

# Democratization and Economic Viability of Community Television in Africa : A Proposal for Nigeria

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## Abstract

It is always stated as a truism that the one mass medium that suits Africa (and the Third World) is radio because it is relatively cheap and already established. Not so television which is seen to require huge financial outlays, sophisticated technologies and electrical energy to install. This paper argues otherwise. It proposes a consideration of the cost-benefit factors of television and video-tape in development and argues that TV and rural video centres are not only economically viable but are socially desirable for Nigeria and, by extension, other African states which strive for fast socio-economic development. It accordingly makes the case for the establishment of rural television and community video production and viewing centres, using cheap technologies which are already available in the market as a way of democratizing the medium and empowering the grassroots communities through their gaining greater access to and control of it.

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# Démocratisation et viabilité de la télévision communautaire en Afrique : Une proposition pour le Nigéria.

## Résumé

Il a toujours été présenté comme un truisme, que le seul medium qui convient à l'Afrique (et au Tiers Monde), est la radio parce qu'elle est relativement moins chère et déjà établie. Ce qui n'est pas le cas pour la télévision qui semble requérir de d'immenses dépenses, des technologies et énérgié electrique pour l'installation.

Le présent document prouve le contraire. Il propose une vue de la télévision et des cassettes vidéos sous leur angle bénéfique pour le développement, et affirme que, non seulement la télévision et les centres vidéos ruraux sont économiquement viables, mais aussi une nécessité sociale pour le Nigéria, et, par extension, pour les autres Etats africains dans leurs efforts pour un développement socio-économique rapide. En conséquence, le document plaide pour l'établissement da la télévision rurale, de la production de vidéos communautaires et des centre cinématographiques, en utilisant des technologies peu chères qui sont déjà disponibles sur le marché local, comme moyen de démocratiser le medium et donner pouvoir aux communautés de base en leur donnant un plus grand accès à ce medium et à son plus grand contrôle.



## Introduction

This paper is not advocating replacement of existing television or other communication facilities, but their supplementation with facilities closer to the grass-roots. Community media exist all over the world, but they are uncomfortably few on the African continent, for reasons relating more to political insecurity, than the oft-quoted lack of technology and resource base. Once their enormous developmental potential is acknowledged, and appropriate regulation is enacted to prevent abuses, private, national and international resources can be mustered to establish them without much danger to national security, or the national purse.

Community media complement centralized media by reasons of their affording community-located inputs in programme production, management, ownership and control. They improve horizontal communication in small scattered communities and among economically disadvantaged groups whose interests centralized media cannot adequately protect, even with the best intentions in the world.

It is proposed in this paper that:

1. Now is the time to start establishing television stations in the rural areas; if not in all the 97,000 communities in Nigeria, but at least in some of the 301 Local Government areas.
2. Instead of mere community viewing centres, cheap widely available community video production and viewing sets can be provided.
3. Both rural television and community video production and viewing centres can be fully operational in five to seven years to allow time for surveying, awareness campaigns, training of personnel, location of structures and equipment acquisition.
4. The two projects are economically rational and financially feasible.
5. Both national and international resources can be harnessed for such project;

6. They pose no security threats that cannot be contained through regulation.
7. They actualize the government's stated commitment to the socio-political and economic mobilization of rural people.

## The Audio-Visual Choice

The first question, however, is why television and video? Or why not radio, with its already established superiority in outreach, lower operational and access costs?

The choice is predicated on the instantaneous and superior impact of television and audio-visual media in conveying information across language and literacy barriers and arousing emotional response. Simply put, audio-visual media are the most complete, most persuasive media currently available.

Ezeokoli (1987) speaks of television's ability to convey a great many types of signals simultaneously, making its impact through mutually reinforcing gestures, words, postures and sounds. She says that, 'the primary language of communication is the language of images, and television is the greatest carrier of images' (p.10).

According to Maduka (1987), information is power, information reduces uncertainty. Underdevelopment is, basically, a state in which people are unaware of their potential.

Akinyemi *et al.* (1987). television is the medium that enables the viewer see and understand himself and the social world around him. 'He identifies himself as a participant in the construction of that society. He sees, especially where his activities are recorded, that he helps to create and determine the real issues in the life of the community' (p. 3). By taking television ownership, production and transmission to the local government level, and video production—viewing centres to the community level, by regulating the content of these media towards self-awareness and development, Nigerian and African governments can make the rural citizen the subject rather than the object of national development.



## Economic Rationality

How can anyone seek to justify the investment of dwindling resources of heavily indebted African nations in rural television and audio-visual facilities? Is this economically rational when potable water, food, shelter, education and unemployment are so glaringly problematic? These are the questions economic planners and policy makers want to ask about mass communication and telecommunication services.

The questions derive from a perception of communication services as luxuries rather than factors of national economic growth.

According to Klees and Wells, (1980) increasing global emphasis on private and public sector economic rationality has resulted in decision makers being called upon to justify their choices in terms of such criteria as profitability, efficiency, cost-effectiveness, and cost-benefit ratio. But, fortunately, Klees and Wells note that more recent thinking within the neo-classical economic framework has led to an acceptance of communication services as an investment in human capital, becoming on the same basis as education, a significant factor in production. Communication systems, like education systems, disseminate information and can produce skill and attitude changes in individuals'.

Such skills, aptitudes and attitudes are believed to better enable industrial or agricultural decision makers (for example) to obtain, process and evaluate information relevant to production, leading to improved maximization of resources.

In addition, the information, attitudes and abilities gained by one individual has multiplier effects on his entourage such as colleagues, friends and family. Finally, a literate, informed population is necessary for the workings of a democratic government. Without an informed population, true national development cannot occur.

The postulates of Klees and Wells have been borne out by empirical studies. For instance, Sinha (1985) cites 18 studies spanning 1959—1981 in which television programming achi-

eved knowledge gain and agricultural innovations adoption, either directly or mediated by interpersonal channels.

Umeh (1988) lists 22 studies and projects in America, Britain and Nigeria from 1952—1983 in which television either as broadcasting or closed circuit television (CCTV) had been successfully employed in higher education, including medicine, science, technology, psychology, mathematics, social sciences, humanities, etc.

From his five-year longitudinal study of the effects of Satellite Instructional Television Experiment (SITE) on the life of the small village of Ismailpur, India, Sinha (1985) reports that the one-year programme resulted in adoption of several agricultural, health, and socio-political innovations. These were the adoption of high-yielding wheat and potato seeds, the use of pesticide to control sugarcane diseases, the use of water 'tub and lantern' method to kill insects infesting rice paddies and the adoption of poultry farming inspite of cultural inhibitions.

The health innovations were the popularization of yoga among village youth, the gradual acceptance of footwear by the women (despite cost) to prevent hookworm infestation, the adoption of nutritional and hygiene practices in the home. Television also stimulated the formation of a youth parliament, which organized village youth into a community work force and radical political vanguard. This youth parliament, called 'Yuva Dal', despite repression by government officials, grew strong enough to help vote out the local feudal landlords four years after the experiment had ended.

If centrally transmitted programmes can achieve that much, user-initiated programme production can produce larger socio-economic benefits.

## Ownership and Financing

The pioneer work of Wells and Klees (*op. cit.*) in the economic analysis of ownership and financing of broadcasting is relevant here (pp. 247-264). They identified three possible types of communication systems control: private non-regulated ownership, publicly regulated private ownership, and public ownership.



As private non-regulated ownership hardly exists anywhere, the three options for rural television and community video centres are either publicly regulated private ownership, public (state) ownership, or a mixture of both.

In Sobowale's (1987) opinion, it is unrealistic to expect private newspapers, which must return profits on investments, to focus coverage on rural areas as it is for government newspapers to seek to compete with their private counterparts for profits (p. 12—14). He suggests that rather than running national newspapers and precluding private entrepreneurs from owning and operating radio and television stations, government ought to have concentrated its media ownership efforts on operating rural mass media. The private media can then be left to cater to the entertainment, information and cultural needs of the urban elites who can afford to pay for such services.

The first problem with this suggestion is that, given the widely acknowledged insecurity of African governments, very few would dare completely release the national audience to the private sector which may harbour their competitors for political power.

The second problem is the assumption that urban dwellers can pay for media services while rural people cannot. This assumption requires clarification because, according to Wells and Klees (*op. cit.* p. 216) media patrons hardly ever pay an economic price for consuming media messages. Media messages are usually heavily subsidized through advertising or tax-supported government ownership in the case of radio and television. Clearly, purchasing a radio or television receiver is not the same as purchasing the messages which it is capable of receiving. Wells and Klees, therefore, distinguish between financing of the production, transmission and reception components of communication processes.

Of course, the transmission component is the most expensive, usually requiring heavy capital investment in hardware (transmitters and related equipment). The community production and viewing centre does not require transmission facilities.

only production and playback. It should be noted that message production can be made relatively cheaper, either through economies of scale (for instance a private or public production outfit producing and selling user-oriented programmes to several community radio stations), or through the use of volunteer production crew and talent, if each rural television station prefers to be strictly self-reliant.

Who then underwrites the installation and operations of transmission facilities, (and licence for frequency allocation if a fee is charged by the state)?

In the Nigerian context, the loudly assertive private sector could probably muster the resources to establish rural television, based in the more densely populated local government headquarters, and as far as possible from state or national capitals.

Private Nigerian citizens are known to run airlines and shipping lines; it is doubtful if a small or medium television establishment would require as much as half of the capital and operational costs of an airline or shipping line.

While few newspapers require the capital outlay needed for establishing television facilities, the large and ever increasing number of private newspaper houses in the country indicate that private media are being run efficiently and fairly profitably (either financially or politically) by Nigerian citizens. The same spirit of entrepreneurship can be released for rural television. However, the experience of other nations with oligopolies, whether of the media or the production of other goods and services, indicate great dangers in permitting the growth of private multi-media conglomerates with interests in newspapers, radio and television (McBride *et al.* 1981. o. 169).

If preliminary feasibility studies indicate that it is in local government headquarters where rural television can be economically viable for private investors, the following regulations are recommended:

1. That no single private investor be allowed more than 20 per cent of the shareholding.



2. That a ceiling of 50 per cent be placed on all private shareholding.
3. That the local government council or councils being served be allocated 10 per cent of the shares.
4. That the remaining 40 per cent be shared up to a maximum of 10 per cent group among co-operatives, labour organizations, farmers' associations and other organized groups; but excluding ethnic or religious associations in view of their divisive impact on the Nigerian polity.

When or if such a financing arrangement is implemented, there must still be some mechanism for recouping returns on investment for the shareholders.

The two main options are advertising and pay-TV. There is a lot of literature on the effects of advertising on even sophisticated, literate urban audiences. It has even been suggested that advertising, especially on television, contributes to the rising frustration of urban poor and the crime rate in developing nations. It is alleged that as citizens are tantalized with products of the Western consumer society which are irrelevant to their real needs, and which they cannot afford, they get increasingly frustrated. Eventually they vent their anger, in the form of crime or social unrest, on the elite who, as clients of the Western consumer society, engage in conspicuous consumption of these luxuries.

Even in the Western society, advertizing is often described as manipulative, and its interface with the media described as a conspiracy against the people. According to McQueen (1985), commercial mass media are not news and features backed up by advertising, but *advertisements which carry news, features and entertainment in order to capture audiences for the advertisers*' (p.4).

McQueen believes that it is a mistake to analyse the relationship between media and advertising by supposing that the media's prime function is to sell advertized products to audiences. On the contrary, the media's job is to sell audiences to advertisers.

Nonetheless, the reality is that even non-commercial media are established to create, maintain and 'sell' audiences to some set of politicians or ruling class, some ideologues or philosophers, etc. Also, it is fashionable but unpardonably cheap to heap all the blame of social inequalities on the media. Media may reflect, even reinforce the status quo; but it is political action or inaction that creates the type of society in which people choose to live.

In the case of rural television, if commercial advertizing can underwrite the costs of selling the people to themselves or selling them the idea of self-development, then its more negative effects can be controlled through regulation.

For instance, regulations governing allocation of frequencies could stipulate that only products with a minimum of 40 or 50 per cent value-added in Nigeria can be advertized on rural television. Such value-added may be restricted to raw material inputs, or extended to labour costs. Whichever option is chosen, such a regulation would encourage local industries, and additional regulations could always be enacted to prevent abuses in advertizing practices.

Fees charged for personal messages, especially festival and holiday greetings, person-to-person messages, can yield significant revenue for rural television (hardly a month passes in Nigeria without some nation-wide festival. Also, local cottage industries, traditional arts and crafts, and other skills, local farm marketing, are as viable subjects for advertizing on rural television (serving several communities), as the best shampoos or dog foods from Paris.

If advertising is not permitted or viable, investors can always resort to pay-TV, through subscribed cable TV. The cable TV system is a closed transmission system in which only paying subscribers' receivers are linked to the transmission station by underground cable. New technology has even made it possible for open broadcast frequencies to be scrambled (distorted) in such a way that only paying subscribers are supplied with decoders which they attach to their receivers.



All this may give the impression of moving away from the original goal of providing both input and outreach access to the majority of rural citizens, as only those who can pay would receive programmes. But if citizens form co-operatives, they could subscribe and watch programmes on the community production and viewing receiver. The government can also give generous tax holidays to private investors to encourage their public-spiritedness in investing in and for making free special provisions for schools and adult education classes.

If, however, feasibility studies prove that rural television cannot be commercially profitable in any part of Nigeria (no such studies are currently available), then as Sobowale (*op. cit.*) suggests, government can intervene and invest in the interest of equity.

As Klees and Wells (*op. cit.* p. 216) note, even market (capitalist) economists agree that if society as a whole decides that it values a more equitable distribution of goods and services, then the public sector, as an agent of the society, can institute policies designed to bring it about.

Although there are no studies to back this, the Nigerian society apparently values television services and video equipment. This is evidenced by the high rate of burglaries and break-ins whose sole objective is the stealing of colour television and video sets. The lengths to which owners of these valued goods go to safeguard their investment is also significant (hiding the equipment in the bedroom, putting burglar-proof bars on windows and doors, hiring security guards, etc.). Indeed, police statistics reveal that television and video sets rank very high among robbery targets in the country's urban centres and unoccupied rural houses of the elite.

And, in Kenya, during the aborted 1982 coup d'état, one of the primary targets of crowds who invaded the houses of the rich were colour television and video sets even though most of the looters live in shanties with no electricity. (They solved this problem by using the sets as room furniture')

Should government decide to pursue equity by investing in a selected number of rural television projects, even on an experimental basis, there are a number of financing options available. Apetey (1986 : 129—137) identified six such options, though he was speaking in respect of telecommunications investments. These are:

(1) self-financing, (2) bilateral government aid; (3) suppliers credit; (4) commercial banks; (5) private financial companies; (6) multinational financial institutions.

Within the similar context of telecommunication projects, Aloo (1988) listed (1) internal cash generation (CG); (2) bilateral and suppliers' credit; (3) multilateral sources; and (4) subscriber financing. Self-financing is obviously not an attractive proposition at a time when most African countries are spending anything between 30—50 per cent on debt-servicing.

Internal cash generation from existing services is more profitable with regards to international telephone services than is currently possible for African television services which, generally, have failed, so far, to meet domestic demand for programming, not to talk of programme exports.

Apetey notes that suppliers' credit and funds from commercial banks and private finance companies are easy to turn to, but they have the disadvantages of being tied to specific types of equipment, very high interest rates and short capital repayment periods. Bilateral governmental aid, be it in form of grants or loans is frequently a reflection of political affinity, and it ties the beneficiary to equipment manufactured in the donor country. The equipment is also probably entangled in a network of additional financial burdens and technical complications (e.g. monopoly of software supply, maintenance and repair contracts).

Whether through suppliers' credit financed by the donor country, commercial bank loans guaranteed by the donor country, or outright bilateral aid, the viability of the entire project and its compatibility with existing resources or management capacity of the recipient institution are hardly ever of any concern to the donor country.



Both Apetey and Aloo rate multilateral financial institutions such as the World Bank, its soft window, the International Development Association, and regional development banks such as the African Development Bank as the best possible credit financing options.

Multilateral financing institutions are credited with thorough technical, economic and financial appraisal of projects, guarantee easier access to world capital markets on better terms, and show much more concern for equipment compatibility with local conditions and managerial capacity.

Aloo also considers the potential of subscriber financing where large unmet demand can be identified. He cites the examples of Japan and Brazil which used deposits by eager subscribers to finance their telecommunication expansion projects. He argues that since the rural population contributes towards building of schools, hospitals, roads, they could also contribute towards building telecommunication network destined for their use. He further suggests that their contribution may not be strictly in cash, but the relevant equivalent in cash crops. Would rural folk in Nigeria make similar sacrifices for their own television stations? Only field studies can tell. But one thing is certain, some significant levels of subscriber financing and participation is essential to the concept of rural television and the community video production and viewing centre.

The initial capital investment may come from the government, donor agencies, private investors or even community fundraising. But operational costs can be met through a variety of sources such as voluntary contributions, volunteer staffing, rent of airtime (not advertisement airtime) to local groups which can sustain regular programming and, if need be, low advertising rates that users can afford. In Nigeria, development agencies, both local (DFRRI and MAMSER) and international (WHO, FAO, UNESCO-IPDC, Planned Parenthood Federation, etc) can adequately support rural television.

For instance, the Liberian Rural Communications Network, (LRCN) sponsored by USAID, derives financial support from

listeners paying, individually, small fees for messages, as well as contracts for programmes from development agencies, shopkeepers, rural hospitals, rural industrialists, etc. (LRCN 1988).

## Technology Choice

Technology choice is by far the most problematic area of planning for rural television stations and community video production and viewing centres. Because of the need for standardization and economies of scale in covering a country like Nigeria, one mistake in technology choice would encumber the country with white elephant projects that would be quite costly both in financial terms and in the shattering the hopes of millions of rural Nigerians.

Slick Western equipment manufacturers have perfected all kinds of hard-sell strategies for unloading inappropriate technology on developing countries through ignorant, or merely corrupt, decision makers.

Some of these include suppliers' credit programmes in which low-cost hardware purchase is tied to thrice as costly software and spare parts, repair and maintenance contracts; training schemes that stop at equipment operations and minor repairs; well-oiled advertisement campaigns whose selling point is always 'buy this, the latest and the best'; sponsored trips abroad to gleaming factories for decision makers, etc.

As far as Parthasarathi *et al* (1988) are concerned, however these are intelligent business practices and not criminal activities. 'What is criminal, is for us to accept the unfair deals offered and be naive customers' (p.9).

And Maduka *op.cit.* points out, in technology choice, every problem should attract the best solution possible; this does not necessarily mean the most up-to-date machine on the market, the most automated and expensive nor, on the other hand, the crudest. The best solution, according to him, will encompass machine or system performance in terms of need, capacity, output, and initial cost; running cost through economic life of the investment, maintainability, skills required for operation and servicing, as well as scrap value (p.13).



White and McDonnell (1982) advise that developing nations should move away from passive acceptance of imported turn-key technology that entails further dependence on training and foreign expert maintenance.

Other guidelines from available literature include:

1. A pre-purchase survey of technology already in use in the target population, their number, uses, problems and adaptations.
2. An anthropological survey of target population characteristics, politics, economics, socio-cultural values, the inter-face between their socio-economic values and existing technology, their user needs and preferences, and likely reactions to new technology.
3. A survey of alternative packages available on the market with specific reference to: (i) appropriateness to user needs; (ii) compatibility with existing infrastructure and standards; (iii) modification to suit local environmental conditions and values; (iv) possible backward integration of locally produced software and parts; (v) affordability; and (vi) training of operational and maintenance staff.

As noted above, multilateral financial agencies like the World Bank, its regional equivalents, and United Nations development agencies, especially UNESCO, have been known to provide relatively honest assistance in the area of technology acquisition.

For the purpose of community television, new technologies available include low-powered television stations with sufficiently low signal radius as to prevent mutual interference in contiguous areas. They are said to cost less than US\$100,000.

The boom in the videocassette recorder players business has brought more models and innovations. Easy-to-operate portable one-piece combined videocamera and recorders, called camcorders, are now available.

UNESCO has been involved in the development of low-cost prototype FM transmitters and solar-powered stations in developing countries. And in Deni Biram Ndao, Senegal, a solar-powered television viewing centre is already being experimented with, as part of a rural literacy campaign (URTNA 1987). This project can be understudied by Nigerian policymakers.

## Content and Regulation

Mayo (1980) notes that the original objectives of communication projects in Third World nations often suffer from ambiguity, clothed as they are in the rhetorics and idealistic aspirations of their initiators towards the 'creation of a new man or integrated rural development'. He therefore urges that such concepts be operationalized right from planning stage.

The proposed Nigerian rural television stations are recommended to be based in as many local government headquarters (outside of federal or state capitals) as can provide economically reasonable internal rate of returns (IRR). The community video production and viewing centres are recommended to be located in each of the 97,000 communities mentioned in the National Communication Policy Seminar Report.

While the rural television stations may be expected to undertake programming that will yield substantial revenue, and the video centres may be expected to service the social life of community members, their programming should essentially reflect the goals of DFRRI and MAMSER. It is suggested that local news, agriculture, health, continuing education and political studies be their major programmes, packaged in the appropriate entertainment formats and exclusively in the local languages.

These programmes should be locally initiated and produced, using the various interpersonal and group communication channels (age grades, town development unions, guilds, market and farmers' co-operatives, schools and health centres, etc) as production crew and talent resource base. In addition, reception and broadcast/playback of national news and special events should be made.



## Planning

Planning for these projects should be inter-ministerial, with Finance, Economic Planning, Information, Telecommunications, Health, Education and Agriculture ministries forming the core.

DFRRI, MAMSER and existing television organizations should be represented at the highest level possible.

Some mechanism should be worked out to ensure participation of end-users at local government and community levels in the planning process.

An important component of planning is the training of personnel for both projects. Fortunately, there are enough television stations in Nigeria (38) and some training institutions to cater for the basic hands-on skills training needed for the project. To support projects of this nature, hard decisions should be taken on the development of relevant copy engineering in software and eventually in hardware on a long-term basis.

In this respect, numerous calls have been made at international fora for more sub-regional and regional co-operation in the development of relevant technology. But political will to implement such calls and resolutions appear unaccountably weak in the African region.

## The Political Economy of Change

Change will always be resisted by those who fear that they have something to lose in the coming scheme of things. But it is also a truism that the most permanent thing in life is change. However, change is not always positive, and no guarantee can be offered here that the proposed rural television or the community video production and viewing centres would not turn out to be more of the same thing or even worse.

Already, video has become an alternative school for the old and young alike, taking audiences away from television, just as the latter took away from cinema. Democratization of TV and

video is tantamount to a potential re-distribution of political and economic power in favour of the majority. Vested interests will resist this in many ways.

## References

- Akinyemi, S.K.O. *et al.* (1987). The Mass Media and Social Mobilization in Nigeria'. Paper presented at the Senior Executive Course, No. 9, at the National Institute for Policy and Strategic Studies (NIPSS), Kuru, October 12—23.
- Akinyemi, S.K.O. *et al.* (1987). The Mass Media and Social Mobilization in Nigeria'. Paper presented at the Senior Executive Course, No. 9, at the National Institute for Policy and Strategic Studies (NIPSS), Kuru, October 12—23.
- Aloo, Charles (1988). 'Rural Telecommunications Development Policy: Planning Policy and Strategic Issues. Paper presented to the University of Nairobi/ACCE course in Communication Policy and Planning for Development, August 9.
- Apetey, Kouassi (1986). 'New Strategies for Telecommunications Financing in Developing Countries'. In *Proceedings: Telecommunications for Development*, October 28.
- Ezeokoli, Victoria (1987). 'Policy Guidelines on Television Programming with Reference to Young People'. Paper presented at the National Communications Policy Conference, ASCON. February 2—7.
- Klees, Stephen and Stuart Wells (1980). 'Economic Analysis and Communication Decision Making'. In John Middleton (ed.) *Approaches to Communication Planning*. UNESCO, Paris.
- LRCN (1988) *The Liberian Rural Communication Network*, Monrovia.
- Maduka, Vincent (1987). 'Technological Tendencies in Communication Hardware: Limits of Development' paper presented at the National Communication Policy Seminar ASCON, February.
- Mayo, John (1988). 'Evaluation Strategies for Communication Planning' In John Middleton, (ed.) *op. cit.*
- McBride, Sean, *et al.* 1981) *Many Voices One World*. UNESCO, Paris.
- McQueen, Humphrey (1985). Quoted in Len Masterman, *Teaching the Media*. London: Commedia Publishing Group.
- Parthasarathi, Ashok, S. Romani and P. Unnikrishnan (1988). 'Economic Implications of New Information and Communication Technologies to Developing Countries'. *Reader on Information Technology*. Nairobi: ACCE



- Sinha, Arbind K. (1985). *Mass Media and Rural Development* New Delhi: Concept Publishing Company.
- Sobowale, Idowu (1987). 'The Role of National Communication Policy and Communication Systems'. Paper presented at the National Communication Policy Conference, *op. cit.*
- Umeh, Charles (1988). 'Television and Video in Higher Education and Training: The Nigerian Situation and the Need for Textbooks'. In Adaba *et al.* *Communication Industry in Nigeria: The Crisis of Publications*. Nairobi: ACCE
- URTNA (1987). 'Glow in the Darkness: The Solar-Powered Television of Deni Biram Ndao', *African Television Programme Screening Session Catalogue 1987*, Nairobi: URTNA Programme Exchange Centre.
- White, Robert and James McDonnel (1982). 'Priorities for National Communication Policy in the Third World'. Paper prepared for the centre for the study of communication and culture, London.