation with the target groups so that programmes and projects are designed to address the needs of a variety of people.

Differential placement in the social and economic sphere may mean that people retrieve information to support whatever stance they are taking at any particular time. People are not only acted upon but also act upon the information they receive and sometimes modify it to suit their ends. Those who did not support environmental efforts in one area might support conservation efforts in areas that were of social and economic significance to them. Environmentalists must realise that the same programme cannot be used successfully in all rural areas regardless of context. They should effectively open lines of communication within the rural areas to facilitate consultation before a project is implemented. The same project might have differential implications for different villages or different people within the same village. Therefore, communities need to be involved in the collection and analysis of data. The provision of external environmental information and advice should be based on dialogue with the community.

Bibliography

- AMANOR K. S. 1994 *The New Frontier. Farmers' Response to Land Degradation: A West African Study*, London: Zed Books.
- BANURI T. AND MARGLIN F. A. 1993 *Who Will Save the Forests? Knowledge, Power and Environmental Destruction*, London: Zed Books.
- BERRY L. 1988 'Concentration without privatisation? Some consequences for changing patterns of rural land control in Africa', in Reyna S. and Downs R. eds *Land and Society in Contemporary Africa*, Hanover: University Press of New England.
- BOYD-BARRET J.O. 1992 'Cultural dependency and the mass media', in Gurevitch M et al. eds *Culture, Society and the Media*, London: Routledge.

- HADEBE S. 1998 'Sociolinguistic issues and Human Factor Development in Africa', in Chivaura V. G. and Mararike C. G. eds *The Human Factor Approach to Development in Africa*, Harare: University of Zimbabwe Publications.
- HALL S. *et al.* 1978 *Policing the Crisis: Mugging the State and Law and Order*, London: MacMillan.
- HALL S. 1992 'Rediscovery of "ideology" return of the repressed in the media studies', in Gurevitch M. *et al* eds *Culture, Society and the Media*, London: Routledge.
- LONG N. 1989 *Encounters at the Interface. A Perspective on Social Discontinuities in Rural Development*, The Netherlands: Wageningen University.
- 1995 *Battlefields of Knowledge*, London: Tavistock.
- MARARIKE C. G. 1998 'The Human factor, media and politics in Southern Rhodesia (Zimbabwe)', in Chivaura V. G. and Mararike C. G. eds *The Human Factor Approach to Development in Africa*, Harare: University of Zimbabwe Publications.
- MOORE D. 1993 'Contesting terrain in Zimbabwe: Political ecology, ethnography and peasant resources struggles', in *Economic Geography*, 69 (iv): 380-401.
- NADKARNI M. V. *et al* 1989 *The Political Economy of Forest Use and Management*, New Delhi: Sage Publications.
- NHIRA C. *et al* 1998 *Contesting Inequality in Access to Forests*, UK: International Institute for Environment and Development.
- OWINO 1993 'Research guidelines for social forestry research in Africa', in Adamowicz W. L. *et al* eds *Forestry and Environment: Economic Perspectives*, UK: CAR International.
- PELUSO R. 1980 *Rich Forests, Poor People. Resource Control in Java*, Berkeley: University of California Press.
- ROBINSON M. H. 1988 'Beyond destruction, success', in Gradwohl J. and Greenberg R. *Saving the Tropical Forests*, London: Earthscan.
- Uche L. 1985 'Diffusion of major crisis information among urban and rural opinion leaders in Nigeria', in Ugboajah F. O. ed *Mass Communication Culture and Society in West Africa*, London: Hans Zell Publishers.
- Ugboajah F. O. 1985 'Oramedia in Africa', in Ugboajah F. O. ed *Mass Communication Culture and Society in West Africa*, London: Hans Zell Publishers.
- Vivian 1994 'NGOs and sustainable development in Zimbabwe. No magic bullets', *Development and Change*, 21 (i): 167-194.
- Wright R. C. 1959 *Mass Communication. A Sociological Perspective*, New York: Random House.

Appendix: Shona and Scientific Names of Trees Mentioned

Shona	Scientific
Indigenous Trees	
Mukamba	<i>Azelia quanzensis</i>
Mukwakwa	<i>Strychnos madagascariensis</i>
Mupfura	<i>Sclerocroa berria</i>
Munanga	—
Munyii	<i>Berchemia discolor</i>
Mutondo	<i>Cordyla africana</i>
Mupane	<i>Colophospermum</i>
Mususu	<i>Terminalia sericea</i>
Mubhangare	—
Mubherenga	—
Exotic Trees	
Mumango	<i>Mangifera indica</i>
Mupawpaw	<i>Carica papaya</i>
Mupuranga	<i>Eucalyptus camaldulensis</i>