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Using Communication Means
for Innovative Training Methodologies
and New Understanding of
Women in Development

Borjana Bulajich

A Thesis
in
The Department
of
Communication Studies

Presented in Partial Fulfillment
of the Requirements for
the Degree of Master of Arts at
Concordia University
Montréal, Québec, Canada

March 1988

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ABSTRACT

Using Communication Means for Innovative Training Methodologies and New Understanding of Women in Development

Borjana Bulajich

In the developing countries most educational, formal or non-formal, programmes and training activities used radio or TV as the main communication means. The programmes usually include only male participants. One of the most critically important factors affecting women's status is inadequate or non-existent education and training at all levels. The innovative training methodology of multi-media training packages using a modular system and a sound-slide package as primary audio-visual media have been created in order to meet the needs of various target groups in different areas of the development process. Their flexibility, multi-media approach and ability to be used by local trainers makes this training methodology appropriate to serve the needs of women, and the needs of decision-makers or any other target groups to understand how women relate to the development process and sectors, and to respond to the ever growing need of trainers, teachers, facilitators and extension workers.
LIST OF ACKNOWLEDGEMENTS

Being a multidisciplinary thesis, my deep appreciation and acknowledgements for moral and scholarly help to complete this thesis are addressed to a multidisciplinary group of people.

I deeply appreciate the academic support I was given from professors Martin Allór, Gary Coldevin, Tilly Gescei and Dennis Murphy to prepare a thesis on a subject matter which has not been presented before in this manner. Their open-mindedness and willingness to accept the challenge of innovative methodologies is a quality which is desired by every student. My desire was fulfilled.

I would also like to thank UN/INSTRAW Director, Ms. Pastizzi-Ferencic, and Deputy-Director, Ms. Ahooja-Patel, who both taught me a new dimension on women in development and enabled me to co-operate with ILO/TURIN CENTRE staff where this innovative training methodology has been produced. Thanks to a wonderful team in the Turin Centre we managed to prepare multi-media training packages which are now used in a number of developing countries. The moral support from my parents cannot be expressed in a few words.

Dedicated to Eva and Kimon Caragianis.
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I. COMMUNICATIONS AND DEVELOPMENT

I. Introduction

What are communications and development? Two multidimensional processes that operate within the unique social, psychological, economic, political and cultural milieus of different societies. Both processes are an important factor of infrastructure of any society and bring into play all factors that determine the existence and cultural climate of a nation. The historic and dynamic variables implicit in it have a bearing on the attitudes, opinions and behaviour of human beings.

In the recent decade, structural and theoretical paradigms of the definitions and roles of communication have been changed and redefined in accordance with the changed approach towards development. Both processes are in a dynamic relationship within and outside any society whether developed or developing. They can and do contribute towards the continuous examination and establishment of new approaches toward the different factors in society and of communication technologies and development policies. We can generally define what is the role of communications and development, but we cannot aim toward a precise definition, since each country has
different infrastructures which tremendously influence the outcome of the established national development policies and programmes. A general realization was made that the so-called Third World or developing countries are not a monolithic block and the universality of applying same communication technologies or development policies will not bring the desired results.

In the past decade it was realized that any strategy for communications must take into account these differences in societies. No single formula can be developed which will be effective across dimensions of space and time.

With the rapid development of communication technologies we are facing new challenges to carry out an integrated form of development which would not be for the sake of economic growth, but which would secure equity and participation of the population in the development process benefiting every individual.

That means that the traditional development doctrines should be renewed and that problems of development could be tackled only through a genuine multidisciplinary and inter-disciplinary approach, i.e. through a deeper interlinking among (in terms of history) most valid theories in the social sciences (economics, sociology, psychology, political science, law, philosophy, etc.) and the knowledge provided by the technical sciences.

The importance of this kind of approach is obvious as
communications are involved in all levels of each society and are influencing and being influenced by different factors of infrastructure. In the socio-cultural development, mass communication media are affecting beliefs, behaviours and skills. In the field of economic development they serve to mobilize human resources by raising expectations and promoting knowledge. In educational development they are becoming an increasingly indispensable tool for improving both the quality and the reach of formal and non-formal educational opportunities. Through various forms of feedback it can also provide an avenue for participatory development. Clearly, all of it will have value only in as much as there is value in the information being transmitted - if it is valuable to the recipient, if it is timely, relevant, comprehensible and useful.

Above all, the most crucial factor are the human beings, as they are the primary agents of development. But this factor has been neglected by the traditional paradigm of communication and development. Only recently we began to think seriously about the management of communications and development in the service of human resources.
II The Beginning

To understand theories one has to also look at the historical and political context of the times they were introduced. The views of communication and development had an important connection starting at the end of World War II. Here, I will only focus on theories of communication and development that are linked to the educational and training sphere in the developing countries. A lot of research and theories have been developed in the cultural area, but as this thesis is not focusing on this area, I did not mention them.

The 1960s was the first decade of actual liberation of the colonial countries. Books on communication and development like Daniel Lerner's (1958) The Passing of Traditional Society and Wilbur Schramm's (1964) Mass Media and National Development were widely read in the early 1960s. They rapidly became a cornerstone and in many ways they summarized the thinking of the times among mass media people and laid much of the groundwork for future research both theoretical and applied.

At the same time, the definition of development centered around the criteria of the rate of economic growth. Through the late 1960s, the paradigm of treating development only in economic terms ruled intellectual definitions and guided national development programmes.
The philosophies and practical recommendations in much of the communication literature of the first half of the 1960s were no exceptions in this regard.

Rogers pointed out that

these concepts grew out of certain historical events, such as the Industrial Revolution in Europe and the United States the colonial in Latin America, Africa and Asia, the quantitative empiricism of North America social science and capitalist economic/political philosophy.\(^1\)

Basically, the four main elements in this conception of development were

1. Economic growth through industrialization and accompanying growth through urbanization approximately equivalent to passing through the Industrial Revolution. It was assumed that development performance could be quantified in economic terms: GNP, per capita income.

2. Capital intensive, labour intensive technology mainly imported from more developed nations.

3. Centralized planning, mainly by economists and bankers, in order to guide and speed up the process of development.

4. The causes of underdevelopment lay mainly within the developing nations, rather than in their external relations with other countries.\(^2\)

The paradigm implied that poverty was equivalent to underdevelopment and the obvious way for less developed
countries to develop was for them to become more like the developed countries. As well, the paradigm put the blame for underdevelopment on the developing nations rather than on the developed countries, or even jointly on both parties.

The main causes of underdevelopment were taught to be

1. of an individual-blame nature (peasants were traditional, fatalistic, and generally unresponsive to technological innovation) and/or (2) of a social-structural nature within the nation.*

In the 1960s, the dominant policy of communication development promoted by the industrial countries and generally accepted in the developing countries was what has come to be known as the modernization model. In many ways this was simply an extension of the earlier colonial model of developing public service institutions which were copies of institutions in the metropolitan countries, but wrapped in an ideology of non-political aid to nation building.

In this concept of communication development, the communication technology as well as major communication institutions and the associated cultural values were to be transplanted from the Western Nations into the Third World, and extended out into the rural areas of largely peasant, agricultural societies.
The paradigm of development implied that the role of communication was

1) to transfer technological innovations from development agencies to their clients, and

2) to create an appetite for change through raising a "climate" for modernization among members of the public.*4

During the 1960s, theories about the role of communications in development viewed communication technologies as an "all powerful tool for development." Communications technologies were seen as having a crucial role in a wide range of applications.

1. The mass media can create a climate for change by inducing new values, attitudes, and modes of behaviour favourable to modernization.

2. The mass media can teach new skills "from literacy to agriculture to hygiene to repairing a motor car" (Schramm 1967, p. 18).

3. The mass media can act as multipliers of resources of knowledge.

4. The mass media are unique in the sense that they can mediate vicarious experiences, thereby reducing the psychic and economic costs of creating mobile personalities.

5. Communication can raise levels of aspiration which can in turn act as incentives for action.

6. Communication can make people more prone to participate in decision making in society.
7. Communication can help people find new norms and harmony in a period of transition (Rao 1966).

8. Communication can change the power structure in a society of a traditional character by bringing knowledge to the masses. The informed person takes on greater significance, and traditional leaders whose power is based on other factors will be challenged.

9. Communication can create a sense of nationness.

10. Communication can help the majority of the population realize its own importance, and this may lead to increased political activity (Rao 1966).

11. Communication facilitates the planning and implementation of development programmes that will correspond to the needs of the population.

12. Communication can make economic, social, and political development a self-perpetuating process.

Obviously, these hypotheses express the firm belief of the time that communications could contribute in an important way to strivings for improved GNP living conditions. In general, the scholars such as Lerner, Pye, Schramm, Verba and others were heavily influenced by economists in their thinking about development planning.

In the communication sphere they took for granted the necessity of free flow of information, a free market economy, and free press. Finally, the attitudes and skills that were to be disseminated to the populations in the Third World reflected the Western middle-class
life-style: the accumulation of consumer goods and individual success.

III The Criticism of The Old Paradigm

At closer examination, especially during the 1970s, it became evident that mass communication in the developing countries could not live up to such expectations and that the economic and socio-political underpinnings of the entire development model, of which this approach to mass communication was a part, needed thorough reassessment.

It became obvious that there is no link between growth in GNP and the living conditions of the majority of the population. Socio-economic gaps between developed and developing countries have been increasing instead of decreasing; famine and malnutrition are still prevalent.

The old paradigm of development applied within the capitalist world has put heavy emphasis on investments in the "modern" sector, in the hope that the gains made in that sector will eventually "trickle down" to groups in the traditional sector. It was also realized that the industrially advanced nations largely controlled the "rules of the game" of the development and that most of the scholars writing about development were Westerners. The international technical assistance programmes sponsored by the rich countries, unfortunately, made the recipients
even more dependent on the donors.

Aside from problems of disciplinary fragmentation in the development theory, the old paradigm was also characterized by problems of ethnocentrism and unidimensionality, as well as deterministic and ahistorical perspectives. Most development theories were of the typological kind that conceal built-in ethnocentric biases.

The criticism of communications centered around the content of the mass media, the need for social-structural changes and the shortcomings of the classical diffusion-of-innovations viewpoint.

Mass communication had been considered to play an important role in development, especially in conveying informative messages from a government to the public in a downward, hierarchical way.

The old paradigm placed great emphasis on the concentration of mass media in the hands of a modernizing elite working through a structure of development bureaucracies centered in the Westernized capital cities and extending out in the rural hinterlands of agricultural societies.

Transistors, radios were the media of the 1960s, penetrated every village. A predominantly one-way flow of information from government development agencies to the people was implied by the old paradigm.

In most developing countries, the modernizing service
bureaucracies with their highly centralized, vertical communication patterns were in place; however, the inefficiency of educational, health, and agricultural services, which use an authoritarian, didactic model of communication and do not allow the participation of the poor themselves, was slowly admitted in the 1970s.

IV The Alternative Paradigm

In the very late 1960s and the early 1970s, a new so-called alternative paradigm to development and communications began to emerge.

The alternative pathways to development basically underlined the importance of the equality of distribution of information; socio-economic benefits; popular participation in self-development planning/self-reliance and independence with emphasis upon the potential of local resources; integrations of traditional with modern systems.

Rogers correctly defined development as a widely participatory process of social change in a society, intended to bring both social and material advancement (including greater equality, freedom, and other valued qualities) for the majority of the people through their gaining control over their environment.*6

The imposed social, economic and communications
structure on the people of the Third World resulted in an
alienation of the people from their original and natural
potentials. So now, one of the most urgent goals in the
development efforts is the de-alienation of human beings.
Development policies must become less elite oriented and
more concerned with equalizing socio-economic benefits of
development.

Obviously, the use of the alternative approach
toward the old paradigm of development implied that the
role of communications in development must change.

It was realized that the role of mass communications
in facilitating development was often indirect and only
contributory, rather than direct and powerful. One of the
major faults in the old paradigm was precisely an
overestimation of the role of information sent by the
various media. Too little importance has been given to
other conditions, and to the interaction between these and
communications. One of the most crucial realizations was
the role of communications in development.

Hedebro correctly pointed out

communication is present in all directed
and purposive efforts to bring about
change. But this does not mean that it
is the most essential factor. The most
important factors are those that
determine the structural organization
of society: the political, economic and
social conditions that set limits
within which change can occur.
Thus, it was gradually realized that without structural changes information activities can never adequately replace the basic material.

In recent years, several nations (the People's Republic of China, India, Tanzania and Taiwan) used small groups at the local level to take responsibilities in planning, organizing and conducting their development activities. These kinds of development activities led to the more appropriate and flexible changes necessary for the local level. One of the basic reasons is that technical information was sought and requested by local levels, instead of having government development agencies designing and conducting top-down campaigns.

The role of mass communications in self-development is more supportive than in the usual top-down development approach, where local citizens are told what their problems are and persuaded to follow certain lines of action to solve them.

One of the principal elements in the self-development approach is participation and self-reliance, with the main responsibility for development planning and execution at the local level.

Participation is an important ingredient as it increases motivation and the people's interest. It certainly is a prerequisite for decisions that have a chance of being successfully implemented over the long run.
The media only represent a potential which can act for increased participation or against it. What will the media do is determined by the context in which they exist. The political, economic and historical circumstances are the decisive factors.

Whether participation will be promoted or prevented is an ideological question of how society is built. It was realized that the media are among the keys to the success of such efforts, which can on one hand increase the active interest of the people at all levels of society, or increase class fragmentation.

The other main element of self-development is self-reliance. The idea of self-reliance stresses the use of locally available raw materials, simple production processes, and the application of indigenous know-how accumulated over the years. In summary, it implies the utilization of existing resources, both human and material, within a society.

Self-reliance in the development efforts demands a dialogue and an exchange of information between the people and their leaders. This has major implications with respect to the organization of communication activities. When raw materials, technology and knowledge are available in the country, the question becomes one of how best to share these resources. The question of channels is fundamental, as there has to be vertical communication
initiated from below, as well as horizontal communication. Not only does it imply a communication structure designed to create a collective spirit, but it also implies the more structural question of equity in distribution.

As mentioned, the dominant paradigm has failed to close the gaps between the developed and developing countries. Instead these have widened. The same result is true within many poor countries. The introduction of technological means of increasing productivity and the organization of cooperatives benefitted only those farmers and workers with a traditionally strong position in society. However, there is now a greater stress on the distribution aspects in development; the criterion is that the poorest shall gain.

In the communication field, too, there is a growing concern about equity, and the avoidance of communication gaps. Great variations are emerging among individuals regarding the ability to find relevant information, to understand it, and to use it.

A more even distribution of opportunities and the ability to communicate for reasons of equity is also an essential precondition for broad popular social participation. The essential point is that information activities should be disseminated specifically for the least advantaged groups of society.

Rogers recommended some solutions that could be used
as communication strategies for a more equitable distribution

1. Use traditional mass media as credible channels to reach the most disadvantaged audience.

2. Provide means for the disadvantaged audience to participate in the planning and execution of development activities and in the setting of development priorities.

3. Produce and disseminate communication messages that are redundant to the "ups" because of their ceiling effect, but which are of need and interest to the "downs".*

All these recommendations should be applied, but the question remains how to adjust and re-change the social infrastructure and the existing development policies. These recommendations demand that the communication set-up be oriented toward rural areas and that the contents be made relevant to rural workers and farmers. If these recommendations were accepted by the national leaders and applied, it would demand a deeper change in a number of institutions and economic and political sacrifice of the existing hierarchical order. Are they ready for it?

Maybe, some more modest recommendation in their scope could outline the functions of a media system in the process of national development.

1. to recognize the needs/demands as well as constraints and possibilities of the socio-cultural environment;
2. to tailor policies and programmes to respond to concrete social, economic and cultural need in rural and urban areas;

3. to work closely with leaders at all levels in a position to co-operate in the performance of nationally established and locally established media duties.

The importance of establishing more national communication programmes reached its peak, as dependence on the more industrially developed countries has roots and will hardly be switched onto the domestic industry. The cooperation should continue to exist between nations, particularly in the communication sphere, but the major goal should be more reliance on the locally available human and technical resources. Each nation has to preserve its national and cultural identity, and the establishment of different institutions, media programmes, educational structures will have to be tailored to the country's needs. Certainly, the necessary hardware and software will continue to be imported, but the question of what will be disseminated to the people is a major problem in most developing countries. It involves not only an economical and technical dependence but socio-cultural and political stresses as well. Obviously, there are a number of positive results from the imported educational technology, the communication technologies, and the development programmes, but we still did not reach the stage of a satisfying equilibrium for both sides.
We realize that communication is one of the main prerequisites of human coexistence: it is one of the main vehicles for education training, information and motivation. The potential effectiveness and might of the media is immense and they offer great prospects for a positive sociological change in education and training, and for the economic and ecological changes needed in the developing world.

Although the technology of mass communication provides unparalleled opportunities for the economic, political, educational and cultural development, its potential for national development will remain unrealized unless it goes beyond one-way mass communications towards two-way interactive systems.

The role of communications in development is essential, yet the benefits of communication will be limited unless there is at least some complementary infrastructure present in the society to make the communication strategies effective. It is imperative that communication strategies should be an integral part of an overall planning and that all communication practitioners should be included in all deliberations at the national and local levels wherever such plans are initiated and such decisions are made. Not only should communication practitioners be involved in all stages and different levels, but they must as well listen to the response from human resources at all levels. It is
becoming obvious that the response must come from within
the indigenous human resources of the developing societies
and it must come from several and eventually all levels
within the society itself.

Thus communication can be effective only if it is
part of an integrated approach to the development process
which would offer better economic and social conditions of
life to the entire population, men and women alike. In
short, communication should be linked to the development
reality. However, we cannot completely observe the
existing theoretical and practical changes that occurred
within the subject matter, communications in development,
without reflection on the New World Information and
Communication Order (NWICO). It is quite interesting to
point out how certain parallel switches occurred in the
1970s within the NWICO and in the alternative paradigm, and
how similar criticisms and recommendations were established
in the same historical political period.

V Communications and Development - NWICO

From the mid-1970s, much of the communications-related
policy discussion, research and action implementation in
developing countries has been conceived in terms of NWICO.
The power of NWICO lies in its ability to bring together in
a unified and interrelated paradigm of objectives and actions a response to virtually all of the major questions and problems of communication development. In practice, the less developed countries have found solidarity in their support of the NWICO, as it covers a variety of different emphasis and has an advantage in combining flexibility in widely varying political, economic and cultural contexts. The NWICO involves not just the government policy makers, but many other socio-political and cultural actors who have important roles in developing the communication patterns and media of a nation.

It is important to understand that the NWICO movement is not simply a Third World phenomenon but is worldwide. A similar movement toward the democratization of communication in the industrially developed countries is found in the community media, the more decentralized local broadcasting, and the greater sensitivity to minority groups in general. In assessing the present state of the NWICO, it is clear that it does not consist of a few international declarations and idealistic policy recommendations, but is a movement that has deep roots in a historic socio-political and cultural process.

An analysis of some of the achievements of the NWICO up to this point indicates that there has been a series of phases and that the expression of the movement is constantly changing. For instance, some of the earliest
phases of the new perspective of the NWICO in terms of its national communication aspects emerged in the 1960s and 1970s with a critique of the modernization model.

Some of the basic issues of criticism can be summarized as follows:

1. More technical information can bring solutions to problems of rural poverty and communications cannot be neglected when they foster structural changes.

2. The external financial and information resources channeled through local elite do not reach the rural and urban poor.

3. The assumption that technology and more enlightened cultural models must come from the Western nations only increased the technological distance of donor nations.

However, it is now recognized that these issues must be complemented by a structure of communications that permits ideas, initiatives and decision-making to come from the people served.

Another important issue is the development of participatory models of communication. In many developing countries, modernization brought about a deterioration of the situation of the rural peasant and the rural poor, and a rural exodus into the slums of the cities. The participatory model constituted a new pattern of communication in themselves, no more horizontal participatory forms of mobilization, and the development of
new forms of media use for communication within the
movements. The so-called "alternative" media have become
so widespread that the experience brought into the NWICO
the conviction that democratization of communication is an
important and feasible ideal.

These are just two basic issues that have been
reflected in the NWICO and coincide with the basic
criticism of the dominant paradigm and the key elements of
the alternative paradigm.

The NWICO might be approached as simply the extension
of a new conception of communication into the realm of
relations between nations, development planning, nation
building, and the definition of the meaning of new
communication technology. The achievement has been made to
change the perception of what communication is and how it
is to function for human and social development.

VI Communication and Development - Women

The issues and redefinition of communications and
development have been raised; the role of communication
technologies in the developing countries has been
re-evaluated; the process of development is now understood
as a multi-dimensional and long-term process.

However, in all these analyses raised by various
scholars, very few of them paid attention to the role of
women in development and why have women been neglected in the formal and non-formal type of education, using different communication means.

As the dominant paradigm has been proven to be partial and ahistorical, the same criticism can be levelled at all development planners who ignored the role of women in the development process. Women have been treated as a "minority group", although they are primarily agents and participants in the development process and contribute immensely to the well being of a family, community and nation. In most countries they don't have equal rights or opportunities and most girls never attend or complete a higher level of formal education. If the development process is to be complete, women should participate in all spheres of the development/planning and programming. Their role in the communication sphere is crucial, especially when applying the traditional means of communication, as they are the ones who are the primary educators of each generation. Without women coming of age, another stage of the human development will remain unbalanced and in disharmony with the new lifestyles.

Scientific research, objective knowledge, rational planning and training could continue only partially to the solution of these crises. Therefore, the questions should be asked, "What is the role of women in development?" and "Why is it important to include women into the mainstreams of development planning and programming?"
II. WOMEN IN DEVELOPMENT

I Introduction

In the light of the development efforts and the results achieved so far in the developing countries, in particular over the past 30 years, the emphasis which traditional economic theory places on high productivity rates as the primary levers for successful development has been criticized with regard to meeting the needs of the masses, i.e. problems of poverty, illiteracy, malnutrition, unemployment, overpopulation, etc. In the first place, the predicted "trickle down" effect from the productive, monetized sector of the economy, for a general increase in incomes, education, health, etc., did not take place. Secondly, this theory has been criticized for failing to take into account the historical, social, cultural, political and economic specificity of different countries, as it is based almost entirely on the experience of the nations which started industrialization at the end of the nineteenth century and the beginning of the twentieth century.

When this approach failed to improve the life conditions of great segments of the developing world's populations, distribution and basic needs were considered
more appropriate issues or approaches to development. At that point, scholars with a sensitivity towards women's issues emphasized that women were not sharing the development pie; in fact, they were often jeopardized by it (Boserup 1970). Moreover, the focus on basic needs made evident the role women play in meeting the food, health, sanitation and other needs of the family and how they must be considered the agents as well as the beneficiaries of development.

Development implies the mobilization of all human resources, including women. However obvious this idea may seem, past development projects and programmes have often acted against women's best interests and thus against the development process itself.

What has happened?

First, the insufficient previous research and study did not identify the social, cultural and economic situation of women in developing countries. Second, planning has been basically male-oriented and male-conducted, presuming a social structure where man is the household head, primary breadwinner and economic producer. Third, theoretical and practical development efforts focused on women's reproductive role, thus circumscribing them to the social and welfare areas - meaning they were considered as costs, not as assets. Fourth, during the 60s, the prevailing approach assumed that the benefits of development, defined as economic growth, would automatically trickle down to women - the implication
being that the main problem women faced was their insufficient participation in the otherwise benevolent process of development. 9

These considerations reflected the growing international concern, as manifested in the Declaration by the United Nations of the International Women's Year and then the UN Decade for Women (1976-1985), with the aim of improving the conditions of women worldwide as well as considering alternative strategies for development.

The concept of "women in development", then, emerged in response to the debates on economic development and the concerns of the international women's movement. Guided by the assumption that economic development would of itself improve the conditions of women, the concept of women in development came to refer to women in economic development, with particular reference and concern on the effects of economic policies, national and international, and how women can contribute to the process.

Although economic conditions affect the condition of women, and should therefore be closely pre-considered and monitored as agents in the process of economic development, it is also clear that economic development is a necessary but not sufficient condition for the advancement of women. For this reason, there have been efforts, as recently manifested in the Nairobi Forward Looking Strategies, a 372 paragraph document, to enlarge the concept of
development to mean "total development, including development in the political, economic, social, cultural and other dimensions of human life". Many scholars are now paying closer attention to the realm of "culture", "ideology", or the "social sphere" as significant in understanding and improving the condition of women and of making development projects more efficient. If we look at development in this way, it becomes evident that the concept of "women in development" should not be restricted to the developing countries as it generally has been. Even with reference to economic development, the concept should encompass industrially developed countries, since national and international economic processes affect women in those countries as well, often to the detriment of large numbers of them, both national and foreign. It is obvious that there is no easy approach to women in development issues. The interrelationship of the productive and reproductive activities of women, the interlinkages between the macro and micro levels of the economy, and the web of international and regional factors affecting the lives of women all combine to weave the complex relationship of women and development. Women's concerns can be and must be incorporated at all levels to ensure that the women's dimension becomes a built-in component of development planning. Consequently, the contribution of women can only be fully utilized if given
proper consideration in the development planning process, not only in terms of the benefits to be earmarked for the redressing of women's situation, but, more importantly, as regards to their participation in this process based on the assumption that successful development is guided by the principles of the development of human resources and popular participation.

II Research

Early research on women, while parallel to research on development was separate from it, with its own focuses, interests and methods. Those research efforts were very limited and specific, anthropologically oriented, or centered around the traditional tasks of women in their family roles. A critique of the research interests and objectives of researches from outside developing areas of the continent is particularly leveled by African researchers pointing to outside emphasis on studying tribal life, kinship, marriage, etc., more often than being considerate of the quality of life of local women.

As Marei pointed out

the consensus in the conceptual and methodological frameworks used were not applied to Third World cultures, and most studies tended to be descriptive instead of analytical, while backing policy orientation.
The economic growth approach toward development gave rise to several trends toward women's issues and problems in the developing countries. Industrialization was generally sought as the means of rapid development in developing countries. This led to a concentration of efforts and resources in the industrial and monetized spheres of society. For example, agricultural mechanization replaced women workers and rendered women's traditional productive activities uneconomic. Women slowly became excluded from the mainstream of development and without alternative new skills for productive activities. The old paradigm of development provoked and gave rise to a multitude of welfare programmes and women-oriented projects as well as to the formation of women interest groups and organizations that focused their attention on providing services for women at different local and national levels. Such programmes mainly provided short-term skill development for generating income, and a variety of health-related educational or social services.

The theories from the 1960s also neglected the problems of equity. Human resources were generally treated as beneficiaries rather than contributors to the development process, and when discussed, the emphasis centered on concepts that tended to exclude women. Other biases in development research such as the emphasis on industrialization, economic activities, technology, also
blurred the contribution of women by not distinguishing their role as agricultural workers, and by mostly concentrating on the division of labour within the family economy. These research undertakings failed to offer an adequate conceptual framework for dealing with women's issues as they relate to culture, society and development.

During the 1970s, accompanied by a greater concern of the role of women in development, the literature reflects a shift of emphasis from studying women in the context of family and family roles to a study of women outside the family roles.

In relating women to development, the literature dealt with the impact of various development factors such as education on women and the extent that women as a group are receiving benefits from the educational opportunities. Over the years there was a shift of focus from research on formal education, enrolment, and the levels of educational attainment of women to an emphasis on informal education, literacy and functional activities and community development programmes which gained importance in the 70's thus also shifting the focus of research from urban to rural women.

More studies on women concentrated on their employment and participation in the labor force than in other areas of involvement. This emphasis results from the role accorded to economic activities in the study of development.

Studies on women dealt with the participation of women in the formal
sector of the economy, participation in labour force, effects of industrialization, access to professions and the social and educational factors affecting women's participation. The abundance of these studies, nevertheless, does not overcome the conceptualization problem of what constitutes work, and what is an economic activity.*12

A major new trend in the 1970s in the research on women is the application of a participatory research approach. It arose as a reaction to the lack of tangible results in traditional social science research approaches. It redefines the relationship between theory and practice by making the research itself action-producing. The participatory research calls for the interaction of researchers with those among whom the research is being conducted, making the research undertaking an educational process for the people involved. The major components of participatory research are:

a) that it promotes the active participation of the constituents in the collective investigation as well as collective action;

b) that it is problem-centered, "thematic investigation", and therefore is goal-oriented and action-oriented;

c) that it has the advantage of being applicable to small groups instead of to a whole community; and

d) that it develops a sense of social responsibility and shows the participants the link between discussion, research and identification of solutions.*13
Participatory research provides the methodology for individuals to become active agents in their environment rather than be passive objects to be investigated by the researcher. Thus, it provides a major departure from the top-down approach to research.

The new trend that emerged from the participatory research in treating the integration of women in development is the shift from an emphasis on the process of development with women as observers to women as active participants. The assumption that development undertakings will directly or indirectly benefit women has also been replaced by a better understanding that women, as human beings, are no objects to "be developed" but must become initiators, participants, as well as beneficiary recipients to develop themselves and their societies. Such new conceptualization of the issue of women in development filled a theoretical gap in accepting and understanding the differential impact of earlier development efforts for women.

It is now fully accepted that women are an essential human potential of the development process, that involving them is not just a question of equity but one of necessity for national and international development, and that the overall success of development is dependent on the full utilization of human resources and the popular participation of men and women alike.
However, gaps still exist in research that are vital for practical integration of women in development, their participation in economic activities, cultural stereotyping, scientific and technological activities, underemployment and unemployment among women. For instance, basic differences in economic activities, family patterns and life styles among urban and rural women create very different expectations and constraints for the two groups. Ethnic and cultural diversity and the adaptation of policy to local needs and values produce a complicated array of social outcomes which make it difficult to generalize about the consequences of particular measures for women collectively.

The research undertakings should examine the analysis of the present model of development and the different approaches and concepts so far used in the development strategies. The focus should be to incorporate women's experience and perspectives, as well as to ensure that women's needs and requirements are integrated in these development strategies.

III Different Impact of Development on Women

As a starting point for the effective integration of women into development processes both as participants and beneficiaries, a planning system should address the
differential impact that development has had on women relative to men. This analysis is useful in highlighting the idea that efforts to promote women are part and parcel of efforts to further the development process and, consequently, that these efforts must coincide with national development policies on all levels, i.e. ideological, institutional, social, economic, etc., if they are to be effective.

The differential impact that development has had on women relative to men arises from the fact that industrialization generally being the method by which rapid development was initially sought in developing countries led most of the national resources to be concentrated in the public and monetized sphere of society which traditionally was a male domain as opposed to the private sphere - the domestic sphere - which was the female domain.

With the redefinition of development, the link between the development process and women's position therein was first realized, leading to the call for the integration of women into development. In this context, women-specific development programmes and/or projects have emerged as strategies to overcome the fact that women have suffered in the development process and to meet their needs. The institutional manifestation of this approach is the growth and more active role of women's groups,
and/or the emergence of "women's bureaus" in various ministries at the national level and women's departments or offices in international organizations. Included in the activities advocated and organized by these feminine interest groups are income-generating activities for low-income women along with training activities in areas such as efficient production techniques, management, finance and services programmes in the areas of hygiene, family planning and literacy.

Many of the above women-specific projects and/or programmes seek to address the very immediate and vital issue of survival as experienced by most women in developing countries. Yet, this type of approach to resolving women and development problems may be useful and serve particular purpose in the immediate future, but it might not be that effective in the long run for a variety of reasons. In the first place, this type of approach does not conform with the call for integrating planning as being the proper strategy for addressing the numerous multisectoral problems that most developing countries confront. In many instances, these projects and programmes are isolated from the main institutional framework which guides the development process in a country. What often follows from this type of isolation is a disassociation of the content of the activities undertaken by these groups from national priorities and goals. Consequently, these activities often
are in danger of collapse when support is withdrawn by the sponsoring agency.

The above activities are certainly viable if viewed and formulated simply as survival programmes and/or immediate strategies for the ultimate goal of the complete integration of women in the mainstream of the development process. This approach may be necessary due to the lag that women in many parts of the world have in terms of education and access to resources arising from their historic exclusion from the national development priorities. Yet, the short-term characteristics of these activities must be borne in mind, particularly in view of this being the second major long-run weakness of these activities - the nature of stabilization policies espoused in many developing countries in the current recessionary period. The main ingredients of these policies are monetary and fiscal restraints, wage restraints, liberalization of the price of imports and exchange controls, devaluation, promotion of the private sector and opening up of the economy to world markets.

Although women are not a homogeneous group, a great number of them are among the poorest of the poor and are therefore hard-hit by these policies, since their needs are most often addressed by the social programmes which are the most negatively affected by the stabilization policies.
Another problem with women-specific programmes and/or projects combined with the effects of stabilization policies indicates precisely why a reliance on a survival strategy in addressing women's problems runs counter to the essence of development as being not merely an economic process, but a social, political and cultural one as well. An examination of the nature of the employment activities highlights their discrepancy with the presently accepted definition of development, and the existence of most of their activities outside an integrated planning strategy.

III.a. Towards effective utilization of women's potential and meeting women's needs in development

Officially, women constitute only one-third of the world's labour force; yet, as 50 percent of the world's population, they perform two-thirds of its work hours, which includes both the modern type of employment in commerce and services, as well as the unrecorded domestic tasks, unpaid labour on the farm or other family enterprise, and labour done with patron/client relationship.

Partly due to this omission of women's work in official statistics and calculation of GNP, women's income tends to be very low - in fact, women receive only 10 percent of the world's income and own less than 1 percent of the world's property.\textsuperscript{14}
In the first instance, the above figures not only indicate some of the main sources for the detrimental effects that the actual development strategy has had on women, but also how this strategy has failed to fully utilize the potential of women, or provide women with significant benefits. As pointed out earlier, some of these primary sources originate from the objectives of the material outlook of most development strategies espoused over the last 30 years. Yet, even though the measurement and analytical methodology employed in the formulation of development plans does not adequately address women's requirements, since it tends to underestimate women's contribution to development, some general worldwide trends and regional variations regarding female labour participation, can still be extracted from these data. They show both a substantial female contribution and the fact that much of women's work is unrecognized and/or undervalued.

The United Nations Decade for Women has contributed to the integration of women into the mainstream of development, but the efforts of the Decade are just a starting point for the advancement of women. Therefore, in Nairobi, Kenya, July 1985, which marked the closing of the Decade, the participants from 157 countries had adopted by consensus a 372 paragraph document, the Nairobi Forward Looking Strategies for the Advancement of Women. The
strategies proposed to meet the objectives of the system have been designed to achieve concrete results in the time period 1990-1995, it being understood to provide a long-term framework for action, that is, to the year 2000, in all spheres of the development process. It implies effective integration of women on all levels of development planning and programming. The areas of specific action include: Employment, Health, Education, Food, Water and Agriculture, Industry, Trade and Commercial Services, Science and Technology, Communications, Housing, Settlement, Community Development and Transport Energy, Environment and Social Services.

The Forward-Looking Strategies not only suggest measures for overcoming obstacles that are fundamental and operational, but also identify those that are emerging. They are intended to provide a practical and effective guide for global action on a long-term basis and within the context of the broader goals and objectives of a new international order.

The two areas of specific action which are of the utmost importance to this thesis are communications and education/training.

III.b. Women - Communications

The relationship of women to the media shows up the
enormous differences which exist between and within the media in various parts of the world. They have an impact not only on distinctive conceptualizations of the women and media relationship, but also on the range of practical possibilities for the development or change in that relationship.

The basic premise that the media are potentially powerful agents of socialization and of social change - presenting models, conferring status, suggesting appropriate behaviours, encouraging stereotypes - underlies almost all past and current analysis of the women media relationship.

In the first place, there has been a call for an examination of the present influence of the media on the formation of attitudes, the development of self-concepts and social perceptions, and the creation of social values in both women and men.

Secondly, stress has been laid on the need to search out ways in which the media can be used to improve the status of women. This approach emphasizes development and it responds to possibilities in countries where the media system is not yet highly evolved. One of the basic facts affecting the women and media relationship is the differential distribution of the media system and output between the developed and developing countries. The distribution of mass media in the world is strongly
disproportional to the distribution of population, with a tremendous concentration of media in a small number of countries in the developed regions. (Table 1).

It is just as important to consider the access of various sectors of the population to those mass media which do exist. Clearly, as far as television is concerned, only the elite urban strata are covered in many developing countries, and even there, differential access is likely between women and men. As Gallagher pointed out:

A Kenyan study, for instance, found that men were more than twice as likely to watch television than were women. In the case of radio, however, the same study found a much smaller differential: while 70 percent of men listened to radio, almost 60 percent of women also listened.*15

There are reports from many countries of group listening to educational radio programmes while at work in the fields or in the market place. However, differences between urban and rural women remain important.

Studies carried out in India found that 80 percent of rural women claimed never to hear radio broadcasts compared with 30 percent of urban women.*16

When it comes to the print media, differing literacy rates between media and women takes on special importance. On every continent the majority of illiterates are women.
In Africa, Asia and the Middle East, there is a difference of at least twenty points between male and female literacy rates, and in all three regions the difference has grown since 1960.17

So, despite an overall growth in world communication facilities in recent years, a large percentage of the world's population - women in particular - is not reached by the mass media at all. Those who do form the audience are often presented with an output which does little to reflect, explain or comment on life as they experience it.

Taking account of the considerable differences which rest between the media distribution and forms, and between the access of various strata of women to the existing media, it is arguable that the treatment of 'women' as a single analytical category subsumes other distinctions of fundamental and greater importance; that to speak of 'women and the mass media' obfuscates and renders banal the set of complex and multi-faceted relationships. It was stressed in the Forward-Looking Strategies, para. 206

Women should be made an integral part of decision-making concerning the choice and development of alternative forms of communication and should have an equal say in the determination of the content of all public information efforts. Women's own cultural projects aimed at changing the traditional images of women and men should be promoted and women should have equal access to financial support. In the field of communication, there is ample scope for international cooperation.
regarding information related to the sharing of experience by women and to projecting activities concerning the role of women in development.\textsuperscript{18}

A view of the media as potentially powerful agents of socialization and of social change lies at the heart of the discussions on the relationship of the media to women's issues. The fundamental problem is structural reform, to reflect changes in women's role and status. At the same time, a fundamental question is whether and which mechanisms can be developed to minimize the ways in which the media have been observed to lag behind change and broader social systems and what communication means can be most applicable for the adequate education and training of women in the developing countries.

III.c. Education and Training

Increased know-how for women in developing countries has been one of the major priorities of the UN Decade for Women. Women's inadequate training and education has been one of the outstanding barriers to their access to the new technology and modern sector jobs which could vastly improve their socio-economic condition. This lack of know-how has seriously contributed to relegating women to low paid, unskilled jobs in the cities, and to unpaid
burdensome labour in the fields. These negative factors have been recognized by the Nairobi Forward-Looking Strategies, para. 163

Education is the basis for the full promotion and improvement of the status of women. It is the basic tool that should be given to women in order to fulfill their role as full members of society. Governments should strengthen the participation of women at all levels of national educational policy in formulating and implementing plans, programmes and projects. Special measures should be adapted to revise and adapt women's education to the realities of the developing world.

Special measures should be adopted to increase equal access to scientific, technical and vocational education, particularly for young women, evaluate progress made by the poorest women in urban and rural areas.*19

Know-how is acquired through three principal channels, namely (a) formal education, (b) on-the-job training, and (c) non-formal education such as adult training classes.

Women in developing countries have been neglected in all three areas. In most cases, educational and training are not geared to the needs of the disadvantaged and the poor, and women often fall into those two categories.

In 1981, female illiteracy was as high as 90% and above in certain developing countries, particularly in rural areas.*20

A high illiteracy rate is still one of the major obstacles to women's participation in active production
and in public life in the developing countries. This situation is damaging not only to women themselves, but to the national, economic and social development as a whole. In recognition of this, many governments of developing countries have made a major effort to reorganize their education and training systems in order to both reduce the gap in female literacy and to draw more women into scientific and technical fields.

As a result, female participation in education and training has gradually progressed over the decade. Women entering the labour force are generally better educated than those of the previous generation and better equipped to enter fields traditionally considered as male.

An annual growth rate of 10.1% was recorded in Africa for female enrollment in higher education in the 1975-1982 period, as compared with 8.6% for males.*21

Although it is not always clear what type of education and precise skills will be the most adapted to market needs in the near future, it is nonetheless evident that persisting sexual bias and insufficiency in female education, of which the most glaring example is the lack of scientific and technological training, will undoubtedly further undermine the women's situation as science and technology make further inroads into the economy.
TABLE 1

Some Statistics

These graphics, taken from UNESCO statistics, show the wide gap between African countries and the rest of the world relating to all forms of communication media. For example, Africa publishes only 1.3% of books worldwide, 1% of daily newspapers, and possesses only 1.7% and 0.7% respectively of the world's stock of radio and TV sets.

Despite the relatively long time span since these figures were collected, the situation does not seem to have improved in any significant way since then.

Distribution of book production (in number titles) by continents and major areas: estimated percentage 1983.

![Pie chart showing distribution of book production by continents and major areas]

Distribution of circulation of daily general interest newspapers by continents and major areas: estimated percentage 1982.

![Pie chart showing distribution of newspaper circulation by continents and major areas]
TABLE 1 (cont'd)

Distribution of newsprint consumption by continents and major areas: estimated percentage 1982.

Distribution of radio receivers by continents and major areas: estimated percentage 1983.
TABLE 1 (cont'd)

Distribution of television receivers by continents and major areas: estimated percentage 1983.

(1) Excluding Arab States
Training

Training has always been linked to education as part of the educational process that complements theoretical learning, or as an educational tool for transmitting knowledge and the "know how" in a particular area. In a rapidly changing world, and with the technological advancement, training more than formal education can provide the means to expand the knowledge of people, and bring their knowledge and activities to the necessary level. It is deemed necessary in areas of activity and productivity that require constant updating of skills to ensure the efficient use of human resources. Training is both a dynamic and an adaptable tool of intervention; its methods, techniques and content can be changed to fit the needs of the trainees, the programmes and the objectives. It has also the advantage of being applicable at a multi-level of intervention.

Above all, it is an important element in attaining self-reliance, and as such it is an excellent intervention tool that is most appropriate to bring women into development activities at all levels. Training components are an essential integrative mechanism to facilitate women's participation. Increasingly, and with the attention generated to the necessity of involving women, there is a greater realization that women constitute a considerable human resource that has been left virtually
untapped in the development process, and particularly in increasing industrial skills in developing countries. Although in developing countries women have always worked both at home and outside, most of their activities have generally been classified as non-economic and women as economically inactive. Misrepresentation in data, sex-biased classification and definition of work resulted in historical neglect of women as a potential resource to be developed through training.

In most countries, there are no legal (major) barriers preventing women from participating in educational or training programmes. But de jure situation is different from the de facto access and often special action is needed to increase the opportunities. In practice, customs and division of labour tasks by sex result in priority being directed at training male members of society, limiting women's option to training skills that lead to occupations that are narrow in range, with low education, low pay and responsibility.

It has to be understood that women's needs are not different from society's needs, and while training may not be a sufficient condition for change, it is certainly a necessary one. There is a tremendous need for changes in attitudes toward the value of training women in different capacities. There is a great need for the allocation of resources at different levels for training women; and most
importantly, a need for planning and coordinating mechanisms and for an exchange of experiences on the training of women.

The flexibility of training as a tool to bring women into the development process makes it more powerful. It can always be modified and redesigned to meet new demands, and, therefore, it must be well-planned, linked to the overall development needs as well as to the ever-changing research and evaluation findings.

It is imperative that educational programmes and training activities be based on the experiences and be derived from the environments of the developing nations in order that they address the needs of women in these societies. It is also important to link the training activities to the mainstream development activities to maintain an action-oriented perspective and to produce activities that respond to the overall development plan. The move should be from concern with a system, while utilizing human elements, towards a concern with the human elements, particularly women, while utilizing the system, "submitting" it to serve human needs. The objectives should be formulated with regards to women and their aspiration as one of the goals of development planning.
IV Conclusion

The central issue of the women in development debate can be related by saying, in the first instance, that women constitute 50 percent of the human population, they are not an isolated group in society - the well-being of men and children is closely linked and dependent upon their well-being - and that the development process has applied a differential to them relative to men. Secondly, as development planning is presently the most widely used method to allocate scarce resources among the various groups and sectors of society for the promotion of development, it is necessary to fully incorporate women's issues into the national development planning process if women are to effectively contribute to and benefit from development.

In order to facilitate the incorporation of women's issues into the development planning process, it may be necessary to undertake action on several fronts. In this regard, receptivity of the national institutional structure to women's issues is important. Furthermore, more research, information and data on the role of women in development are necessary as a tool for both planning and consciousness-raising, as well as an assessment of training needs. As regards to these training activities, one type could be geared toward planners, and thus relate to the appropriate groups of women in order to synchronize their
skills with national goals and priorities.

But in order to do so, it is necessary to create, use and continuously modify training methodologies through communication means which correspond to the needs of the developing countries at all levels. It is equally important to evaluate the ongoing projects and programmes, particularly the use of different mediums, which contribute toward the education and/or training of women.

The potential of innovative training methodologies is enormous; the range of the possible application of the communication technology is striking. If all of this is technically possible, how shall we use it for development purposes for the training of women?
III. EDUCATION AND TRAINING IN THE DEVELOPING WORLD

I Introduction

In keeping with an expanded concept of education and the variety of activities now assumed under such a concept, the roles and expectations surrounding the uses of communication media have broadened considerably in recent years. It is no longer accurate to limit a discussion of the communication media exclusively to the realm of ancillary aids to the learning process. The trend towards systematic educational planning, planning involving a wide variety of resources and clientele, prevails in most countries as well as in the numerous international organizations working to diffuse educational innovations of all kinds. This trend also implies a purposeful and integrated approach to the use of the communication media into the mainstream of national development planning.

Some of the most interesting projects and programmes involving the communication media have taken place in areas where traditional educational resources such as schools, trained teachers, and learning materials of all kinds are in the shortest supply. Yet, the performance of the media to date in various educational reform and development projects has not been uniformly successful. Many projects
have been launched, but few have survived long enough to demonstrate the scale or quality of impact that their originators and administrators had initially anticipated. Far too often, the vision of what media could accomplish in education has not been preceded by adequate analyses of the specific educational problems that were to be addressed or by a proper delineation of the roles the media could most productively play. Even when such preliminary work has been done, logistical and administrative problems have frequently undermined the effectiveness of media-based programmes at the local level. Educators in the developing countries turned their attention to the problems of rural education. They realized that the neglect of rural people is no longer tolerable. In most developing countries, the vast majority of rural youth are still denied the opportunity to study beyond the second or third grade, while a significantly larger number of their counterparts in the urban areas are able to progress through more advanced academic levels. Another type of educational imbalance is the ratio of female and male attendance in any form of education (Table 2). For these reasons, even the most optimistic advocates of the communication media have become more cautious in their assessment of what these tools can do.

In the developing world, the field of education and training faces two major problems. On the one hand, there
# TABLE 2

Female Education as a Percent of Male, 1980

<table>
<thead>
<tr>
<th>Country</th>
<th>Adult Literacy Rate</th>
<th>1st &amp; 2nd Level</th>
<th>3rd Level</th>
<th>Avg.</th>
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<td>77</td>
<td>85</td>
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<td>101</td>
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<tr>
<td>Barbados</td>
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<td>76</td>
<td>91</td>
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<td>Bolivia</td>
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<td>Brazil</td>
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<td>94</td>
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<td>Dominican Republic</td>
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a. Enrollment only: women's literacy not available
b. Third level enrollment not available.
c. Women's literacy rate and enrollment are for early 1970s.
are material problems relating to the resources available for education and training. Many developing countries have enormous educational and training needs and these needs are growing. On the other hand, there are conceptual problems concerning; more particularly, the way in which education and training actions are conceived. The most important problem is the appropriateness of educational and training programmes to national requirements and to the aspirations of the population concerned. As educators and development planners have become aware of the need to provide more educational opportunities, the mass media became more important in their thinking.

Looking back over the past two decades, we find that as concern for development intensified, different educational and social change strategies were articulated. The potential use of the mass media for a wide variety of tasks was given a thrust forward by Daniel Lerner whose book, The Passing of Traditional Society (1958), heralded the vital role of mass communications in the diffusion of information as well as modern social values. Wilbur Schramm in his book, Mass Media and National Development (1964), summarized previous experience in this area and outlined more completely the specific roles that the mass media might play in the development process.

A technological breakthrough was also important in
enhancing the role of the mass media in rural education. Until the late 1950s broadcast technology was prohibitively expensive for most developing countries and its reception in rural areas depended largely on the availability of electricity. The invention of the transistor and its rapid commercialization in the manufacture of inexpensive, battery operated radios meant that, for the first time, radio broadcasters could be beamed at rural areas far removed from existing power sources.

Radio health campaigns, farm forum discussion groups and literacy projects blossomed in the first decade of the transistor. Most of these projects operated on the fallacious notion that messages conveyed by the mass media would automatically have a direct and powerful impact on rural audiences. Such optimism was unfounded, and in retrospect it seems clear that the early concentration on the new technology was at the expense of content development and a proper regard for programmed utilization techniques. It was discovered that simply reaching rural audiences with information was not itself a sufficient means to foster social change.

It became clear by the end of the 1960s that neither advocacy of the mass media nor hardware oriented trial projects were enough to meet the needs of rural areas. A period of reassessment began, therefore, with planners asking how effective the media really were in solving rural
problems. In 1967, UNESCO assisted many mass media projects and undertook a series of briefcase studies to review projects.

It was pointed out that the common problems were:

- the emphasis on hardware at the expense of content development;
- the lack of clear project objectives;
- the reliance on foreign technicians and the lack of adequate training provisions for local personnel;
- and the fact that virtually no feedback systems on serious evolutions had been undertaken by the projects themselves.*22

All these factors make the serious evaluation and criticism of existing mass media projects an essential element for the establishment of future projects.

We have entered an era of reassessment and realism in which the widely agreed-upon potential of the media is counterbalanced by a deeper appreciation of the complexity and pervasiveness of the obstacles to change. The media still hold a compelling attraction for planners hoping to make a major impact on education in a relatively short time. But in view of the limited resources available, it is imperative to make critical choices and take hard decisions.

What should be the communication policies? What should be the priorities for expansion? The answers to these questions are not easy to come by. There is an urgent need for a national debate on these important
questions.

The first task would be to critically examine the existing communication facilities. On the basis of whatever little research findings are available and from common observations, one can safely say that the mass media are not as effective as they should be as a catalyst in ushering development and change in rural areas. There could be many reasons for this, and one obvious explanation often put forward is that 'resources are limited and communication facilities are inadequate'. This is true to a great extent. However, I think much can be achieved even with the existing communication facilities of which we have not been able to make full and proper use.

What has been raised to date? Today, we are aware that there is no cookbook of recipes for media selection that can be applied in every educational and/or training system in the developing countries. Obviously, it goes against common sense and experience to dictate the use of a given medium or combination of media for a particular education. Such decisions are based on too many variables: costs, number of students, subjects, media, variations among students in educational background and personality, the need to present any one subject in many ways, and wide variations by country in the availability of equipment, trained human resource and labour costs. Beyond that, this complexity means that there is often more than one...
good choice. Yet, some general conclusions hold true.

Third World countries are by no means a monolithic block and one finds a great variety of political tendency, economic systems and cultural backgrounds lumped together under the highly unsatisfactory term of "Third World". *23

Differences in subject matter and in audiences are more important than differences in media to the success of an educational programme. *24

An important factor in media selection is the projected availability of various media in the environment in which the instructional package will be used...the flexibility, durability and convenience of the materials within a specified podium are other factors. The final factor is the cost effectiveness over the long run of one medium compared to others. *25

Therefore, the analysis of which medium best suits educational and training programmes depends on each country, although certain generalizations can be made for the developing countries. Nevertheless, it is crucial to properly select a medium and its suitability for the Third World since this can prevent costly errors which may appear obvious in retrospect but sometime escape notice during the design stage partly because those responsible for the design may be very different in terms of education, culture and audience.

Since most of the research in the past two decades in communication development focused on the informal education
and on the analysis of radio as a primary medium, it is necessary to point out some findings before elaborating on innovative multi-media training packages, using a modular approach, and on sound-slide packages as a primary audio-visual medium.

II The Mass Media in Informal Education

In the rural areas of most developing countries, the school is the only means of formal instruction currently available. The poor conditions found in the rural schools of most developing countries are well known: irrelevant curricula, overloaded teachers, and inadequate supply of learning materials. A sad but frequent event is that:

Primary school dropouts are generally high throughout developing countries, but when rural breakdown is made, it often reveals a disastrous situation in rural areas, with dropout rates before the sixth grade often in excess of 80 percent of first grade entrants.*26

Revising these failures of rural education while working within the existing formal structures has its own difficulties. For instance, all official organizations involved with education planning are slow to change or accept innovation. Regardless of willingness of concerned officials at all levels, to implement the best designed reforms is no easy task. Given the immense problems and
the difficulty of changing the existing system, development planners looked beyond formal education to more informal strategies for extending education and training in situ. What does informal education imply?

It can be an extension of the formal school system, as in correspondence or 'open' schools; it can be a parallel instructional system where differently focused school equivalency work is carried on; it can be a skills training course in agriculture, literacy or mechanism.*27

Advocates of informal educational strategies often point out that the crucial need of rural people is for more practical information; information that will help them upgrade the productivity of their land, improve the quality of their diet, and allow them to reduce the incidence of disease by adopting better health practices in the home. Such information has customarily been provided in the course of formal schooling and through extension programmes. Since this kind of information reached only a small fraction of the rural population, new ways were found to diffuse the information in rural areas.

The mass media as well as lower cost communication technologies (slides, filmloops, flip-charts) are an obvious means for channeling such information on a much wider basis.

In informal education, a growing number of educators use media to support
face-to-face teaching. Films, slides, booklets, and other aids have an established place now in education, health, nutrition, and family planning. Radio or, less often, television is also used, either to provide regular programmes (as in the radio School for Family Education in the Dominican Republic, which provides daily programmes on health and family planning) or to provide publicity or support for a campaign (such as the 1974 breastfeeding campaign in Trinidad and Tobago).*28

In informal education, too, audiovisual media can extend more and better teaching to many more people than teachers alone can reach. Since adult education services are usually considerably less developed than schools and universities, media's contribution is all the more important. Broadcasts have proved particularly effective in attracting people to adult education. Audiovisual media linked with print can also train at a distance those adults who require vocation, technical, or professional training or general education but who cannot attend classes.*29

Given the fact that communication technology, notably radio, has now achieved virtual saturation coverage in almost all developing countries, what evidence is there to justify the high hopes development planners have for its wider applications in the service of rural education? Unfortunately, the evidence is by no means clear. As well, there has been a considerable diversity among the audiences of informal education programmes. Such diversity is exhibited in the wide range of ages, occupation,
previous educational experience, and motivation of people who have been attracted to one type of programme or another. Since radio has been a primary media in the educational targets in the developing countries, it is necessary to point out the advantages and disadvantages of it vis-a-vis other media, particularly the sound/slide package.

II.1. Radio

What is known about context of educational radio in educational programmes in developing countries? In general, four dominant characteristics:

1) its programmes are arranged in series to assist commutative learning;

2) they are explicitly planned in consultation with external educational advisers;

3) they are commonly accompanied by other kinds of learning materials, such as textbooks and study guides, and

4) there is some attempt made to evaluate the use of the broadcasts by teachers and students.*30

Rather vague and general, since evaluation and monitoring are the major missing components in most projects. Nevertheless, we cannot disregard the fact where educational radio stands in the countries of the world. Table 3 summarizes the position. Almost every
country claims to use educational radio. In some countries, total provision may amount to no more than an hour or two a week. In others, it may add up to more than a hundred hours in the same period, learned at a variety of audiences. What are the advantages and disadvantages of using radio as a form of education and training?

Radio can reach a large audience cheaper and is accessible even to the poor and illiterate. Radio is effective where affective learning or an imaginative response is required. Ideas can be stimulated on issues raised through personal accounts or debates. It is also particularly useful when the need is to present up-to-date local information. In teaching agriculture, for example, programs can include items on new products, outbreak of disease, or on the effects of unusual weather conditions. Similarly, radio is also important when there is a need to attract a widely scattered audience, particularly when many members of that audience cannot read. Naturally, radio has its limitations.

Radio can create awareness of innovations and stimulate a sense of involvement. But at other stages of the development process, especially at the crucial stage of adopting innovation by the rural people, the role of radio is less effective. What are the disadvantages of using radio?
<table>
<thead>
<tr>
<th>AFRICA:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AMERICA, NORTH:</td>
<td></td>
</tr>
<tr>
<td>Antigua, Bahamas, Barbados, Bermuda, Canada, Cayman Islands, Costa Rica, Cuba, Dominica, Dominican Republic, El Salvador, Greenland, Grenada, Guadeloupe, Guatemala, Jamaica, Martinique, Mexico, Nicaragua, Panama, St. Kitts, St. Lucia, St. Pierre et Miquelon, St. Vincent, Trinidad and Tobago, United States.</td>
<td></td>
</tr>
<tr>
<td>AMERICA, SOUTH:</td>
<td></td>
</tr>
<tr>
<td>Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Falkland Islands, French Guyana, Guyana, Paraguay, Peru, Venezuela.</td>
<td></td>
</tr>
<tr>
<td>ASIA:</td>
<td></td>
</tr>
<tr>
<td>Afghanistan, Bahrain, Brunei, Burma, China, Cyprus, Hong Kong, India, Indonesia, Islamic Republic of Iran, Iraq, Israel, Japan, Jordan, Republic of Korea, Kuwait, Lebanon, Malaysia, Maldives, Nepal, Pakistan, Philippines, Qatar, Singapore, Sri Lanka, Syrian Arab Republic, Taiwan, Thailand, Turkey, Socialist Republic of Vietnam, Yemen.</td>
<td></td>
</tr>
<tr>
<td>EUROPE:</td>
<td></td>
</tr>
<tr>
<td>Austria, Belgium, Czechoslovakia, Denmark, Finland, France, German Democratic Republic, Federal Republic of Germany, Gibraltar, Greece, Hungary, Iceland, Ireland, Italy, Malta, Netherlands, Norway, Poland, Romania, Soviet Union, Spain, Sweden, Switzerland, United Kingdom, Yugoslavia.</td>
<td></td>
</tr>
<tr>
<td>OCEANIA:</td>
<td></td>
</tr>
<tr>
<td>Australia, Cook Islands, Fiji, Gilbert Islands, New Caledonia, New Hebrides (United Kingdom), New Zealand, Niue Norfolk Island, Pacific Islands, Papua New Guinea, Tonga, Western Samoa.</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** International statistics on educational broadcasting are difficult to obtain (see UNESCO 1979) and are not well standardized. Countries and territories shown in Table 3 are either listed by UNESCO as broadcasting educational programmes or mentioned in other reports as doing so.
Radio cannot provide much detailed information, because the listener soon forgets and the message cannot be kept for use later. The listener cannot refer back as when he is reading. If he does not understand and retain the message when broadcast, it is lost. Furthermore, radio is a one-way communication as the broadcaster never knows the reaction of the audience. *31

Education broadcasts often take place at times that are inconvenient for many listeners, and it may not be possible to repeat them often enough if only a few hours are available for education. Then, too, when listeners can tune in to more than one channel, rival programs may divert audiences. *32

It is less effective than face-to-face teaching for communicating detail, particularly if used alone. It is also inferior for instruction in practical work that requires a pictorial or written record or demonstration as well as comprehensive instructions. *33

Some subjects are difficult to teach by radio, since effective learning requires numerous active responses. Here the problem is not the medium itself, but time. Where enough air-time is available, radio teaching is very effective. *34

In considering the costs of radio, two general points can be made.

First, when radio and television are compared, radio is cheaper by a factor of up to ten. Second, unless the audience is very small (under a thousand, say) or located in a very small area, then the costs of distributing information by radio are
likely to compare favorably with those of any form of physical distribution.*35

Radio has been and will certainly stay one of the leading media used for educational and/or training activities in the developing countries. Certainly, each country could report on the results achieved by using radio as an educational medium. One cannot deny the fact that radio did play an important role in the developing countries, regardless of all its disadvantages, and has contributed toward the development process. The lack of a two-way flow of communications, lack of evaluation and monitoring of radio programmes within informal education projects cannot be criticized only on the basis of medium per se but on the larger socio-economic and organizational level.

II.2. Basic Problems in the Use of Media in Informal Education

To evaluate the media's effectiveness (in this case, radio) in informal education projects, it is necessary to specify the goals that different projects have worked towards, as well as the nature of the content of messages that the media were assigned to carry in each instance. The lack of concrete objectives has greatly complicated
the task of project evaluation.

Nevertheless, a review of existing case studies reveals that informal education programmes usually have applied the media to accomplish one or more of the following objectives.

1. Extend the formal school by providing instruction in traditional academic subjects. Programmes allow formerly isolated students with little hope of continuing their education in formal settings to pursue their education via radio or television.

2. Upgrade the competence of rural people by providing basic skills training. This objective encompasses the literacy projects that have been undertaken in virtually all countries in recent years.

3. Provide practical information and advice on a continuing basis. Within informal education projects that stress this goal, the media have customarily acted as surrogate extension agents.

4. Stimulate community development through the encouragement of self-reliance and self-help projects.

36

For example, experience in Brazil and Bolivia has shown that once traditionally oppressed rural people liberate themselves through a development process that Paulo Friere has designated "cultural action for freedom", the pressure for change is increased on traditional institutions and leaders. For this reason, education
projects that have used the media for sensitizing rural people to their social situation and vulnerability have been highly political in tone and intent. On the one hand, within revolutionary societies such as Cuba, China and Tanzania, educational programmes directed to rural audiences have been carefully designed to stress a particular political ideology and its relation to development.

However, within informal education projects there is very little research available on what patterns of organization and control seem to offer the highest probability of success. By some scholars it was pointed out that:

One clear impression that does emerge from existing case studies of informal education projects is that the media can rarely, if ever, be relied upon exclusively. A second impression is that very few agencies involved in informal education projects have paid enough attention to the problems of training their staffs in the proper techniques for utilizing the mass media.37

Basically, the problems of unclear administrative arrangements in steady local interest and organization and poor evaluation and follow-up have undermined the effectiveness of most media-assisted informal education projects. To successfully build upon the satisfactory performances of a pilot project inevitably requires additional financial and human resources as well as
careful planning of development priorities. The preparatory stages should include consultation with the target audiences; the choice of medium should be selected in accordance with the socio-economic, cultural, financial situation; the pre-testing and formative evaluation should be included in the projects; feedback and monitoring should be an essential component of all projects and programmes. Finally, the local human resources should be educated and trained to proceed with the project and available local hardware should be used for the equipment. The integrated approach of educational projects within the mainstream of development planning is the only way to ensure certain positive results of the numerous educational projects that are on-going in a number of developing countries.

Another way to approach the educational problem in the developing countries is by providing an alternative solution to it. Training is one of the alternative means by which population can be educated on all levels, particularly in situ. The question is what has been designed in previous years in training strategies to enable more effective education of men and women alike?

III. Training

Training has always been used as method of increasing human productivity, either by introducing new skills or by
further developing old ones. It is a flexible instrument of learning; since it can be adapted to different environmental and human needs, it can be used at different levels of intervention.

Training, being a part of the educational system, became a necessary component in many development projects during the past two decades. Training programmes have the flexibility to be incorporated into informal educational projects, to be conducted per se, and to be a part of national and/or local development projects using a participatory approach. In order to be effective, training programmes have to be designed to suit national needs and maintain an action-oriented perspective that responds to the overall development plan. As training activities can always be modified, it is necessary to continuously evaluate and upgrade the existing programmes in order to meet the new demands of the target audience.

As women have been generally excluded from the on-going educational projects and programmes, training activities became another channel of upgrading their knowledge and skills.

While many training activities are on-going at all levels of developing societies, there are general problems and obstacles: a major and most common is the lack of trained staff and trainers in the various areas of training needed for women. More women are receiving minimum
training skills, but the number of women receiving training in planning, decision-making technical areas, or in new applied technologies and science are insignificant in relation to the needs and the potentials.

Analysis of most training systems show that they are structured in a traditional way to provide different levels of training for skills, applying curricula primarily designed to meet examination purposes.

Therefore, it became necessary to create innovative approaches to training for developing countries. The challenge is to break new grounds, to look at the design of training programmes in a manner which would make them attractive to participants. One of the major shifts should be from didactic instruction to more participatory methodologies, involving communication and media support as essential ingredients. Local trainers must be re-trained in the use of different approaches and methodologies. The internal interaction system must be made more decisive and effective, and training support systems must be provided.

Participatory training in the broadest sense should teach the trainees how to avoid the trap of immobility. This means, man and woman alike, should learn how to perceive their future development within the context of national development and how to adapt to change accordingly. It can take place only if the problem solving analysis and
dialogue are an integral part of the training process. It means that participants themselves should play an active part in identifying needs, problems and approaches for their solution. Such learner centered methods treat the trainer only as a facilitator who should secure productive response and interaction among trainees. The inclusion of audio-visual materials will improve motivation of training. It is important to point out the innovative approach is not a question of communication technology per se. The main problem is how to create comprehensible, useful and most of all relevant software or, in other words, relevant training messages and materials.

There is a general lack of adequate training material for development purposes. In the case of women's advancement through training, it is extremely rare. The question is how to create relevant training materials in a way to appropriately serve the needs of women, or the needs of the decision-makers, who seldom understand how women relate to development processes and sectors, and how to respond to the ever growing need for trainers, teachers, facilitators and extension workers.

An important concept in this direction is the "multi-media training packages", using the modular approach. They have been developed as an alternative training methodology supplementing radio and television.

Multi-media training packages use instructional
material in combination with sound-slide packages and transparencies for training needs. They comprise one of the first attempts to combine instructional and audio-visual materials for training in a modular sense.

In June 1986, the first multi-media training packages were produced for training women in one of the specific areas of action as outlined in Nairobi Forward-Looking Strategies, water supply and sanitation. They were produced by UN/INRAW* and ILO/TURIN Centre as a pioneering effort to start training different target groups on the importance of including women more effectively into the mainstream of the development process at all levels. However, we have to underline that these training packages are essential vehicles for trainers, and are not aimed only at women, but men, children and society as a whole.

* On behalf of UN/INRAW, I produced two multi-media training packages on 'Women, Water Supply and Sanitation' in June 1986, Torino, Italy.
IV MULTI-MEDIA TRAINING PACKAGES

The recent training methodology which was designed in 1986 for the developing countries are the multi-media training packages, using a modular approach and supplemented with the sound-slide package as a primary audio-visual media. These training packages will be used to train trainers in the developing worlds and they are designed to suit national needs which have to be adopted and modified by the local professional staff at the community level. Instead of a conventional training text, modules have been created which comprise of oral and visual media, with defined objectives and extensive group works.

The need to develop an innovative training methodology became a necessity, since the existing methods have not satisfied the needs of the population in the developing countries, particularly the women. The modular programme enables training in situ and provides practical "how-to" materials.

In this part I will elaborate on what is a modular programme, what are modules, and why was the sound-slide package chosen as a primary audio-visual medium. Appendices II and III cover the systematic organization of training and general guidelines for a modular training seminar.
I. What is a Modular System?

In a modular programme, the content is not considered as a continuous series of linear units peculiar to a particular training, but as a series of entities each of which form a whole, but conceived in such a way as to make it possible to include them in different training programmes and to adapt them to the individual or special needs of the learners. These entities are called "teaching modules".

I.1. Teaching Module

A teaching module is:

a whole in itself but can be integrated into a teaching unit; it must therefore have very precise pre-requisites (entry-test) and objectives;

designed to be easily inserted into different training programmes; the pre-requisites are minimal and include options and possibilities for readjustment;

adapted for individual needs; it therefore starts with a diagnosis based on the pre-requisites (entry-test) and on objectives (pre-test); it offers the students training elements chosen as a result of their starting knowledge of level, their needs or the demand;

a remedial exercise to make it possible to adapt to the level of training."
What is a module composed of?

Each module is a self-contained training/learning unit, but some knowledge of previous modules or particular pre-requisites may be required. The modular course is designed in such a way that it can either be used in full for an initial training course in methodology, or, as in the case of advanced training programmes, modules suited to the needs of the trainees are selected, while complementary modules can be taken from different modular courses. All the modules contain training situations that enable the user to acquire the knowledge and skills which make up the teaching objectives in as short a time as possible.

The module contains a course covering the subject area, clear instructions are given with each session as to exactly what material is required so that local instructors can coordinate their lectures with sound-slide packages which are provided in the accompanying pack.

The module is produced to stand on its own, without any further supply from external source. Each module comprises a topic given in audio-visual or printed form to facilitate both teaching and learning, together with an "Instructor's Guide" for the tutor. Setting out from specific objectives, the guide describes the activities of both the instructor and the learners.

Obviously, preparation of each module is a long-term
process, since it involves team work and practical knowledge gained from a concrete life situation.

Basically, the preparation of the module is comprised of eleven stages, namely:

1) determine the terminal profile;
2) determine the objectives and pre-requisites in the terminal profile;
3) divide the module into sub-modules;
4) prepare the following provisional tests: entry test, terminal test and pre-test;
5) describe teaching activities and/or provide the tools needed to carry them out;
6) provide intermediate tests and improve the statement of objectives and the tests;
7) incorporate the branch lines (to adjustment tests and other lines);
8) describe the adjustment activities and/or provide the tools needed to carry them out;
9) describe the teaching activities and, if necessary, the tools to carry them out;
10) test the module and improve it according to the results;
11) draw up the specifications.*39

A module has three main parts:

an entry system which helps to guide the student at
start (either towards the module or towards a previous or a more advanced module);

the body of the module which defines or contains the learning activities and the teaching activities necessary to achieve the objectives;

an output system which helps to guide the student towards the next module or towards remedial activities.

In addition, a module should have an adjustment system operating at the three preceding levels. (Appendix I - Figure 1).

The entry system of a module includes:

the specification of the general aims of the module and its contribution to those training programmes in which it can be used, as well as a statement of the objectives expressed in terms of results expected, and the activities and attitudes of the student after completing the module;

an entry test intended to check whether the learner has the necessary pre-requisites, i.e. has those competencies she/he will have to use in the course and which will not be taught;

a pre-test based upon the objectives of the module; this test enables the learners who possess or think
they possess, at the outset, the skills and knowledge which they are going to be taught, to see if they really have mastered them, and avoid teaching them what they already know;

In cases of total failure in the pre-test, the learners are directed towards the body of the module; the pre-test, in the form of a post-test, is also necessary to evaluate the learner's progress after the module; in practice, pre-tests are unnecessary when teaching material which is entirely new to the learners.

Tests should be accompanied by a precise correcting scale and by an indication of the decision to be taken according to the results obtained.

The entry system also has specifications which describe the module: intended population, level of course, orientation (general, technical or as specified), time of completion and results. These specifications can be designed for the trainer of the trainee. (Appendix I - Figure 2).

The body of the module contains the learning situations which are either provided for within the module (e.g. a printed programme course) or else simply specified (and have to be carried out by the teacher or the student himself). Different ways can be offered to the learner
according to her/his level of preference. The body of the module is often divided into sub-modules corresponding to a continuous learning session or class. (Appendix I - Figure 3).

An output system contains:

1) a general summary of the module, revision work and application to complex situations;

2) a post test (also called a "terminal test") on all the module's objectives, accompanied by a correction scale with guidance as to the decisions to take according to the results obtained, e.g. if module A is a pre-requisite to module B, the post-test for A can be used as an entry test for B;

3) advice about the choice of module to follow according to the training required by the learners, and hints on further applications or exploitations of the knowledge and behaviour potential acquired in the module;

4) remedial exercises for students who partially fail the test. (Appendix I - Figure 4).

For each training session a different module has to be prepared in accordance with the subject matter and the
audio-visual materials. In order to carry out modular training, the training programme must have a function and clearly defined objectives. That is, the objectives must be defined in terms of the observable behaviour results expected from the trainees to be acquired by the end of the modular unit.

What are the advantages of a modular system?

**Efficiency**

The modular approach is based on teaching complete mastery and, through the many checks and adjustment activities included, makes it possible to detect and remedy any deficiencies both at the beginning and in the course of training or at the end. In particular, checking the pre-requisites makes it possible to avoid many failures.

**Flexibility**

Carefully planned linking points make it possible to use a module within different training schemes; furthermore, if pre-requisites are minimized or if enough remedial exercises are provided, the module's field of application is considerably broadened. In addition, through their entry system, and adjustment activities, modules enable training to be adapted to the needs of different students.

**Openness**

The modular approach imposes no constraints on the method, place or style of teaching. It only states that education and training aims at tangible results. Modular teaching makes it possible, for education and training to be available to all, without consideration of diplomas or entrance examinations.
Economy

Because of their preciseness, modular courses can form the basis of a contract between teacher and learner and also between a contracting organization and its supplier. In particular, professional training on a modular basis is easier to negotiate and offers the recipient more guarantees because responsibility can easily be defined.

Appropriateness for Life-long Education

Because of its flexibility and openness, modular teaching is particularly suitable for life-long education. It makes it possible to break down barriers between different education systems and to free oneself from the constraints imposed by education organized in terms of years or grades.

Progressiveness of Establishment

Modular teaching, although it requires a basic reform, can (and should) be set up progressively as more and more means become available for applying it.

As this is a non-conventional type of training and being an innovative methodology, the difference also exists between conventional and modular teaching.
II Modular Teaching

Modular teaching is a teaching programme that is made up of modules, i.e. of teaching units, each of which has its own structure and forms a whole. These can either stand alone or be integrated into training programmes other than those for which they were originally intended.

This is a far cry from what is sometimes thought, that modular teaching is a teaching method in which a course is divided up into parts corresponding to chapters. This, of course, has nothing to do with modular teaching and the question is what is the difference?

The difference is that a module can be integrated into several different training programmes, while a chapter of a book cannot usually be taken out of one book and inserted into another.

How then is modular teaching carried out, and what are the conditions in order for it to be modular? Well, first of all, the teaching programme must have a precise function and clearly defined objectives. That is, the objectives must be defined in terms of the results expected from the student, i.e. in terms of the knowledge, educational skills and behavioural patterns the student should have acquired by the end of the module.

On the other hand, when we want an educational action or some educational material to be interchangeable with
other training programmes, these must be able to adapt to a variety of populations.

In a lot of teaching, we have to rely on the knowledge or, more precisely, on the skills previously acquired by the student. If these skills are not checked, a great disservice is done to the student.

In modular teaching some modules must be general in the sense that they must be integrated into a great many different training programmes. But this necessarily implies other modules must be more specific and must complement the general modules so that the needs of a training program, which often has both general and specific requirements, can be fully met.

Thus the general requirements are covered by the general modules and the specific requirements by the specific modules. As each module is composed of oral and visual parts, the structure of training session is based on a multi-media approach. In this respect, the main characteristics of multi-media approach should be highly touched upon.

III Multi-media Approach

In recent years, more scholars and instructors are pointing out the advantages of a multi-media approach vis-a-vis a conventional approach. Beside ordinary
lectures or written materials, other audio-visual media are gaining more importance in classrooms and training courses in both developed and developing countries. What are the differences between these two approaches?

The learning theory supports the case for multi-media education, as this hybrid approach is called. Normally, people do not remember and learn everything they experience, but instead select important or interesting points to learn. Teachers normally guide this selection by emphasizing the most important issues. One method is to present a point twice, but simple repetition can become boring and decrease motivation. Having access to two different media enables the teacher to present the same point in different ways with different emphases. Moreover, students are more likely to remember if they are given the chance to put into practice what they have just learned. Teaching should, therefore, be alternated with exercises and activities, and the integrated use of more than one medium can usually offer the teacher a wider and more varied choice of options for activities. Finally, using more than one medium will generally satisfy both those with preferences for verbal instruction and those who prefer visual instruction.
### TABLE 4

Comparisons of Media for Conventional Use with Multimedia Uses

<table>
<thead>
<tr>
<th><strong>CONVENTIONAL USE</strong></th>
<th><strong>MULTIMEDIA USE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Treats a topic</td>
<td>1. Each medium treats a concept within a topic</td>
</tr>
<tr>
<td>2. Serves general purposes or broad objectives</td>
<td>2. Serves narrow, specific objectives leading to learning competencies</td>
</tr>
<tr>
<td>3. Most often for group presentation</td>
<td>3. May be for group use, but increasingly for individual student use</td>
</tr>
<tr>
<td>4. Relatively long in length (10-20 minutes, 40-60 frames, so on)</td>
<td>4. Each medium is of short length in keeping with concept treatment</td>
</tr>
<tr>
<td>5. Almost entirely expository with students passively receiving information</td>
<td>5. Active student participation through coordinated paperwork (completing exercises, self-check of learning, so on) or other activities</td>
</tr>
<tr>
<td>6. Each medium used separately</td>
<td>6. Integration of media in structured sequence</td>
</tr>
<tr>
<td>7. All students view and hear same materials</td>
<td>7. Variety of materials available so students have choice for selected study</td>
</tr>
<tr>
<td>8. Materials usually used at instructor's presentation pace</td>
<td>8. Students work with materials at own pace and convenience</td>
</tr>
</tbody>
</table>
Multi-media teaching also increases the more disadvantaged students' chances for equal participation. In school, all students can listen to and discuss broadcasts, even if the weaker ones cannot cope well with all the follow-up activities. Out-of-school adults, be they illiterate or literate, can benefit equally from broadcasts and discussion.*42

Multi-media teaching also treats many subjects more effectively than single-medium or conventional teaching does. For practical scientific work, an experimental procedure can be described in print with words and diagrams. A television demonstration to support the print will, however, eliminate the need for a detailed description and dispel ambiguities in the presentation.*43

Finally, while one medium alone can in theory teach effectively, in practice, few people can follow a sustained course of study without some variety or some face-to-face contact.*44

Obviously, the production of audio-visual materials or aids for the multi-media approach demands proper selection of media according to the national or local needs; adequate hardware and, above all, well-defined objectives with corresponding instructional material. The audio-visual materials can perform multiple roles as mentioned above to enable teachers/trainers in presenting a lesson. However, audiovisuals are not an end in themselves. They are a means to an end - possibly an efficient and effective one, but a means all the same. Instructors/trainers use them because they help realize a
lesson's objectives. Merit lies in the assistance they offer, not in the way that they are made. What is important is how they are used and what they contributed to the training learning process.

III.1. Audio-visual Materials

There are many sociological and cultural reasons for using audio-visual materials. They make up another language, a language that has its place in our culture. Education is part of this culture and must be in harmony with it. If communication in education training was never audio-visual, it would be in contradiction with a world in which communication is often in audio-visual form. However, this does not mean that we should disregard other forms of communication, particularly written communication.

Audio-visual materials confer a number of benefits to the teaching-learning process. When they are used properly, they attract and hold attention. They supplement verbal information, as well as reduce the amount of verbal information required. Above all, they illustrate relationships in a way that is simply not possible with words. However, they must be selected and used properly. Otherwise, they reduce rather than increase efficiency.

In the education and training process, audio-visual materials perform a number of roles. They can function as:
Aids to instruction

In this role, media serve to help teachers and instructors manage instruction more efficiently. Audio-visual aids:

- Assist instructors to communicate more effectively
  - e.g., chalkboard, flip chart, overhead projector transparency, wall chart, working model, etc.
- Take over the operating role of instruction from teachers and instructors: e.g. computer-assisted or managed instruction, simulators, slide-tape presentations, motion pictures, games, etc.*45

Aids to learning

In this role, media serve to help trainees and students learn more efficiently. Audio-visual aids:

- Promote understanding. The old saying, "A picture is worth a thousand words" is an application of this role. Media help trainees grasp meaning: e.g. pictures, drawings, film, slide-tape, TV, working models, etc.
- Assist in the transfer of training. Sometimes learning one task assists in the learning of another. The skill "transfers" to job situations: e.g. simulators, games, case studies, etc.
- Assist in assessment. Audio-visual aids can be used in assessing or evaluating the mastery performance: e.g. simulators, videotapes, etc.

Whatever their role, aids serve both instructors and trainees, teachers and students. They make a twofold contribution.*46

We have to underline that audio-visual materials are most effective when they are:

- Simple and to the point
- Suitable and relevant to the task
- Essential and necessary
- Interesting and challenging
- Saving in effort and time.*47

The purpose of aids is to simplify instruction. They
should not make the process of teaching and learning more complex. In the developing countries, audio-visual materials have been used,

to give organized support to agricultural extension, health education, and other educational services, so that the combined effects of face-to-face contact and teaching through the media increase agricultural productivity, decrease mortality or morbidity, or achieve other desired results. Where improvements occur on a large enough scale, the use of media may be cost-effective compared with face-to-face extension work. *48

Having in mind all the advantages of the multi-media teaching/training approach, it is obvious that the training packages needed this kind of approach. Not only for the above mentioned points, but also because the target audience is heterogeneous and the training is being conducted in the developing countries. Many times external instructors are rejected due to the socio-cultural barriers, but the audio-visual material is an effective tool in breaking this kind of barrier.

In UN/INSTRAW-ILO/TURIN training packages, the audio-visual materials consisted of sound-slide packages, transparencies and flip charts. After an elaborate research at the ILO-TURIN Centre, it was decided to use sound-slide packages as a primary media instead of instructional cassettes, or videos or radio lessons. Why
was it chosen as a primary media?

III.2. Sound-slide Package

One of the primary reasons is that the flexibility of sound-slide packages is the fact that, as opposed to radio or TV, they are not bound to a specific broadcasting slot, but can be used at the discretion of local trainers, and in time slots suitable for the target audience. Before proceeding to elaborate further on the roles of sound-slide package, it is necessary to point out the advantages and disadvantages of the primary visual media slides.

III.2.a. Slides

Slides are the most flexible of audio-visual media; they are practical, versatile and cost-effective. They offer high production values while preserving visual images of high quality, and in a format that can be readily updated. These formats can easily be modified to suit regional, national and local needs. Jenkins pointed out that

Slides are instrumental to good teaching because of their values in illustrating a concept, of adding life to a description, stimulating
questions or exercises, serving as a reminder of a point just taught and providing variety, for explaining difficult topics clearly.*49

Slides can perform a number of roles. They can:

be integrated into individualized instruction programmes. Although developed primarily as a large-group medium, recent hardware innovations have made slides feasible for small-group and independent study as well.*50

Slides can be used at any point in the lesson (introduction, body, summary) and they can be very effectively used in combination with other types of media such as the tape recorder.*51

When slides are used as an instructional aid:

Instructors can adapt their lessons for different student groups or vary emphasis by deleting or adding slides before each presentation.

Instructors can back up visual displays to review specific points.

The large visual display on a screen allows an instructor to point out critical items.*52

Slides can also serve as an instructional medium when used in combination with audio. For example: A preprogrammed sequence of slides can provide exact visual content than can inhibit the tendency of various presenters or instructors to revise or improvise lessons. The compact size of slides facilitates the production and distribution
of individualized lesson materials.

As slides are categorized as still media or little media, they have been compared to filmstrip. What are the similarities and differences between these two media?

Like the filmstrip, slides can do many of the same things as a film, but without the motion. Slides, too, can be used to show close-ups of very small items. They can be used to highlight key steps in processes that are hazardous or that occur too rapidly or over too long a period of time to be easily viewed by students in a classroom. Also they can be used to illustrate abstract concepts.*53

Since each slide is an individual unit, the order of the presentation is not fixed as it is with the filmstrip. You can easily change the order, add slides, eliminate slides or replace slides of outdated material with new slides.*54

Since slides can be arranged and rearranged into an infinite variety of sequences, they are more flexible than filmstrips or other fixed sequence materials. Finally, slides are reproducible in large quantities and their small size allows for compact packaging and storage and for ease of distribution for use in various locations. However, one disadvantage is:

Since slides, unlike filmstrips, come as individual units, they can easily become disorganized: out of sequence, upside down, sideways, backwards, etc. Even when stored in trays, if the locking ring is loosened the slides can come spilling out (usually beginning of a showing!)*55
III.2.b. Sound-slide Package

What is a sound-slide package?

Simply, a tool for presenting information relying on visuals (in the form of 35 mm slides) allied to a descriptive audio tape and perhaps other supportive material - e.g. hand-outs, models, etc.

How are they produced?

Combining 2-by-2 inch slides with audiotape is the easiest multimedia system to produce locally, which is one reason for the increasing popularity of its use in the instructional setting. The system is also versatile, easy to use, and effective both for group instruction and independent study.*56

Slides can be produced with accompanying audiotapes (usually cassettes) that explain or discuss the material on each slide in a sequence. These slides/tapes can be used very effectively with groups or on an individual viewing basis.*57

A sound-slide may be incorporated into a teaching system, or be used as extraneous enrichment material. Such packages may be used to teach fact, attitude or skills to large groups, small groups, or to individuals.

Sound-slide programmes can be developed locally by teachers or students. In terms of emotional impact and instructional effectiveness, they may
rival film or television productions, yet they can be produced for a fraction of the cost and effort. Indeed, sound-slide sets are produced frequently as prototypes of more elaborate film or video projects, since they allow the presentation to be tried out and revised in its formative stages.*58

They may be used to excellent effect in group instruction and they can be adapted to independent study in the classroom and the media or learning center. This comparatively simple multimedia system is especially versatile as a learning/teaching tool in that more than one narration can be prepared for a given set of visuals.

While slide/tape is widely used in training applications, it is not quite as ubiquitous as print or transparencies. Slide/tape programmes represent an unusual training technology in that they are equally suitable for both group presentations and self-study use. A considerable amount of progress has been made in slide/tape equipment in the past years. Development of slide/tape materials is relatively inexpensive and quick. Furthermore, commercial development services and expertise for slide/tape is widely available.*59

In self-study applications, slide/tape is able to provide both the visual and audio information of an instructional presentation. Thus, it can effectively replace the content of a classroom lecture or laboratory demonstration. Slide/tape can also replace print-based instruction, although normally slide/tape programmes incorporate print materials. The design of slide/tape programmes where slides are used to emphasize, summarize and organize the information provided via audio can combine the advantages of the two
presentation modes in an effective manner. Using the rule of thumb that a person is able to remember about 20 percent of what is heard and 50 percent of what is seen, slide/tape should result in retention of approximately 70 percent of information presented to a motivated student. Of course, this assumes that the visual and audio components are perfectly complementary and do not interfere with each other.*60

It is also less costly and less demanding of managerial and technical skills and could be used in a series to illustrate a concept. One of the most important factors is that students do not have to be literate. As the lack of electricity is another major problem in most villages, a battery-operated projection can be used as a solution. Although radio can also be used on batteries, the sound-slide package can be repeated and presented in the different locations and different hours as many times as deemed necessary.

For example, in his research Coldevin found that:

Village-based media presentations were effective in raising information levels... with the highest score occurring for the combined audio-cassette/slide-tape presentation...*61

From the above-mentioned scarce research, it appears that the sound-slide packages can be effective for the developing world. They do not require literacy, they can be repeated as many times as wanted, no scheduled hours are requested, they can be continuously modified and
adapted to the needs of a country. They can rely on "home-made" photographs and are not an expensive medium for projection. As well, they comprise oral and visual media which is important for trainers, as some people react more strongly on the visual presentation than the oral. These are some of the reasons which make the sound-slide package a more effective educational and training tool than educational radio and TV. It is essential to have visual products which can motivate trainees, illiterate and literate, and enable wider use in remote rural areas with the scarce technical equipment. We have to bear in mind that it is important to affect people in how they act rather than in what they think they know.

However, more research, field-testing and evaluation are necessary in order to provide a more precise framework for the use and role of the sound-slide package.

Concern exists as well for the media hardware. In this case, I will point out that slide projectors and tape recorders are known to exist in most rural areas. The advantage of the slide projector and the tape recorder is that they can be operated with either batteries or electricity and that they are easy for transportation.
III.2.c. Slide Projector

Slide projectors are small, lightweight, quite simple to operate (especially those that hold slide trays) and relatively inexpensive. Most newer projectors include a remote control that allows you to sit where you can best view both students and the screen, while still being able to advance the slides yourself. Some projectors even come with a timer that will advance the slides automatically at preset intervals.

Since even those projectors with automatic controls can be operated manually, each slide can be projected for as long as is needed for the class to study or discuss it.

Goiburú presented a list of oral and visual media. For the slide projector it was pointed out that

<table>
<thead>
<tr>
<th>Media</th>
<th>Advantage</th>
<th>Disadvantage</th>
<th>Cost</th>
<th>Use</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slide projector</td>
<td>Same advantages as for still (much cheaper than cine projector and much easier to use). The possibilities are greater as the order of the pictures can be changed. Photographs may be home-made.</td>
<td>There is not a great selection of suitable slides (though they can be &quot;home-made&quot;)</td>
<td>Fairly expensive</td>
<td>Simple Very useful and versatile photgraphs can be made to measure for every group, and titles and summaries may be added.</td>
<td></td>
</tr>
</tbody>
</table>
However, in order to make sure that the training methodology and slide-record package suit the needs of the target group, it is necessary to do a formative evaluation before finalizing the conclusions about the multi-media training packages. Therefore, an additional component of the UN/INSTRAW and ILO/TURIN multi-media training packages includes a formative and summative evaluation.

IV Evaluation

Although projects using communications for development have been numerous, relatively few evaluations assessing their effectiveness have been undertaken. There seem to be various reasons for that. In part, there is often a lack of financial and other resources that are allocated to evaluation activities, or there may be a lack of personnel or skills to undertake the evaluation. Often an evaluation is viewed as unnecessary or there may be political opposition to its undertaking.

The importance and necessity of an evaluation as an integral element of various instructional, educational and training programs has been realized since the early twenties. However, certain field experts in the developing countries perceive evaluation as an activity to measure somebody's mistakes during a project. This is a completely wrong view. Generally speaking, evaluation is a long-term
activity or process by which results are measured against its targets or objectives, to see whether they have had the desired impact or any undesired negative effects.

Two basic distinctions of the evaluation forms were made in the 1960s. One form of evaluation is the "formative evaluation" which is performed on a product during its development or "formative" stages so that the product can be improved before final production. The other form, which has been applied more frequently in the projects, is the "summative evaluation" which is performed on a product after the final production. The two forms have different techniques and procedures applied at the different points of times. Table 5 summarizes the contrasts between reports for formative and summative evaluation.
<table>
<thead>
<tr>
<th>Purpose</th>
<th>Formative Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shows the results of monitoring program's pilot tests conducted during the course of the program's installation. Intended to help change something going on in the program that is not working as well as it might, or to expand a practice or special activity that shows promise.</td>
<td>Documents the program's implementation either at the conclusion of a developmental period or when it has had sufficient time to undergo refinement and work smoothly. Intended to put the program on record to describe it as a finished work.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tone</th>
<th>Informal</th>
<th>Usually Formal</th>
</tr>
</thead>
</table>

| Form          | Can be written or audiovisual; can be delivered to a group as a speech or take the form of informal conversations with the project director or staff, etc. | Nearly always written, although some formal verbal presentation might be made to supplement or explain the report's conclusions. |

| Length        | Variable. | Variable, but sufficiently condensed or summarized that it can be used to help planners or decision makers who have little time to spend reading at a highly detailed level. |

| Level of Specificity | High, focusing on particular activities or materials used by particular people, or on what happened with particular students at a certain place or point in time. | Usually more moderate, attempting to document general program characteristics common to many sites so that summary statements and general overall decisions can be made. |
The primary role of a formative evaluation is to enable researchers to verify a product with the target group or audience in the development stages in order to provide feedback and improve the project and/or programme. The importance of conducting formative evaluation is essential if we are able to apply different methodologies in the developing countries and meet their needs. Different techniques and approaches are used in formative evaluation and are applied accordingly to the available resources (time, money, personnel, facilities) in the developing world. Coldevin pointed out that:

Typically, formative evaluation is rarely applied and summative evaluation is of a descriptive nature only, rather than a rigorous assessment of the extent to which the original objectives were achieved.  

The urgent need of applying formative evaluation in development projects is becoming a must since so many projects failed due to the improper selection of the training methodology and media. Whatever their situation, formative evaluators do share a set of common goals. Besides, ensuring that the programme is implemented as effectively as possible, they watch over the programme; alert both for problems and for good ideas that can be shared.

In the UN/IN stray-ILo/TURIN Centre multi-media modules, the role of a formative evaluation will be a
activity. The training methodology and sound-slide packages will be formatively evaluated in three major sections: subject matter (content), instructional design and technical presentation. The target audience will be interviewed on the effectiveness of the sound-slide package as a possible innovative leading media. The formative evaluator will be asked to review factors, such as content accuracy, comprehensiveness, objectives and content for the target population, language, clarity of objectives, sequence and relationship of ideas within the content, technical quality, media compatibility of the materials with the training programmes.

The formative evaluations will be expert in "Subject Matter", "Pedagogical", "Instructional Design", and "Presentation and Curriculum" categories.

The "Expert Review" will have to analyze various aspects of the sound-slide package, such as:

1. Whether adequate motivational material exists;
2. Is the appropriate content included and up-to-date;
3. Does the narrative correspond to the slides;
4. Is there a clear relationship between content and objectives;
5. Is each topic presented clearly;
6. Is the content appropriate for the target group;
7. Is all required information available;
8. Whether certain areas of women's activities should be emphasized;
9. Is music appropriate for different regions;
10. How does it influence the text.

These are all the questions one has to examine before and during the showing of the sound-slide package. In this particular case we have to bear in mind the ignorance to knowledge-scale, opposition to acceptance and support-scale, and other attitudes or habits that mitigate against change in developing countries, particularly when dealing with the advancement of women.

The summative evaluation will include information on the training methodology, pedagogical scheme, training text, instructors, participants and visual materials.

V Conclusion

What can we conclude? Multimedia modular training packages certainly provide an alternative to educational radio and TV. The packages have more advantages and flexibility than other educational and training programmes used in the developing countries. As a number of essential factors have been taken into consideration while designing and producing these packages, there is certainly more
guarantee that they will be more effective than just radio or TV. Since it is a pioneering work, especially on the topic of women in development, the challenge lies ahead of us. In the coming years, extensive research on their effectiveness will be crucial. They are certainly not an end in themselves, but rather training means which have to be continuously modified and re-adapted to meet the needs of local people in different parts of the world. As they offer more self-reliance on software and hardware than on any other educational media, these modules can be a turning point for all scholars involved in communications development, education technology and women's issues, and, above all, for trainers in developing countries.

As the modular programme is adjustable to various target audiences and different training needs, this methodology offers a possible solution to serve appropriately the needs of women and/or the needs of decision-makers to understand how women relate to the development process and sectors and to respond to the ever growing needs of trainers, teachers, facilitators and extension workers. There are, to my knowledge, only a few examples of awareness building and attitude change among executive level managers and administrators. Not only the policy makers, but the public at large has not yet sufficiently realized the investment in human resources, particularly in the training of women, is a condition of
In any case, the process of breaking new ground with innovative training methodologies has started, and how far it will go remains to be seen.
V NEW CHALLENGES TOWARD TWENTY-FIRST CENTURY

I New Communication Technologies

In the developed countries one of the main problems is how to cope with the information overload, while in the developing countries the problem is how to get any information at all.

In the developed countries the different means of communication are increasingly converging onto a common digital language. Through integrated networks they are transforming the schools, libraries, banks, businesses, postal systems, phone companies and stock exchanges into a single, multi-purpose electronic "information grid," providing access to an ever increasing amount of information. In contrast, in the developing countries, there is often not a single telephone available to thousands of people in hundreds of miles.

Therefore, the first step towards the effective use of the communication technologies for development is to establish the so-called "missing link" or, more generally, the infrastructure necessary to provide and support access to information. In general, the developing countries have so far assigned a relatively low priority to communications. Greater emphasis was put on the cost of the communication
technologies and less on the role of communication for developing human resources.

The impact of communications on people and society is not easy to access. Unlike investments in new fertilizers, for example, where a certain input can yield a measurable increase in output, communications do not lend themselves to such measurements. The benefits of information obtained through telecommunications and mass-mediated communication (though with the increased blurring of boundaries between the two the distinction seems no longer appropriate) are hard to quantify. For example, if child spacing is improved after a mass-mediated health campaign, society benefits; or if a woman subsistence farmer increases her crops through radio messages, her family and society both benefit.

While most development efforts have concentrated on education using mass media, the newer small-scale technologies have not yet been widely used. For example, computer-assisted learning is only beginning to make its way into the developing countries, video cassettes are not yet massively in use for training, although their mobility greatly helps trainers. There are only a few examples of use of low-power or community television for development, although it would allow broadcasting inexpensive and locally relevant programmes. Computers and development data bases are starting to be priorities
on the agenda of universities and decision-makers. Slowly, telecommunications' infrastructures are weaving their way onto the agenda of planners.

All this emphasis on newer technologies does not mean that older technologies like radio are to be put aside. Quite the opposite, not even the potentials of radio have yet been fully explored.

Few evaluations of the effectiveness of communications/development projects have been done. Some suggest success in ushering change, others, reinforcement of changes already on the way. But not too many projects have been successful. What is the problem?

Notwithstanding important problems in planning, implementation, financing, technical problems, lack of infrastructure and the like, the problem is not so much the video cassette recorder but the video cassette, not so much the personal computer but the floppy or compact disc, not the film, not the radio or television but the programmes. In other words, the problem is not so much the acquisition or installations of hardware (radios can be handed out, portable battery-powered computers exist), but how to create comprehensible, useful, adequate and relevant software. How to create training materials and development information to secure growth with equity and popular participation?

Communication can only be effective if it is a
complement to other development efforts. A vaccination campaign can only be effective if there are vaccines at the local health centre. A training course to teach women new crafts skills can only be useful if there is a market for the goods produced.

If development means giving control over their lives to the millions of people who are now deprived of any influence, deprived of the ability to be effective, deprived by lack of food, money, education and other constraints, that is, if development means moving towards a participatory society, then communications could provide education and give voice to those people who do not now have a voice.

In order to do so, the planners would need to readjust the existing situation. How?

I.1. The Role of Education/Communication Planners

The process of education and training planning has undoubtedly become more complex over the past two decades, especially in low-income countries where problems are enormous and resources relatively scarce. A decade or more ago the problems seemed more straightforward and communication media were considered an important means for seeking to improve and expand education. Today, there has been increasing emphasis on the political-economic aspects
of planning (Hallak, 1974) as well as on the "non-rational" elements of educational systems, such as the clash of group or class interests, bureaucracy and political party interests in policy-making. (Nevertheless, planners are confronted by the fundamental challenge of trying to guide decision-makers in the best use of available resources to solve concrete educational problems of the country or region where they are working. If the planner's aim is to optimize the use of resources in an attempt to solve concrete problems, then what is needed is a knowledge not only of the problem but also of some alternatives for the solution).

When the work of the educational planner is looked at comprehensively, a threefold process emerges: planning and design (in which the planner examines problems and alternative solutions, chooses one and details this design); implementation of the design (where the planner looks at administrative, political and other obstacles to implementation and suggests some solutions); and evaluation, where the planner looks carefully at the consequences of the process on people and runs the gamut for simply getting people involved in a learning activity through a medium like radio or sound/slide packages.

One of the primary areas for improvement is the need to carefully consider the need for trained personnel in order to use technology effectively in education and
training. Lack of such persons can not only lead to lowered effectiveness but may also, through import of outside experts, lead to a dependency situation in educational areas. Trained personnel are needed at various levels: planners who are acquainted with previous experiences through the research and evaluation literature that has accumulated; administrators who can deal with complex systems of software production, hardware installation and maintenance of field-agent networks; message-design personnel to translate interests and needs of audiences into an appropriate set of messages; production people to put this into artistically and technically appropriate messages; trained researchers to improve the quality of the adaptation of the content to audience circumstances through formative evaluation; technicians to install and maintain production, distribution and reception. Of these, message design, content development and formative evaluation are areas that past experience indicates are most crucial to an effective media system.

As well, planners in countries where education and training are attempting to decentralize must also promote some experiments in the use of smaller scale communication media (e.g. audio and video cassettes, etc.) in order to see how these help or hinder people to more actively participate in their own education.
Certainly, one of the most crucial and delicate areas for the planners is the question of deciding priorities for the expansion of communication facilities. Every medium has claims for its expansion, and perhaps rightly so. Even so, the audio-visual media would be the obvious choice in view of the low literacy in rural areas. But to take full advantage of the various audio-visual media, the development of skills, not only in producing programmes, but more importantly for receiving the messages, among the audience is a pre-requisite. In the absence of such skills the situation can be almost similar to the absence of a broadcasting receiving equipment (say a radio), when the message is in the air but you cannot receive it. Of course, it is a kind of closed circuit argument. Even so, bearing in mind the low literacy and the social and cultural milieu, I would suggest that to build up such skills, emphasis should be on audio-visual materials which can be produced by using intermediate technology at a reasonably large scale but at the same time at a low cost. Efforts should be made to innovate indigenously such methods of communication. Here, I have in mind sound-slide packages, flip-charts and folders and other materials using visuals.

Such visual publicity materials would not only be cheap in terms of cost of production and distribution, but have the added advantage of being handy and more durable.
The mass media do have a role in education and training; they are not magic wands that will miraculously eliminate the awesome problems of the rural sector, but for the solution of specific problems they can be most helpful.

I agree with the following recommendations concerning the role of planners in education and training:

1. Educational and training objectives should stem primarily from a thorough and realistic determination of rural and national needs and only secondarily from the assessment of the media's potential role.

2. The principles of self-reliance and local control demand that educational and training problems as well as solutions emanate as much as possible from rural people themselves. These principles are particularly important in the relationships between rural people and urban decision-makers and between underdeveloped and developed countries.

3. At the operational level, planners should adopt a more experimental attitude toward the media so that different strategies for rural education can be tried and evaluated before final system designs are decided upon.

4. Planners should resist the more expensive and complex media technologies offered by the developed countries unless it is clear that their educational objectives cannot be met by means of less sophisticated and lower cost alternatives.

5. When instituting a media-based instruction, reforms of non-media components of the educational system -
curricula, complementary written materials and classroom utilization must not be neglected. Careful design of these components greatly increases the probability of a system's success.

6. Countries planning new media systems for rural education and training cannot afford to ignore the needs of local personnel such as teachers and community development workers. Local organizers and users of the media must be given proper orientation and training and they must be kept well informed once the new system is underway.

7. The media's effectiveness is enhanced when they are integrated within organizations that are strong and flexible enough to carry out complementary educational reforms. Also, without political and administrative leadership capable of sustaining interest in a particular rural education programme, the media's effectiveness is likely to decline over time.

8. Jurisdictional disputes over control of the media may be minimized by assigning them very specific functions (such as school broadcasting) at the earliest stage. Once established successfully in one area, the media's roles can be expanded.

9. More research is needed to summarize the experience of media projects in the past and to develop principles for the better use of the media in the future. Such research should include descriptive case studies as well as more extensive field testing and experimentation.64

But, none of this can be implemented if it is not coordinated with the overall development planning. Not only an integrated approach is needed for successful
educational and training projects, but also a multidisciplinary approach at various levels of development projects and programmes. Fragmentation between different departments has led to unsuccessful projects and waste of human and financial resources which cannot be abused any longer. It is not only planners that have to reconsider these issues, but also decision-makers, academicians, extension workers and funding agencies.

Besides, readjusting objectives for more effective educational and training projects in the developing countries, we should also readjust toward a new understanding on the role of women in development.

II. New Understanding of Women in Development

A main challenge we face at present is to find an answer to the question: What kind of development do women need?

After a decade of initial experiences it became evident that economic growth and development would not automatically benefit women as expected when the objectives of the United Nations Decade for Women were proclaimed and when it was implied that women's main problems had been their insufficient participation in the otherwise benevolent process of development.

Today, it is clear that the challenge we face is
double-implies both the change in the position of women and the change in the existing development patterns. Arguing for gender equality without examining the processes and strategies for people-oriented development is an argument with limited scope, since the improvement of the status of women could be achieved only through a search for alternative development patterns with growth, equity, participation, social justice and eradication of poverty as main underlying criteria. The present crisis situation in the majority of developing countries, the uncertainty about the validity of the traditional economic theories and solutions in the light of rapid technological change offers a fertile ground for action in both developed and developing countries. In this respect, the message of the Nairobi Conference offers a strong challenge to the academic community within and outside the United Nations system to strengthen its role as a catalyst for change.

A question might be posed how should new research, training and policy trends be oriented in order to face the new challenges posed by the development.

II.1. New Research Trends

It is obvious that the integration of women into development calls for multidisciplinary and cross-cultural
research efforts which are rather difficult to attain in the rather compartmentalized academic circles. Such an approach could be pursued by teamwork of scholars representing various scientific disciplines. Research on women and development is being undertaken at different levels by a multiplicity of organizations and for a number of purposes. A more interdisciplinary team approach is needed, which in turn requires that planning of research activities be conducted in larger units and not in isolated projects.

One of the new trends in research on women in development is the application of the participatory research approach. Such an approach secures the shift from the emphasis on women as beneficiaries of development to women as active participants.

Another emerging trend is liked to the necessity to redefine the economic activity of women, which includes the problems of measurement, employment, status of unpaid family workers, reference period, informal sectors of economy and rural activities.

New research trends should also focus on household, gender and age differentiations, particularly in a different cultural and community context, by using multiple instruments to gather a comprehensive view of women in their changing social and economic settings. The innovative methodologies apply a life course approach, qualitative sources (e.g. extensive personal life stories)
and qualitative methods (e.g. discourse analysis) combined with qualitative sources such as associated with a life history matrix and a time use budget. All those methods could contribute to a richer understanding of the development processes with the role of gender taken into account.

An additional difficulty lies in the need to identify and define the economic activity of women in what is termed the informal sector. This includes the problem of how to measure status and employment in family work, the wide variety of rural tasks and other informal activity.

These are only a few areas of the open questions requiring the immediate and constant attention of research institutions and the community.

II.2. New Training Trends

Women constitute a considerable human resource that has been left virtually untapped in the development process. Although in developing countries women were economically active, both within the household and in the workforce, their activities have generally been classified as non-economic and women as economically inactive, which resulted in the general neglect of women as a potential resource to be developed through training.

In most countries there are no major legal barriers preventing women from educational or training programmes. However, special action is needed to increase opportunities
and access of women to training. In practice, customs and
division of labour tasks by sex limit women's options to
training for skills that are only an extension of their
traditional roles at home (which usually lead to
occupations that are rather narrow in range).

From the standpoint of the advancement of women, the
first stage of increasing training efforts should be
grounded to those who could be identified and act as change
agents. In other words, the target population for training
projects and programmes should consist of participants from
developing countries who in their work have the most
opportunity to implement development actions which would
result in the advancement of women. In this respect, it
would be most relevant to train officials responsible for
the design preparations and presentation of national
proposals directly concerned with improving the role of
women in sectoral development activities. Such training
should deal with topics as:

1) Identifying national and local needs evolving
from national development flows and programmes
and analyzing their effects on women;

2) Structuring project proposals related to women's
needs and participation in development;

3) Lay-out of project proposals according to
different models required by the funding agencies.
Such training is extremely important, since women's organizations generally do not have the skill to develop project proposals while planners are seldom acquainted with women's needs and participation in development problems.

More than the modification of conventional approaches to training is required for the advancement of women, particularly in view of the rapid social technological changes. Due to the growing interdependence of various development aspects, it is necessary to critically assess and appraise the implications of training on development in general and on the community and individual lives in particular. This can take place if problem solving analysis and dialogue are an integral part of the training process. It means that women themselves should play an active part in identifying the problems, needs and approaches to their solution. Equally local, social and cultural forms should be built in the effective participatory patterns.

Measures should also be taken to ensure equal access by women to all forms and levels of education and training, such as:

1) To eliminate illiteracy among women;

2) To provide adequate formal education, including training in occupational skills which can be used
both in self-employment and wage employment;

3) To provide vocational training in all fields, especially those areas which traditionally do not employ women;

4) To provide training and retraining to ensure upgrading of skills, including technical and managerial skills, to facilitate women's adaptation to changed technical and technological modernized methods of production.

5) To provide appropriate vocational and career guidance so as to direct women towards productive and permanent industrial employment.

In order to ensure that the activities for the advancement of women are closely linked with regional, national and community needs and objectives, it is relevant that the training programmes for the advancement of women be implemented through applying the criteria of training in situ in close cooperation with regional institutions, national and local networks of institutions and professionals. By working through networking with existing regional, national and local research and training institutions, resources can be most effectively and efficiently utilized with responsibilities decentralized and shared. Working through local organizations, whether formal or informal, development institutes, academic
institutions or individuals familiar with and sensitive to local conditions, can provide the necessary perspective to design appropriate strategies for effective training.

Correspondingly, direct efforts should be geared to the massive training of women in developing countries through an increased use of non-conventional types of training, such as the multi-media training packages. Their main advantage is in their flexibility to adjust to locally available human as well as cultural and economic resources. The packages are not uniform but can be adapted to the specific circumstances of each local community or target groups. In other words, it is possible to adjust the modules to fit different training tasks, which is not the case with ready-made radio or television programmes. A part of the flexibility of the multi-media training packages lies in the fact that as opposed to radio or TV, they are not bound to a specific broadcasting slot, but can be used at the discretion of local trainers and in time slots suitable for the "target audience".

The multi-media packages are aimed for parallel activity, meaning training decision-makers, development planners, trainers and women simultaneously. The national trainers can use these training materials to train the local population and in that manner achieve a "bottom up" approach. Going one step further, these packages enable more self-reliance on instructional and audio-visual
material than on any other educational means. As the reproduction cost is low and most of the material can be "home-made", this modular methodology will enable trainers to fully adjust modules to the existing local needs. We, as outsiders, cannot possibly know all the problems different countries are facing at local levels. We are aware of the general problems, but the specific ones are in the hands of the national trainers. As well, the national trainers would not face the socio-cultural barriers from the trainees. Obviously, the choice of adequate national trainers is one of the most crucial elements in the training process. Certainly, modifications will be necessary but to my knowledge this training approach has more advantages than any other educational/training means. The modular methodology, use of multi-media, use of sound-slide packages, flexibility in time and space use, cheap technology and ability in self-reliance makes these training packages a more powerful tool than educational radio or TV, or posters or conventional teaching. They will also have to be evaluated and readapted, but I see in them a potential innovative training methodology that could refreshen the existing situation and enable women to be trained accordingly.

Despite all forms of training, we have to keep in mind that the magnitude of the task of training women at different levels and of different cultural and educational
backgrounds cannot be prescribed in one particular method or approach. The general strategies of the training programmes should promote: a) the utilization of research findings as the basis for training programmes; b) encouragement of local women to participate and have an input in the design of the appropriate training programmes; c) maximum utilization of existing training institutional capabilities; d) training in situ; e) training the trainers to become sensitized to the special training and other needs of women, and training trainers to respond to the shortage of trainers and provide role models for other women (multiplier factor); f) continuous review and development of training methods and the exchange of information and experiences to develop more flexible and adaptable modules.

Today, just a decade short of the year 2000, there is much more education and training. Of course, literacy is crucial, but so is the mastering of computers and of the telecommunications technology, the maintaining of the water supply and sanitation systems, the knowledge and practical use of new and renewable sources of energy, and the command of all kinds of technical skills.

On a more subtle level, formal and informal education generally reinforce restrictive stereotypes. Women, whose education has been thwarted by gender discrimination, are ill-prepared to pursue careers leading to executive
positions, or to assume roles where they stand as good a chance as men of influencing policy. It is not surprising that policies, in both the government and private sectors, are largely made by men, hence insufficiently representative of those vital issues and concerns which require a woman's perspective to be properly addressed. That is one reason why senior officials and planners also need training, because to do things differently you first have to see differently.

Worldwide awareness is growing that women are too rich a potential to be left untapped. It is a question of equity as much as one of efficiency. Unless women's contribution is assured (and properly accounted for), development, if it occurs at all, is bound to be lopsided, with its benefits unevenly distributed throughout the population.

To increase this awareness, change attitudes towards women and ensure their full participation in development, requires a sustained process of information, education and communication. Training of both women and men, particularly those in leadership or executive positions, is part of the process. It involves parallel activities. One is to prepare women to assume sectors. The other is to ensure that planners and administrators (usually male) acquire the necessary sensitivity and information to afford women these opportunities.
Regardless of the audience, the goal of such training is to enable women to grow and develop, to fully use their potential and to gain greater control over the direction and quality of their lives. For women to take such a major leap forward will require the support of the upper echelons of the national hierarchy. Hence, sensitization, awareness-building and attitude-change among executive level managers and administrators are important components. The role of the trainer and/or facilitator is to provide appropriate situations and simulations that will modify the audience's awareness, attitude, perception and behaviour - a prelude to social change.

II.3. New Policy Trends

The main objective of the incorporation of issues of relevance to women into development planning and programming is to make additional efforts in order that national development plans and technical cooperation projects' public as well as private investment become more responsive to women's participation and requirements.

Women oriented planning and programming at the present stage raises a number of problems which could be characterized as a search for a change and which should encompass: (i) long-term concepts and strategies of economic development, i.e. issues of policy design,
(ii) innovative methodological approaches to planning and programming techniques; (iii) research and data collection, and (iv) adequate institutional framework.

The present planning and programming techniques place women - and not quite often - within the social policy measures for which there are never sufficient resources - instead of basing the economic activities on their actual work potential. The planner should be made aware that there is an urgent need to assist the grass-roots level through appropriate participatory planning and programming techniques.

In this respect, a prominent place should be given to the incorporation of women's issues in the policy of the individual and collective self-reliance of the developing countries which implies the development and maximum use of human resources based on the experiences of the developing countries.

How to incorporate women and their active participation in particular sectors of development is another problem to be explored. Policy-makers seldom understand clearly how women's needs and participation relate to agriculture, industry, energy, transport, science and technology, environment, etc. It is all well elaborated in the so-called women's studies or during women's meetings and conferences, but many efforts are needed to bring this knowledge to the attention of those responsible for the
decision-making development.

Adequate linkages between the various levels of policy-making should be established in order to secure the interaction of international, national and subnational levels of decision-making. In other words, the planning methodologies should substitute the so-called "trickle down" (top-down) with the "trickle up" (bottom-up) approaches according to the particular situation in each developing country.

At the macro level there is a need to collect and compare data on existing policies, national, regional and sectoral plans and legislation and to analyze the extent of their impact on the population in general and women in particular. One of the critical and crucial factors is the political will to make explicit the breakdown of social objectives and the implication by group of economic agents, particularly by sex and group, to account equally, in the same desegregated manner, for the socio-economic implications on the above groups for the implementation of development policies, plans and programmes.

At the micro level the most disadvantaged rural and urban areas should be provided with ways and means of increasing their access to the infrastructure, by providing them with the basic services, in order to alleviate the heavy workload necessitated by the demands of their families, including both children and the elderly.
Efforts to incorporate women in the mainstream of development policies, plans and programmes should not preclude transitional, technical, material and financial resources for women, particularly for local rural and urban women, so that they have access to nutrition and health services, including maternal/child care, education, training, employment and financial resources. Access to these resources will facilitate the ultimate goal of complete and equal incorporation of women into the mainstream of the development process.

Systematic monitoring and evaluation of plans, programmes and projects at both the micro and macro level should take place in a manner that would allow for the evaluation of the success in implementing the goals of achieving equal participation, opportunity and benefits to women along with the overall evaluation of the plan. Appendix IV provides one form of guidelines on how to incorporate women at the national and local level.

Obviously, the opportunities for women to participate in the development process vary in scope and degree according to the country and region. The extent of participation as well as of specific activities will continue to be determined in large measure by such factors as the existing social, political and economic status of women, their educational levels, prevailing cultural and religious mores, inter alia, all of which are interrelated.
However, we have to understand that the incorporation of women is not one problem added to the already numerous problems confronting planners in the region, one which, therefore, requires specific policies and actions. It is a new "reading" of the set of economic and social policies that are a component of the overall development process. It should be a renewed focus which will enrich those already in progress, making possible more adequate diagnoses and, therefore, more effective policy designs.

III Conclusion

Development and communication, although interlinked, most often operate independently of one another. It is not so clear whether development leads to communication or communication leads to development, or whether they somehow co-occur. Generally speaking, the growth of the communication technology has not produced the relevant effects when applied to developmental purposes in the developing countries. Despite all technological possibilities, there are still a lot of difficulties when it comes to concrete uses of communication for development. For example, there is a technological gap. Namely, most developing countries do not yet have an adequate enough communication infrastructure, such as telephone systems, that would allow easy access to information. There is also
the economic reality: to put it simply, information processing and transmission is still quite costly, due to equipment costs, leasing of phone lines and satellites, costs of subscriptions to data bases, royalties, fees, etc. Furthermore, there are various, often conflicting regulatory policies imposed by governments and information industries which have to be coordinated: copyright laws, transborder data flow policies, privacy codes, etc. Notwithstanding those and similar aspects of the problem today, the emphasis seems to be shifting towards the uses of communication for participatory development at the local community or grass-roots level.

Yet, clearly, the benefits of communications will be limited unless there is at least some complementary infrastructure present in the society to enable communication strategies to be effective.

In this respect, communication processes cannot be seen in isolation from the societal arrangements under which they have developed and from the restrictions through which they exert their influence. This socio-economic organization provides the context within which communication technologies operate and it may act as a structural constraint to their effectiveness. The socio-economic context often defines the modus operandi of communication technologies such as video, lower power TV, super-film, etc., and does not necessarily result in
"soft" decentralized communications. Decentralized communications can exist only within a network of a decentralized social organization. Thus, communication can be effective only if it is part of an integrated approach to the development process which would offer better economic and social conditions of life to the entire population, men and women alike.

Hence, if we view development as an all-encompassing economic, social, cultural and political process which strives towards a constant improvement in the well-being of the entire population and of each individual on the basis of his/her active, free and relevant participation in development and in the equitable distribution of the benefits resulting from such a process, then everybody should have a right to development and a right to communicate.

Communication technologies may also facilitate social change advocated by "women in development" approaches. It could be done by increasing the amount and speed of social interactions and by increasing mobility and contact between different social groups as well as generally improving the quality of life.

The potential of the technologies is enormous. The range of their applications and their multi-faceted uses are stunning. Their capacity to handle an ever increasing amount of information even more rapidly is impressive. If that is all technologically possible, how do we go about
our own capability of dealing with all that information? How are we going to cope with all that information if it is exponentially increased in the next decade? Since all areas of our planet are increasingly interdependent, how are we going to share all that information and narrow the gap between the developed and developing countries?

That is a question not only of a technological but also of a moral nature. Developing countries should focus their attention to the development of participatory communication for development programmes and projects based on the policy of individual and collective self-reliance. At this stage, this is quite relevant since most communication for development projects, although participatory in intent, have been initiated by outsiders to the local community with outside funding. Grass-roots participatory programmes should be initiated in many development sectors, such as agriculture, nutrition, health, sanitation, income generation, etc., with the full involvement of the national and local software production capacity and distribution mechanism. I see that women in development issues could be an important part of such an approach which would help the women's own advancement and the advancement of their societies. Finally, education and training can be effective only if they are part of an integrated approach to the communications and development process.

As the training programme expands and diversifies,
future directions will focus on harnessing the potential of technological mass media for women in development purposes. These innovative multi-media packages are the challenge of breaking away from the narrow, disciplinary approach to education/training which can so easily ignore the political, social and cultural complexities of development problems. The training solution proposed is through sensitization and consciousness-raising within the power structure, coupled with image-building, leadership, management and organizational skills training for women, to change the balance between the groups and result in a more equitable deployment of human resources.
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12) Ibid. p. 11-12.

13) Ibid. p. 16.


16) Ibid., p. 23.

17) Ibid., p. 23.


19) Ibid., p. 41.


21) Ibid. p. 10.


27) Ibid. p. 70.


29) Ibid. p. 11.


33) Ibid. p. 17.

34) Ibid. p. 17.

35) Ibid. p. 17.


37) Ibid. p. 82.


40) Ibid. p. 13.

42) Ibid. p. 13.

43) Ibid. p. 13.

44) Ibid. p. 13.


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49) Ibid. p. 22.


54) Ibid. p. 39.

56) Ibid. p. 164.


60) Ibid. p. 21.


Bibliography


APPENDIX I

GLOBAL STRUCTURE OF A MODULE (Figure 1)
ENTRY SYSTEM OF A MODULE (Figure 2)

- SPECIFICATIONS
- INFORMATION GIVEN ABOUT OBJECTIVES
  (+)  
  (-)  

- FOLLOWING MODULE
- PRE-TEST
  (+)  
  (-)  

- ENTRY TEST
  (+)  
  (-)  

- PREVIOUS MODULE
- REMEDIAL WORK FOR ENTRY

- PARTS OF THE MODULE NOT MASTERED OR OTHER REMEDIAL ACTIVITIES
- BODY OF A MODULE

+=Pass  ±=Partial Failure  -=Complete Failure
BODY OF THE MODULE (Figure 3)

Advice of test to determine choice between different possible ways

Sub-module 1

Teaching

Organization of situations, Motivation, Getting students involved.

Means, Way of using them, Delicate points.

Further applications, Exploitation.

Learning

Preview and introduction

Learning situations

Review and summary

Remedial Activities + Intermedial test
OUTPUT SYSTEM (Figure 4)

General Summary and revision

Post-test (terminal test)

Remedial courses

Advice about choice of next module

Beginning of Module

Next Module
APPENDIX II

I. THE STEPS IN A TRAINING ACTIVITY

The "steps in a training activity" mean the various operations that have to be considered in order to carry out a training project in their chronological order.

Generally, a training activity is made up of four stages:

1. Definition determining the aims (purpose), the goals (the training profiles of each individual) and the objectives (the expected results of the training defined in terms of observable behavior patterns).

2. Preparation the study of the population, an analysis of the training contents, the choice of methods and materials.

3. Implementation actually training the learners who are offered various training and learning situations.

4. Evaluation of the training activity at different stages.

In order to be trained, a person has to follow a training system for a predetermined length of time while making use of human and material resources available. In this way the individual, who at the outset did not possess the skills for a project/programme or post (untrained person), may acquire these skills (trained person).
I.1. The Systematic Organization of Training

A training system is made up of elements which interact to produce a given predetermined result. In order to carry out a training project, a plan-curriculum has to be drawn.

A curriculum is a training plan that includes training aims and objectives and a specification of the means to be applied together with a scheme for evaluating the programme.

<table>
<thead>
<tr>
<th>A CURRICULUM</th>
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<tbody>
<tr>
<td>TRAINING ACTION</td>
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<tr>
<td>- DEFINITION OF AIMS AND OBJECTIVES</td>
</tr>
<tr>
<td>- SPECIFICATION OF TEACHING AND LEARNING ACTIVITIES</td>
</tr>
<tr>
<td>- LIST OF THE KNOWLEDGE, SKILLS, TECHNIQUES AND BEHAVIOURAL PATTERNS TO BE ACQUIRED BY TRAINEES BY THE END OF TRAINING</td>
</tr>
<tr>
<td>- PRECISE STANDARDS FOR EVALUATING THE TRAINING PROGRAMME AND THE PERSON BEING TRAINED</td>
</tr>
</tbody>
</table>

II. TRAINING SYSTEM

As with all systems, a training system includes:

- an input (in this case, the untrained or partially trained person)
- a process that enables the student to acquire knowledge, skills, new behavioural patterns and techniques
- an output (the trained person)
- feedback
Input or untrained persons

These are individuals who are to be trained by the training system. As a result of their training, they will acquire knowledge, skills, techniques and attitudes that can be seen by their adoption of new, directly observable behavioural patterns.

The Training process

The means used for training, including trainers, premises, didactic and financial resources, methods, etc.

Output or trained persons

These are trained individuals who have acquired, by means of the training process, the behavioural patterns desired by the training officers at the start of the programme.

II.1. Adjusting the Training Programme

Adjustment plays an important part in a training system because means training can be modified during the course and adapted to individual requirements. This adjustment is carried out by means of a test which obtains data at input (Entrance of Pre-requisites, Pre-Test), during training (intermediary tests) and at output (Post-test).
The experience gained when training a particular group can then be taken into consideration with a view to improving the system for future training.

II.2. The Four Steps in a Training Activity

Training is often provided for individuals who vary (according to age, their environment, gender, educational level and culture).

It is necessary to take account of the individual differences which exist in relation to the training itself and to the trainees.

These differences show themselves at four stages: at the point of entry (pre-requisites, motivation, etc.). During the training (consciousness, spirit of initiative, speed of learning, mistakes made, etc.) and after the training (degree of retention, degree of integration, etc.).

1. Training may have to achieve different aims (preparing women to use water pumps).

2. Training may have to achieve specific goals (training an illiterate woman, an instructor).

3. Training must have objectives, i.e. determining the expected result of the training activity in such a way that we can check whether this result has been achieved or not. An objectives defines a directly observable behaviour pattern.

4. Training must have operational objectives, i.e. defining in detail the behavioural patterns which trainees should have acquired upon completion of their training by determining certain conditions.
An operational objective, therefore, defines an activity or directly observable behavioural patterns which concerns an object and has a product as its end result.

These are all the factors which are essential in a training activity and from here we are in a position to define a training activity, that is:

- studying training needs
- determining the target population
- stating the aims, goals and objectives

For example, it might be a question of training a mixed group of adults, in an industrial environment and from a Muslim cultural background, to become teachers whose task is to teach basic rules of hygiene to illiterate adults using nonprojected visual aids.

II.3. Definition of a Training Activity

DEFINING THE TRAINING

ACTIVITY

Aims

NEEDS

Goals

POPULATION

Objectives

This is the first step for any training activity and is made up of five stages:

1. Studying the needs of the individuals who are to be trained, whether a general or a classroom type training is required, or the needs of the particular project (industrial type training as against the transfer of technology).
2. Determining the characteristics of the target population, but without entering into too much detail - this will be done in the preparation phase.

3. Stating the aims - the intentions, the values to be respected when carrying out training.

4. Stating the goals - individual profiles and the training programmes.

5. Defining the objectives - expressing the expected training results in terms of directly observable behavioural patterns.

II.4. Preparation of a Training Activity

The second step is the preparation of the training activity to be undertaken.

This step comprises a first stage - recording and studying the characteristics of the individuals to be trained so as to achieve the objectives set (this is the study of population).

These characteristics may be:

- psychological (maturity, discernment...)
- pedagogical (acquired knowledge, school background - if any)
- cultural (values, way of thinking...)
- sociological (family background, educational expectations...)
- linguistic (language, linguistic structures...)
- physiological (age, nutrition, any physical handicaps...
The above characteristics determine the limitation or rather the catalytic elements that should be kept in mind.

**PREPARATION**

STUDY OF PRE-REQUISITES
THE POPULATION METHODS
ANALYSIS OF MATERIALS
TRAINING CONTENT

The second stage entails an analysis of the training context. This stage consists of determining the subjects to be taught in order to achieve the objective, the type of teaching (the methods used) and the necessary pre-requisites for the training.

II.5. Implementation of a Training Activity

The third step consists of carrying out the training activity organizing the teaching-learning situations.

**IMPLEMENTATION**

**LEARNING SITUATIONS**

This step - the actual training - consists of placing the learners in situations where they can acquire new knowledge, educational skills and attitudes, or else improve their existing skills in various fields.
This progress, or newly acquired knowledge, is reflected in changes in individuals at the level of observable behaviour.

There are numerous learning situations. For illiterate populations it would include visual aids, or training in situ if required for technical skills. It can also include written exercises; questionnaires, tests, simulation exercises, case studies, individual or group work, etc.

II.6. Evaluation of a Training Activity

Finally, the fourth step consists of EVALUATING the training activity so as to allow for feedback and remedial action.

Evaluation is envisaged at every stage of the training activity.

```
DEFINITION
(Aims, Goals, Objectives)

PREPARATION (pre-requisites, Contents, Methods, Means)

IMPLEMENTATION

EVALUATION

FEEDBACK
```
APPENDIX III
GENERAL GUIDELINES FOR A MODULAR TRAINING SEMINAR

General Guidelines for Conducting the Seminar

Planning
Definition of seminar objectives and outlines
Administrative matters
Selection of venue

Organizing
Orientation of internal lectures
Orientation of external lectures
Organization of facilities
Organization of detailed timetable

Leading
Lecturing/Presentation
Organizing and managing group work
Leading plenary sessions
Opening and closing of the seminar
Preparation of final report

Monitoring
Setting up evaluation criteria for the seminar
Establishment of any follow-up activities to enhance the impact of the seminar
I. ORGANIZING

The officer in charge of seminar management will perform the following tasks:

1.1. Orientation of internal lecturers which includes:
   1.1.1. Guidance on the seminar structure
   1.1.2. Guidance on the subject matter
   1.1.3. Assisting the methodological approach of the seminar during:
           - presentation
           - group work
           - presentation of group work reports
           - general discussion

Together with the presentation, training materials and aids will be an essential component in each session.

The orientation of the group work and general discussion sessions should focus on the preparation of action-oriented recommendations for the more effective participation of women in UN projects at all levels.

1.2. Orientation of external lectures

The expert lecturer will be assisted in preparing his/her presentation following the given outline. The presentation may require additional training material and aids. The expert lecturer will orient discussion towards elaboration of key issues and to enhance production of action-oriented recommendations. If possible, additional training material should
include case studies, pamphlets, etc...illustrating local conditions.

II. GROUP WORK IMPLEMENTATION

2.1. Officer in charge (facilitator) and lecturer present key issues for discussion.

2.2. Officer in charge and lecturer organize 4 working groups for each subject matter. Each working group will select a rapporteur for each subject matter.

2.3. Each group will meet separately and after a brainstorming session and discussion will formulate recommendations related to the key issues presented during the lecture.

2.4. Each group rapporteur will present in appropriate form their recommendations (using flip charts, transparencies) and the rapporteur will write up the group work report (one page). The report will be presented by the officer in charge who will make sure that every participant has received a copy of the report before presentation.

2.5. Each report will be discussed in plenary session and revised, if needed. The final version will be presented by the end of the seminar. The final report will be an action-oriented report providing a
basis for follow-up of the seminar in order to increase the number and efficiency of projects and programmes for the participation of women.
# Pedagogical Schemes of Sessions

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Theory</th>
<th>Expert(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summing Up and Analysis</td>
<td>3 or 4 working groups</td>
<td>Officer in Charge and</td>
</tr>
<tr>
<td>of Key Issues</td>
<td></td>
<td>Expert</td>
</tr>
<tr>
<td>Organization of Working</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groups / Election of</td>
<td></td>
<td></td>
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<tr>
<td>Rapporteur</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation of Key</td>
<td>Different for each</td>
<td>Officer in Charge and</td>
</tr>
<tr>
<td>Issues for Group Work</td>
<td>subject</td>
<td>Expert</td>
</tr>
<tr>
<td>Group Work</td>
<td>(Start with brainstorming session)</td>
<td>Participants divided in groups</td>
</tr>
<tr>
<td>Presentation of the Results of Working Groups</td>
<td>Presented on flip-charts. Copy to be made on white paper for reproduction.</td>
<td>Rapporteurs All Group Participants</td>
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</tbody>
</table>
### APPENDIX IV

Techniques for Incorporating Women's Concerns at National and Local Levels

<table>
<thead>
<tr>
<th>ISSUES</th>
<th>WHY (REASONS)</th>
<th>REMEDIES/TECHNIQUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. National Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Lack of favourable attitude towards women.</td>
<td>1. Social mores.</td>
<td>1. Increase publicity of women's concern through mass media, education, case studies, organized group action.</td>
</tr>
<tr>
<td>2. Absence of women at policy-making level.</td>
<td>2. Lack of education and opportunities.</td>
<td>2. Strengthen the capability of women. In initial stages establish a quota system at all levels. Simultaneously there should be also open competition.</td>
</tr>
<tr>
<td>3. There is a lack of adequate data and information on women participation in agricultural and para-agricultural activities.</td>
<td>3. Lack of proper system to establish a Data Bank (manual or computerized).</td>
<td>3. a) Establish a systematic mechanism for collecting, storing, retrieval and dissemination of reliable information and data regarding women.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Conduct participatory research, i.e., where the researcher lives in the community and acquires reliable in-depth data.</td>
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<tr>
<td>4. Inadequate funds for women's projects.</td>
<td>4. Lack of realizing the importance of women's contribution and allocation of sufficient funds for women's programmes, especially projects included under the national priority programmes for agriculture and rural development.</td>
<td>Proportionate allocation of funds be made in National Development Plan giving priority for Women's Programmes and projects in areas such as</td>
</tr>
</tbody>
</table>
### APPENDIX IV

Techniques for Incorporating Women's Concerns at National and Local Levels

<table>
<thead>
<tr>
<th>ISSUES</th>
<th>WHY (REASONS)</th>
<th>REMEDIES/TECHNIQUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. In some countries there is lack of identifying qualified women in the process of planning and decision making.</td>
<td>5. Lack of awareness, education, training and opportunity in specialized fields.</td>
<td>education, training, personnel development, administrative support services, etc. Under the national priority programmes, funds should be allocated for designing projects focused on women and by ensuring a proportionate percentage of women beneficiaries in such programmes.</td>
</tr>
<tr>
<td>6. Lack of awareness and recognition among both women and men regarding the capability and competence of women. Unfavourable societal attitudes. Persistence of stereotypes. Women's low self-esteem and image.</td>
<td>6. Traditional hierarchy, perceptions of role models and preconceived attitudes of both women and men. Negative portrayal by national mass media.</td>
<td>a) Breakthrough of traditional hierarchical system through mass media and through watch dog mechanism of group actions. These advocacy responsibilities should be undertaken by government, women's units and NGOs.</td>
</tr>
<tr>
<td>ISSUES</td>
<td>WHY (REASONS)</td>
<td>REMEDIES/TECHNIQUES</td>
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<td></td>
<td></td>
<td>b) Involve mass media personnel in organized group activity on women in development. Establish positive collaboration and cooperation with media organizations and initiate a dialogue on women's issues, concerns and perspectives.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c) Gradually formulate legislation or controls or regulations to eliminate any sort of discrimination in mass media.</td>
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<td></td>
<td></td>
<td>d) Use mass media to educate society on women's discrimination and exploitation.</td>
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<td></td>
<td></td>
<td>e) Establish a mechanism for sharing research findings and other documentation on women's issues with the personnel of the mass media and institutions.</td>
</tr>
</tbody>
</table>
### APPENDIX IV
Techniques for Incorporating Women's Concerns at National and Local Levels

<table>
<thead>
<tr>
<th>ISSUES</th>
<th>WHY (REASONS)</th>
<th>REMEDIES/TECHNIQUES</th>
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</thead>
<tbody>
<tr>
<td>B. Operational: NIO/Naional/Village/Local Level</td>
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<td></td>
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1. Inadequate database to identify viable projects for women for increasing production in agriculture.  
2. Inadequate identification of projects for women.  

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<tbody>
<tr>
<td>1. Conventional and official statistics and documentation do not reflect the production contribution of women.</td>
<td>1. Census and survey enumeration should include women's role.</td>
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<td>2. a) Financial allocation does not take into account women's contribution in the programme activities.</td>
<td>2. a) To identify particularly women members and active participants of grass roots level women's organizations and other types of women's organizations.</td>
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<td>b) Lack of knowledge within the management system to formulate projects.</td>
<td>b) To provide appropriate training for women on project formulation and to coordinate/ control and evaluate women's projects.</td>
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<td>c) Lack of grass roots level organization for mobilization of women.</td>
<td>c) To acquaint women with easy technology to save their time to spend on other activities.</td>
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<td>d) Physical drudgery in the household and farming sector adds to women's time constraints.</td>
<td>d) Training women for project identification and management.</td>
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<td>e) Lack of confidence and technical know-how among women at all levels.</td>
<td>e) Development of curriculum.</td>
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<td>f) Supply of training material and training aids.</td>
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<td>ISSUES</td>
<td>WHY (REASONS)</td>
<td>REMEDIES/TECHNIQUES</td>
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<td>3. Insufficient involvement of women in decision making.</td>
<td>3. a) Lack of social acceptance.</td>
<td>3. a) Adequate number of women should be included in the local level planning because these women should then be trained and encouraged for effective participation.</td>
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<td></td>
<td>b) Lack of access to economic resources, training and job opportunities.</td>
<td>b) To give effective representation to women in village level cooperatives, associations and groups.</td>
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<td>c) Lack of women's leadership at the grass roots level.</td>
<td>c) Training women in management.</td>
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<td>d) Leadership development training.</td>
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<td>4. Inadequate incorporation of women's participation in Planning of Projects.</td>
<td>4. Women not incorporated and integrated in the planning process because of the centralized planning system.</td>
<td>4. More emphasis should be placed on local level planning and women's participation to be ensured.</td>
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<td>5. Implementation is slow of projects related to agriculture and animal husbandry.</td>
<td>5. a) Attitudinal constraints.</td>
<td>5. a) Access to land ownership occupancy and tenancy of land.</td>
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<td></td>
<td>b) Lack of trained personnel.</td>
<td>b) Training women in the technology of farming systems.</td>
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<td>c) Lack of resources:</td>
<td>c) Employment of more women extension workers in agriculture, livestock, poultry and other para-agricultural activities.</td>
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<td></td>
<td>- Women who don't have land</td>
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<td></td>
<td>- Even women who have land cannot get access to it because of traditional taboos and legal system.</td>
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<td>6. Inadequate Monitoring and Evaluation of Women's Projects</td>
<td>6. Monitoring and evaluation are very much linked with the stages of identification, decision making and planning, where women are not involved or consulted.</td>
<td>d) Increase the quota and provide incentives for women to join training and education institutions of agriculture, veterinary sciences and extension. 6. More women should be associated in the overall process of project development and particularly in the feedback system.</td>
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