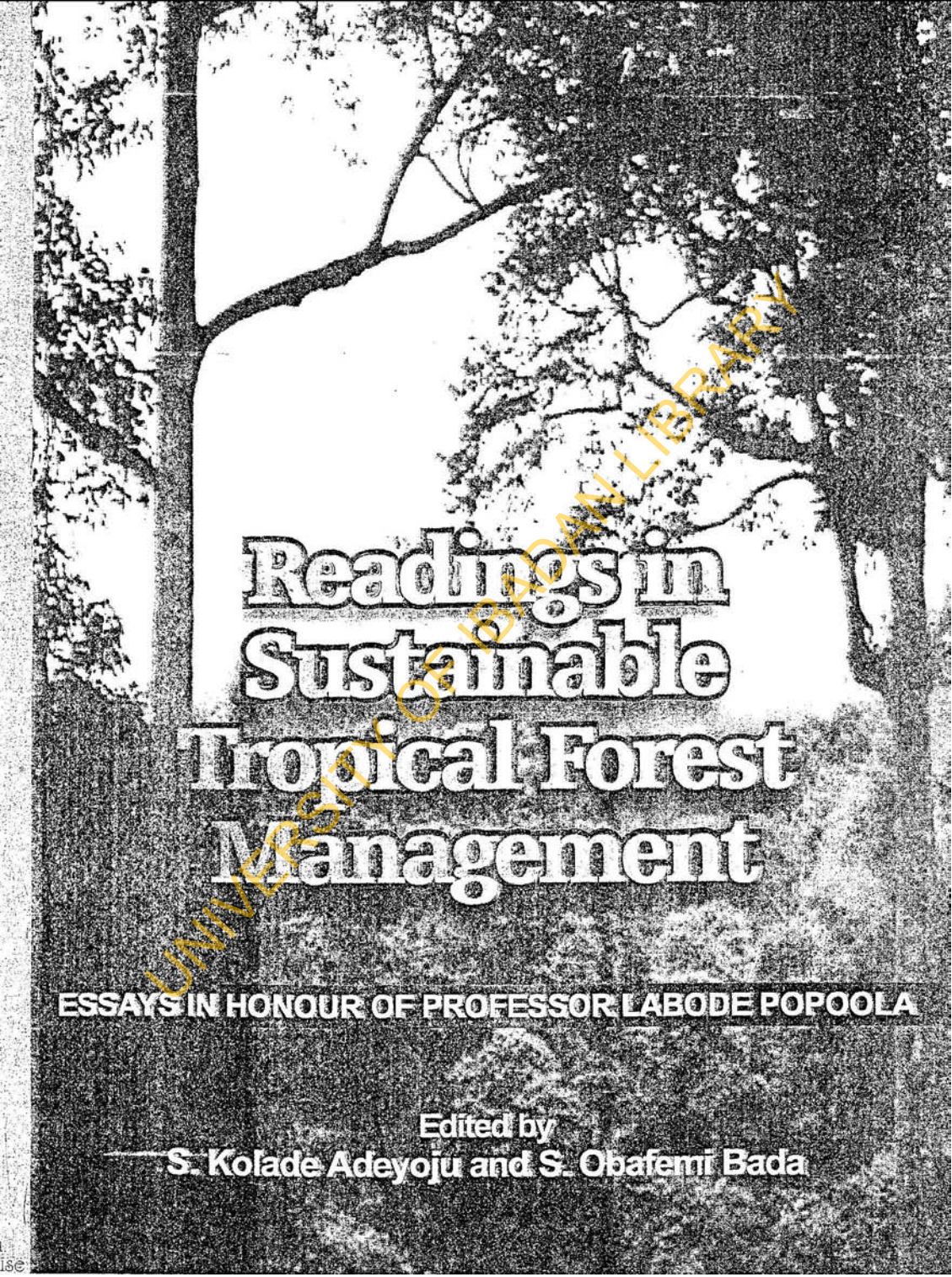

Forest resources are essential to sustaining the biodiversity of natural ecosystems and creating harmony within the world's climate system.

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FOREST CONSERVATION SUPPORT INFORMATION DISSEMINATION IN SOUTHWESTERN NIGERIA – ISSUES AND PROSPECTS IN THE MULTI-MEDIA APPROACH

Ismail O. Azeez

INTRODUCTION

Deforestation is simply the conversion of forests to other uses apart from allowing the forests to regenerate. Singh (1993) views deforestation as a complete clearing of tree formation (closed or open) and the replacement by non-forest land-uses. In Africa 5.1 million hectares were deforested annually between 1981 and 1990 while in Nigeria about 300,000 hectares of forests were destroyed every year, while the closed forest was converted at the rate of 5% per annum (WCED, 1987). NEST (1991) and Adedire (2002) submit a higher figure of 350,000ha and 600,000ha of forests and woodland respectively as being destroyed annually, leading to exacerbating desert encroachment in the north and savannah of the high forest in the south.

As submitted by Coufield (1985) and Myers (1989), if deforestation were to continue at these rates, most tropical forests would disappear sometimes during the twentieth century, or be reduced to small patches with only a few blocks of primary tropical rainforest remaining in inaccessible or effectively protected areas. Invariably, deforestation will impact the environmental system (Sesanayake, 1994) through biodiversity loss, climate change, flooding, loss of soil

fertility, desertification and soil erosion, which will affect the social system both at the local level and on a wider international scale. To guard against such occurrence, there is a need for conservation - i.e.: rational utilisation of the remaining forests and possible reclamation of deforested land area. The conservation of living organisms through regeneration/renewability has been recorded for over two millennia (Lokunbandara, 1991), but conservation biology gained political recognition at the United Nations Conference on Environment and Development (UNCED), leading to a convention on Biological diversity in 1992. Conservation is defined as the management of human use of the biological resources of the earth so that it may yield the greatest sustainable benefits to the present generation, while maintaining its potential to meet the needs and aspirations of future generations (IUCN, 1980, Anijah-obi, 2001).

Sustainable use of forest resomces will, however, be attractive to the rural populace whose livelihood hinges on the forest only if it does not infringe on their access to the forest (Olawoye, 1996) or if the concept does not contradict the social and cultural premises within which they operate. Such use must therefore incorporate the convenience of the users, as well as the managers of the forests, if it is aimed at raising the standard of living of the rural people. Invariably, there is a need for a meeting of minds, which is achievable through a participatory approach to local (forest) resource management if the managers of the resource will not be assuming what is convenient for the rural people.

Local resource management was reported by Edmunds (2002) as well as Chambers (1987) and Cernea (1987), as "the organised and conscious local efforts, whether project-related or not, to sustainably maintain or increase the regenerative capacity of local natural resources". This definition forms the background for the conceptual and practical framework of all development activities in the 1990s and beyond (WCED, op. cit.; World Bank, 1992). As a pre condition, working towards conscious, organised environmental management requires that the target audience should gain insight into the problems in their own environment, and perceive that these problems directly concern them (WCED, op. cit.; World Bank, op. cit.). Hence, to embrace sustainable use of forests, it is important that

the target audience is apprised of imminent danger in the wanton exploitation of forest resources.

Disseminating forest resource conservation information, however, amidst the social, cultural, economic and psychological premises surrounding the rural populace is very complex. Thus, it is pertinent to understand and appreciate the dynamics of the information needs of forest-users in the context of their socio-cultural and economic premises. This chapter therefore chronicles the dissemination of forest conservation-support information, tapping into media mix, in the context of traditional and interpersonal channels, as well as modem print and electronic media (Moemeka, 1987 and Roger and Shoemaker, 1971) for mobilising rural people to accept the rational utilisation of forest resources.

Sustainable Development

As posited by UNEP, sustainable development is meeting the needs and aspirations of the present generation without compromising the ability of future generations to meet their needs (Brundtland, 1989). This was the background for conceptual and practical framework of all development activities in the 1990s and beyond. Importantly, it puts forth the view that promotion of the environment does not necessarily have to be at the expense of economic development. Assigning the highest priority to economic progress and growth had in the past led to inconsequential environmental sacrifices (Dasmann *et al*. 1976). Today, the human race faces enormous challenges to its very existence viz reckless destruction of rain forest, carbon emission from use of fossil fuels and the consequent warming of the earth's climate, land, water and air pollution and damage to the ozone shield.

According to the World Watch Institute, if policies that endanger our fragile planet are still being pursued by human kind, an ecological disaster and economic decline, which will result in societal disintegration are imminent (The Blade, 1990). Therefore developing nations ought to focus their energies on halting the destruction of natural resources (William, 1989). They must also limit population explosion and avert imitating the western style of growth and development, which has, until recently, ignored the fragile ecosystem of the planet Earth. Williams (1989) then suggested the inclusion of

local capacity building fir integrating sustainable resources-use policies and management in the development programmes of develop g nations.

According to Melkote (1991), a major external constraint to development is the paucity of adequate, reliable, relevant and timely information to overcome lack of knowledge and skills about recommended innovations among potential peasant adopters. This therefor calls for focusing research effort at development innovations relevant to the needs of the disadvantaged with a view to bridging the gap between the technical specialists, the subject matter specialist and the users who are in need of such knowledge.

Conservation

Conservation is defined as the management of human use of the biological resources of the earth so that it may yield the greatest sustainable benefits to present generation, while maintaining its potential to meet the needs and aspirations of future generations (IUCN, 1980, Anijah-obi, 2001). For a renewable natural resomce like forest, conservation is the controlled use of the resource in such a way that its capacity to renew itself is not impaired.

Conservation of the forest ensures the continuity of the benefits derived from them; these include raw material for wood based industries, protection of watershed, minimisation of erosion, stabilisation of soil, amelioration of climate, provision of materials for food, health, shelter, among others, (Sayer, 1990). These benefits are so important to man that they ensure his continuous survival on the planet Earth. Going by this, conservation involves preservation, maintenance, sustainable utilisation, restoration and enhancement of the natural environment (NEST, 1991). It is thus a sustainable development process.

Innovation Diffusion

Innovation diffusion is an information dissemination process through which novel ideas are spread to a group of people in a society. A study of the process provides information on how to communicate effectively with a large number of people to accept new

idea(s). Rogers (1995) defines innovation diffusion as the process by which an innovation spreads, while the diffusion process is the spread of new ideas from its source of innovation or creation to its ultimate users.

Innovations are usually treated with curiosity and suspicion by intended beneficiaries. Curiosity arises among beneficiaries about their effects – positive or negative, while the suspicions are linked to the risks and uncertainties involved in adoption of innovations. Therefore, communications centred on innovation diffusion should not only aim at influencing positive action, but should also build confidence, create assurance and instill safety in the minds of the adopters. Adoption of a new idea is an individualistic decision; hence diffusion processes are affected by some factors such as culture, social values and psychological frame of mind.

Furthermore, innovation diffusion may not result in improved communication if the source and the receiver are heterophilous. As observed by Rogers and Shoemaker (1971), and Moemeka (op. cit.), communication is improved and rewarding only when both the source and the receiver are homophilous. Homophily is the degree to which interacting pairs are similar in certain attributes even though it can also result from diffusion of innovation.

As observed by Larzarsfeld *et al.* (1948), the more communication there is between an interacting pair, the more Likely they are to become homophilous; and the more homophilous they are, Me more fruitful their communication will be. Hence, communicators must identify with one another and invariably, innovators or change agents should be able to share adopters' belief, attitude, psychology and values. This is why research in diffusion should focus on the condition which increase or decrease the likelihood that members of a given culture will adopt a new idea, product or practice. According to Rogers (1983), diffusion research has focused on five elements viz: the characteristics of an innovation which may influence its adoption the decision making process that occurs when individuals are considering adopting a new idea, product or practice; the characteristics of individuals that make them likely to adopt an

innovation; the consequences for individuals and society adopting an innovation; and communication channels used in the adoption process.

However, diffusion assumes that the diffused innovation is needed by intended beneficiaries, which may not be so. Innovations are intended to empower beneficiaries and such empowerment will be effective and sustainable only when the target group is assisted in decision-making on innovation within their whims. Homophily can only be achieved when change agents have information on the background of target group, which is expected to influence their choice of advice and hence their gaining of the latter's confidence.

Persuasion

Basically, persuasion is an attitudinal change toward a proposal (i.e a recommended course of action), which has resulted from a message designed to alter beliefs about the proposal. For example, "let us plant fruit trees on our farms". Attitude on the other hand, is defined as "how favourably one evaluates something and is represented by feelings". An example of an attitude toward a proposal might be "I feel that planting trees on our farm is an extremely valuable suggestion". A belief is a perception of how two or more things are related. In persuasion, beliefs are perceptions of the consequences of a proposal. For instance, "if we plant trees on our land, we may have less land to grow our arable crops".

The use of persuasion implies provision of justification for a choice behaviour. To differentiate persuasion from coercion or compliance, the receiver must feel free, not constrained to choose. If a persuader wants to influence a specific behaviour, the first concern is usually attitude. If beliefs are negative, attitude will not be favourable. Admixture of positive and negative beliefs results in a moderately favourable or unfavourable attitude, depending on the proportion of positive to negative beliefs (Fig. 1).

Belief change ⟶ Attitude change ⟶ Behaviour change

Fig. 1: Schematic Link of Belief, Attitudinal and Behavioural Changes

According to Mc Laughlin *et al.* (1980), there are six dimensions of persuasion situation: intimacy, dominance, resistance, justification, personal benefits and long-term consequences. It is important that a persuader considers these six dimensions. For instance, if the receiver is very resistant to the source's proposal, a good deal of time may have to be spent explaining why the proposal is needed. So also, where the receiver has a pre-conceived perception of a proposal, source credibility will play a strong role in convincing him/her otherwise.

Although deforestation is an ugly menace threatening the eco-cultural status of Nigeria, the extent of damage is lost on the rural dwellers whose livelihood hinges on forest resources exploitation. Therefore, the very important facets of persuasion: justification, personal benefits and long term consequences, will play a vital role in persuading the target audience to embrace sustainable utilisation of the forests.

Source Credibility

In studying persuasion, the source is portrayed as being aware of everything and so active in encoding and delivering a message. Invariably, if the distinguishing characteristic of persuasion, that is, perceived choice is to hold, then source credibility cannot be over-emphasised. Persuasion model depicts a persuader not only as completely alert, but also actively controlling the shape, contents and sound of the message. But in recent times, this is not the case (Roloff, 1980). Persuaders assume a least resistant receiver which leads them to rely upon previously prepared scripts. A script is a meaningful sequence of events, which a person expects in a situation as either an observer or a participznt (Abelson, 1976; Brinol and Petty, 2009). Invariably, where extension agents are not knowledgeable enough and ready to accommodate indigenous suggestions, source credibility could be a negative premise for the use of persuasion in forestry development support communication. Hence, the sensitivity of deforestation and the nature of forestry as a profession will not accommodate a lifeless network diffusing forest conservation initiatives. Rather, a completely alert system, made up of change agents, target beneficiaries and common interest (sustainable

development) which will be actively controlling and shaping forest conservation messages, will most likely yield positive results.

Extension Services

In the early days, extension was directed at generating *new* knowledge while making existing knowledge accessible to others (Dada, 1999). Every ministry responsible for agriculture in Nigeria has had extension units as far back as 1954 when the Forestry Research Institute of Nigeria (FRIN) was established as the Federal Department of Forest Research (Okoro et *al.* 1989). These units were responsible for dissemination of information on crops, livestock, fisheries, produce and forestry. But the units were a failure as far as the dissemination of forestry information was concerned because they were manned by personnel trained in crops agriculture.

This trend continued till the 1990s except for slight respites: the setting up of the River Basin and Rural Development Authority (RBDA) in the 1970s and the Directorate of Food, Roads and Rural Infrastructure (DFFRI) in the mid 1980s – which had forestry contents. The establishment of Forestry Management, Evaluation and Coordinating Unit (FORMECU) with the World Bank assisted forestry projects fund also did not help forestry extension as much as expected in Nigeria (Dada, 1999), most especially in southwestern Nigeria.

Similarly, *in* the *mid* 1970s, with funding assistance from the World Bank, the Federal Government of Nigeria established Agricultural Development Programmes (ADPs). The ADPs have since spread to every state in Nigeria (Benor and Baxter, 1984). ADPs make use of numerous contact extension agents, to disseminate improved technologies, innovations, ideas and information to farmers who are the ultimate users. This is *aimed* at achieving the much-desired improvement in agricultural production and transformation (Arokoyo and Adegbehin, 1995). The extension technology backing-up ADP specified a cadre of frontline line staff (the villa, ge extension workers - VEWs) as advisers to farmers on crops, livestock, fisheries, forestry, *fadama,* irrigation, soil and water conservation. This frontline staffs are to be backstopped by subject matter specialists (SMSs) – (Eremie, 1994).

However, the impact of this frontline staffs on forestry development was negligible (Azeez *et al*. 2000; FORMECU, 1995).

Forestry extension in southwestern Nigeria has had little or no impact in all departments except awareness creation. Each state has its tree planting campaign ceremonies at the state and local government levels but the effectof this effort hardly reaches the rural population, while the technical assistance provided are to the local influential people present at the ceremonies (FORMECU, 1998). However, development communication is concerned with awareness creation, education and positive attitudinal change. The emphasis on only one of Me cardinals of development communication is mere propaganda and will not impart the lessons of environmental amelioration on the target group. Forestry extension has also suffered from lack of trained personnel in an environment where the predominant belief is that anyone interacting with rural people including forest guards is an extensionist. There is no doubt that, without inter-personal contact, it is impossible to tap into the indigenous knowledge of the custodians of forest resources in Nigeria, which is why the establishment of effective forestry extension network becomes imperative.

Forest Conservation using Participatory Extension Approach

The concept of sustainable rural development is rather general and can therefore be loosely applied. On the other hand, forest resources conservation is a specific strategy with diverse methodologies and tools directed at achieving it. One of such is the social forestry approach; owing to the complexity of forestry and its resources (Dada, 1986). In Nigeria, extension has normally promoted blanket recommendations for most technologies - agricultural, agroforestry, forestry, etc. However, the farmers' environment is highly diverse with patches of high and low fertility, different soil types, microclimate, social, cultural, psychological and institutional variables which influence the performance of technologies. The optimal management of such spatial, social, cultural, psychological and institutional diversities can only be achieved if farmers are knowledgeable about appropriate technologies and are capable of adapting them to their conditions. Transferring blueprints does not help in managing environmental and social complexity. Farmer to

farmer advice and learning by doing will be most appropriate (AGRITEX, 1998). This is where Participatory Extension Approach (PEA), which is a strong tool in social forestry, becomes imperative for sustainable rural development.

Participatory extension is like a concept based on "trials", where you try-out ideas and share your experience with others. Its approaches are a way of improving the effectiveness of rural extension efforts by government agencies, NGOs and other organisations engaged in rural development. The institutionalisation of PEA can help to improve organisational performance at the interface between the service provider (the extensionists) and the clients (the farmers). The following characterise the PEA:

- Initiation of community mobilisation for planning and action with rural development extension and research;
- Encouragement of equal partnership between farmers, researchers and extension agents so they can learn from each other and contribute their knowledge and skills;
- Strengthening rural people's problem solving, planning and management abilities;
- Promotion of farmers' capacity to adapt and develop new and appropriate technologies/ innovations;
- Encotuagement of smallholder farmers to learn through experimentation, budding on their own knowledge and practices and blending them with new ideas. This takes place in a cycle of action and reflection which is called "action learning"; and
- Recognising that communities are not homogeneous but consist of various social groups with conflicts and differences in interests, power and capabilities.

The goal of PEA is to achieve equitable and sustainable development through the negotiation of interests among groups and factions in rural communities and hence provide space for the poor and the marginalised in collective decision-making. PEA might not always lead to 100% success, but the communities are themselves in charge of the process of arriving at decisions. This is more important because when there is failure, the community will still have the urge

and the initiative to retry or modify innovations to suit their specific conditions. This is not possible without effective communication.

Communication

Globally, the drivers of deforestation viz: tribulations of the local resomces custodians, social structure, power relation, etc. may be caused by something else. However, the level of education of the mral dwellers on the ii–nportance of forest is a crucial factor in most developing economies. Custodians of forest resources therefore need to be mobilised and sensitised on the import of resources to their continuous existence. Thus, the first step in the PEA process is social mobilisation: facilitating the communities' own analysis of their situation (AGRITEX, op. cit.). Without this phase, community level action planning, implementation and monitoring are impossible. Social mobilisation is however, impossible without communication. As submitted by Melkote (1991), the communication of ideas, knowledge and skills is to make possible the successful adoption of development innovation. Melkote (op. cit.) merely reposed early definitions of communication by Rogers (1969), Schramm (1976) and Hellman (1980).

Historically, from the 1940s to the 1960s, various communication approashes of the dominant paradigm of development prevailed. The shift in emphasis regarding the role of the mass media, from one of dominant and powerful influence to that of minimal effects in the 1960s, was lost on the findings advocating the use of the mass media for development in the third world countries. Administrators and policy makers in the developing world perceived the mass media as an important means of bringing about quick behavioural change among their people, particularly in favour of the modernising objectives of the state. Ironically the plight of the very poor in the developing world has not improved significantly since the 1960s. In reality, the situation seems to have deteriorated (Illich, 1969, Seers, 1977; Wang and Dissanayake, 1984; Smythe, 1985).

By the early 1970s, it was fairly clear that the social-structural constraints on development did not often yield to the indirect influences of the media. Social structural Change, desirable as it is, is difficult to achieve in a developing society with-out political and ideological commitment, as well as popular participation by a

majority of the people (Mc. Anany, 1980). However, this socioeconomic hiatus in development can be narrowed using appropriate communication strategies, despite the major structural changes at the macro level. According to Shingi and Mody (1976), media could narrow the socioeconomic benefit gap, employing proper communication strategies. But, such strategies would be built into a flexible, development-support project which should be institutionalised.

In the 1980s and beyond, scholars and administrators viewed communication as a tool for development, development project and information programmes with a view to assessing their contribution (or lack of it) to overall development in developing nations. Most of the theories developed between 1950 and 1970 were assumed to have failed developing nations (Hornik, 1988). Presently, comm~mication at the grassroots level is an acknowledgement of the need to explore the various strategies used for rural development apart from, those anchored in the traditional top-down, inherently paternalistic and seemingly monological conception of comm~mication (Harris & Ado, 1994). The term *monological* refers to the classical conception of communication as a linear process involving a one-way transmission of symbolic stimuli from leaders to followers (Melkote, 1991). Although this is no longer obtainable in most developing nations, there is urgent need to revolutionalize the rural communication channels if development is desired.

Communication, according to Lai (1990), is an important aspect of human development, because without exchange of ideas, there will be no development. Olalekan (1990) supported this assertion when he described comm~micationas a combination of the life-blood and nervous systems of a living animal. Like blood, it carries water, oxygen and precious nutrients (goods and services) to every living cell and like the nervous system, it receives, processes, stores, retrieves and responds to stimuli (messages) both from within and without. He concluded that without rich pulsing blood and an alert nervous system, animals will soon be dead or dying. In other words, without comm~micationwithin and connecting to the outside world, a society ceases to exist.

Communication, in simple terms, denotes information flow and in discussing the flow of information, the process of information dissemination, according to Olurin (1990), becomes important. From the perspective of Olalekan (op. cit.), the greater and more complex an animal and its environment, the greater and more complex the communication network required to cope. If the town crier or the griot was the King's most complex communication instrument in the traditional society, the mass media are the central computer of the modem nation state.

Indigenous Knowledge (IK)

This is a locally acquired knowledge gained from the direct interaction of man with the environment. It exists in all forms and aspects of the lives of the local people. Numerous aspects of IK are not readily apparent to outsiders – certain trees, for example, may be used as indicators for soil fertility and seasonal changes in an environment (Warren, 1990). Indigenous knowledge is an important aspect of culture and technology of a society. For example, traditional farming system is an intrinsic part of the culture of the people and it is influenced by other elements of the culture such as religious beliefs, prestige, tribal group, land tenure and Inheritance (Lowe, 1986). Schultz (1974) also posited that among primitive and peasant societies, cultural beliefs and behaviour often play an equal or greater role than economic consideration when deciding whether or not to accept new practices. Kinship obligation, peer group influence, fatalistic beliefs, negative social sanctions regarding accumulation or surplus, individuality, taste differences and constraints as well as perpetuation of common tradition or values through fair socialisation, all present serious challenges to any foreign change agent.

The fundamental premise for the importance of IK is that rural inhabitants are highly knowledgeable about local conditions and their knowledge is as crucial for successful rural development as is the knowledge of science. Development must hence, first recognise the relationship between human societies and their environment (Dahlberg, 1979). Sound knowledge of the information base of the society, codified in the languages of the society facilitates communication and decision making and will go a long way in

solving rural development problems. The strength of rural people's knowledge lies in maintaining, extending and correcting innovations. This is achieved through acute assertions, good memory for detail, and transmission through teaching, apprenticeship and storytelling. These are in contrast with high wastage and replacement rate associated with outsider's knowledge, which is stores! on paper, in libraries and on computer tapes.

The success of a development project often depends on local participation. If local peopie are interacted with using people-friendly communication terminologies, they would readily volunteer information on their indigenous knowledge of such things as the nature of their soil, cropping practices, conservation technologies, etc. Such information will assist researchers in re-designing studies that would address the problems of the local farmers. As reported by Steiner (1987), farmers' participation in research is important in reducing the time and cost of adapting technology, and in strengthening farmers' abilities to exhibit their own expertise.

There are two types of communication channels that are pertinent to the Nigerian situation. These are the traditional mode of communication, which are more applicable to the rural setting, and the modem mode of communication, which relates very well in the urban environment (Olurin, op. cit.). White and McDonnel (1982) however, reported the failure of planners in the developing nations as the need to look for new patterns of communication, which would cut through social class barriers and establish horizontal linkages between isolated disadvantaged groups. This invariably has questioned the dichotomy of urban/rural communication mode.

The Traditional (Folk)Media

This consists of a variety of forms: folk theatre, puppetry, storytelling, folk dance, ballads and mime (Melkote, 1991). Through the use of dialogue, action, music, song and dance Melkote (op. cit.) submitted that, folk media have served as vehicle of communication and entertainment in Asia, Africa and Latin America for centuries. Olurin (1990) also identified traditional methods of information dissemination viz: the town crier system, folk tales, songs, comic plays, *Ewi* (oral poetry) and traditional festivals. Folk or traditional

media provide a communication system embedded in ihe culture, which existed before the arrival of modern mass media and still exist as a vital mode of communication.

In many parts of the world, traditional communication presents a certain degree of continuity despite changes (Wang and Disanayake, 1984). The traditional use of folk media was primarily for entertainment, social communion, and religious activity. People, who are engaged in community activities among ordinary and unsophisticated people especially in rural areas, cannot afford to ignore the media, which are indigenous and familiar. Melkote (*op. cit.*) identified three types of folk media in terms of flexibility: the rigid, semi-flexible and flexible folk media with the flexible types lending themselves as vehicles of persuasive communication. Rigid traditional media are usually ritualistic and very religious and they reject all foreign messages. The semi flexible media might permit limited insertion of foreign messages through certain characters or situation. The flexible media provide unlimited opportunity for inserting development messages.

The folk media are the product of local culture, they are rich in cultural symbols, and they are intimate with the people at the grassroots; are highly participatory and have great otential for integration with the modem mass media. To Ugboaja (1985), folk media is better regarded as rich interpersonal human communication speaking to the rural common man in his language, in his idiom and dealing with problems of direct significance to his situation and predisposition. Ranganath (1980) summarizes the following as the advantages of the traditional media:

1. As part of the rural social environment, they are credible sources of information for the people;

2. They command the audience as live media and are ideal examples of 2-way communication;

3. They prove useful in generating grassroots participation and a dialogue between the performers and the audience;

4. Their formats are mostly flexible, thus facilitating the incorporation of development oriented messages in their themes;

5. They are relatively inexpensive and in almost all cultures, command rich and inexhaustible variety, both in form and theme. The timeless traditional media, therefore present inexhaustible alternatives in form and theme for experimentation in comm~mication.

Among rural residents of southwestern Nigeria, Azeez (2006) reports folk media as playing information dissemination, reminder and reinforcement roles in forest consemation support-communication. He also notes that village/religious meetings are reliable information sources among rural inhabitants.

The Modern Mass Media

Mass comm~micationaccording to Burgoon and Ruffner (1978), is the form of comm~micationwhose delivery system permits the flow of information to large, diverse and scattered audiences, which may also be far removed from the message source. Mass media are used to mobilise human resources by substituting new norms and values, attitudes and behaviour for existing ones. This can stimulate increased productivity among target beneficiaries.

When used as vehicles of communication rather than as channels for information, the mass media can stimulate and sustain human/social communication (Moemeka, 1990). For it is only when the mass media have been changed from acting as channels for distribution and transmission to asserting themselves as vehicles for participation, expression and discussion that they truly become media of mass communication (Moemeka, op. cit.).

However, the success of mass media approach to rural development greatly depends on the ability and willingness to create for the rural people, access to the media and to induce the people's participation in both comm~micationprocess, as well as, their involvement in development efforts (Moemeka, op. cit.). Also, the identification and

choice of the right medium or media are equally important for rural development purposes (FAO, 1993 and Yahaya, 2001). This is because on these depend whether the beneficiaries are, in the first instance, reached with development messages. Choice of media also affects what people learn and how quickly and well they learn. On this note, while FAO (op. cit.), identified numerous mass media (television, radio, newspaper/magazine, video, bill boards, slide sets/film strips, audio cassettes and flip charts), Moerneka (*op. cit*) identified three as most popular for rural development; viz: television, radio and the print media (newspaper). This was supported by Azeez (op. cit.) who identified radio as one of the most reliable sources of information among rural inhabitants in southwestern Nigeria.

Media Mix

This is one of the various communication strategies, which aims at identifying and analysing innovations sought by people and those to be introduced by authorities. It is used to determine how various factors viz: attitude, culture and existing media of communication will help or otherwise in the adoption of the idea and recognises the means of relating media to people. Media mix takes into cognizance a combination of various media and recognises the religious, cultural and socio-economic diversity of target beneficiaries (Kekovole, et *nl.* 2997). A media strategy of this nature provides a means and way through which all members of the community will be reached effectively since without doubt, varied media appeal to various people depending on their individual preferences, accessibility and literacy levels (Kekovole *et al*. op. cit.; Rimon *et nl.* 1994; Singhal and Rogers, 1999).

Relating media to people, Severin and Tankard (1997) point out that, while the mass media can reach large audiences rapidly, create knowledge and spread information which may lead to changes in weakly held attitudes, interpersonal communication achieves the formation and Change of strongly held attitudes. Hence, interpersonal channels are more effective than the mass communication media where there is apathy or resistance to change (Rogers and Shoemaker, 1971).

There is no doubt that forest conservation innovation will distort the usual way of life of forest dependent peasants. These peasants map be aware of the problem that any western scientist may identify in their environment, but their perception of such problem or its cause may deviate from western logic. For example, peasants perceive forest disappearance and its associated problems like weather vagaries, barrenness of farm holdings, and water shortages as an act of God. Therefore, jettisoning the traditional land-use practices to meet food security need viz-a-viz mix farming and/or crop rotation practice(s) is a survival strategy and will be strongly held among peasants. Convincing them otherwise requires interpersonal channels.

However, forest conservation is a development initiative, and its communication is multi-phaseted. Communicating such initiative requires its analysis both within adopters and sponsors (the government, non governmental organisations, and other agencies). So also, there is need to determine the effect of attitude, culture and existing media of communication on the adoption or otherwise of the initiative. Where an innovation is not new to the target beneficiaries, one might hastily conclude on the non-inclusion of the mass communication media in the mixes for diffusing it.

Although, peasants are knowledgeable in traditional forest conservation practices, they lack the skill/knowledge of effecting multiple land use practices amidst their socioeconomic limits. The use of interpersonal mixes, which entail the use of opinion leaders in getting useful information to the grassroots, would have been most appropriate for achieving this but opinion leaders are themselves professionals who influence adoption of innovation to suit their whims.

Therefore, forest conservation innovation would best be communicated by making use of the mass media in providing knowledge of an idea while interpersonal channels will be used in persuasion. Thus, a combination of mass media and interpersonal channels is the most effective way of reaching people with new ideas and persuading them to utilise this information (Rogers and

Shoemaker, *1971*). For example, creating the awareness and instituting the principles of forest conservation in the sub-conscious of target beneficiaries, could be through the use of electronic and the print media (radio and newspaper, most importantly in the study area). The findings of Azeez (2006) reposed this fact when he reported radio in combination with community/religious leaders as an appropriate media-mix for sourcing information on sustainable utilisation of forest resources in southwestern Nigeria. At the same time, Change agents' could be involved in the formulation of forest conservation technologies with the target beneficiaries, as well as, educating them on the technologies. Azeez (op. cit.) findings also supports this by reporting the use of radio and forestry workers'-mix as the next most popular mix suggested for sourcing information on sustainable utilisation of forest resources.

Conclusion

Forest conservation is a developmental issue, and like all such issues, it requires a participatory decision-making process involving the target group, policy makers and technocrats. The need to look into the active participation of target groups necessitates a serious consideration of their indigenous knowledge viz a viz the social economic and cultural background. At the same time, age of chivalry is fast spent; the world is now a global village of sophisticates, economists and computers. Thus, aside the cost implication of what rural residents of southwestern Nigeria consider as appropriate for airing FCSI, the need to move with the tide of time is equally imperative. Therefore, the use of media-mix is expected to positively impact on the target audience.

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