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ABSTRACT

For developing nations, education can equalize opportunities, especially for the deprived and disadvantaged, and therefore must be delivered with efficiency and quality. Conventional ways of spreading education are proving to be inadequate in the face of rapidly expanding populations. There is a marked need to supplement formal schooling with nonformal education, distance education, and out-of-school education. Education for the complete person should be the goal. New systems of education must be developed to promote self-reliance, encourage community participation, and strengthen positive humanism for the goals of improving the quality of life and developing peace. A silent revolution in education is taking place all over the world as distance education emerges as an alternative system. Perhaps the most important group to target are illiterates because their numbers are increasing and because literacy can be linked to vocational education. Through the use of new communications technology, access to good educational programs on most subjects can be greatly extended to large audiences in rural areas. Broadcasting can play a special role in alleviating high unemployment and underemployment, low economic performance, erosion of national cultures and deterioration of national values, the search for peace, the deprivation of opportunities for women, and continuing neglect of the rural disadvantaged. To implement a comprehensive approach to developing distance education in the Philippines, the University of Life can be converted to a National Open University of the Philippines, acting as a national resource center for distance and nonformal education and a center for educational development and broadcasting. Networks of regional campuses can also be set up.

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RESOURCE PAPER

**EDUCATIONAL BROADCASTING AND DISTANCE EDUCATION
AS A STRATEGY FOR REVITALIZING EDUCATION OF THE DISADVANTAGED**

DR. MOTILAL SHARMA

A SYMPOSIUM ON

**EDUCATIONAL BROADCASTING FOR MORE EFFECTIVE
DISTANCE EDUCATION IN THE 1990'S: STRATEGIES AND APPROACHES**

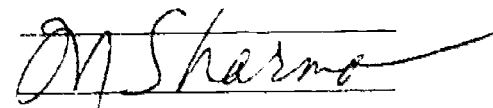
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EDUCATIONAL BROADCASTING AND DISTANCE EDUCATION AS A STRATEGY FOR REVITALIZING EDUCATION ^{1/} OF THE DISADVANTAGED ^{2/}

Dr. Motilal Sharma
Education Specialist
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"We talk a good deal about economic development - about expanding the number of goods and services and capacity to produce them. But the goods are needed to serve man; services are required to make the lives of men more useful as well as more fruitful. Political, social and economic organization is needed to enlarge the freedom and dignity of man. Always, we come back to Man - to Liberated Man - as the purpose of activity, the purpose of development."

Julius Nyerere ^{3/}

1. We are only 10 years away from the 21st century. Yet it is most painful to realize that the age-old problems of poverty, ignorance, malnutrition and disease continue to plague millions of disadvantaged people in the rural communities of the developing countries. These problems persist even as, within the past three decades, mankind has made tremendous advances in science, technology and mass media. We are living in an environment full of the most rapid, complex and volatile, oftentimes violent, fluctuations in ideas, ideologies, power-struggles, and socioeconomic, political, cultural, and technological movements sweeping across the world, in both North and South. Often, the poor and the ignorant, are trapped, unaware of objectives of the same resulting in the sacrifice of thousands of lives with no cause served and thus disturbing peace and tranquility.

2. Food, clothing, shelter, medicare and education are considered as basic needs. In some cases, education is even more pervasive than the other basic needs. It is the foundation, the bedrock, the root cause of man's state of development or underdevelopment. It is ignorance, more than any other state or condition, that breeds poverty. Poverty is both a result and a further cause of ignorance. For developing nations, education can equalize opportunities especially for

^{1/} The term revitalized education system used in this paper refers to a system that provides improved educational service in terms of quality, and access, regardless of age, sex, socioeconomic status, and the religion of the learner.

^{2/} Disadvantaged: An individual or a group of individuals (to include communities or nations) that is deprived and underprivileged in cultural, economic and social matters and characterized by poverty is described as disadvantaged. In this paper, the phrase "disadvantaged" is used instead of "poor" because the author considers that the word "poor" is derogatory in spirit and has a demoralizing effect on the disadvantaged, thus, hampering the objectives of development.

^{3/} Nyerere, Julius K., Ujamaa: Essays on Socialism, Oxford University Press; Dar-es-Salaam, 1968.

the deprived and disadvantaged, and therefore must be delivered with efficiency and quality. The latter involves costs and resources of a magnitude that are not within the means of the developing countries. Yet their people must be nurtured with the proper values, the required knowledge and appropriate skills so that the minimum standards of life, a sense of dignity, and the sustainability of everyday survival can be attained. EDUCATION IS THE NUTRIENT THAT SERVES AS CATALYST FOR ALL THE NECESSARY INPUTS TOWARDS THE TOTAL DEVELOPMENT OF MAN.

3. Today, ignorance, illiteracy, or the lack of education, are regarded as among the biggest obstacles to sustained growth and technological progress. Conventional means of spreading education are proving to be inadequate in the face of rapidly increasing populations. Furthermore, the quality of schooling remains low in many countries, particularly in remote rural areas. There is a marked need to supplement formal schooling with non-formal education, distance education and out-of-school education for the people who have either missed schooling or have simply dropped out, or want to continue their studies while on-the-job.

I. EDUCATION FOR THE COMPLETE MAN

4. **Education for All** is a positive and good idea. But this may not be sufficient. Given the circumstances of poverty, ignorance and scarcity in the developing countries, we should strive for the Education of the Complete Man. What do we seek for in the complete human being?

5. This is a critical issue because our concern is for the vast majority of the disadvantaged people who comprise the bulk of people inhabiting this planet. For example, the 29 developing member-countries of the Asian Development Bank have a total population of 2.5 billion people, over half of the world's population. Most of their educational systems are legacies of colonial pasts dating back to the 17th century. These countries comprise the region of the world where absolute poverty is most widespread. According to recent estimates, around 600 million Asians live in absolute poverty - which is equal to the combined populations of Western Europe, Australia, Canada, New Zealand and the United States. The challenges to development are indeed most formidable and complex.

6. In this context, traditional thinking and ways will have to be improved upon to develop new dynamic systems of education that promote self-reliance, encourage community participation, strengthen positive humanism, with the goal to improve quality of life and development of peace. In the Third World environment, therefore, the purpose of education is to ensure the educated man's employability, promote trusteeship and enhance development to his ^{1/} full potential as a positive human being.

^{1/} The term "his" is used for writing purposes only, and not to discriminate gender values.

7. By employability is meant the provision of psycho-motor skills, such as livelihood and productivity tools and techniques, to enable the educand to sustain his economic life in a working environment. In a world dominated by disadvantaged populations, it will be futile to advocate academic quality or the good life if these people have nothing to eat, to wear, to sleep in, or a roof to live under. Relevance in a Third World curriculum, therefore, inevitably means employability.

8. By trusteeship is meant a provision of cognitive skills to enable the educand to participate actively in decision-making that affects his life, especially those which directly impinge on the assets of the nation and national philosophy (socio-politico-economic). An educated man, in this sense, is a trustee of the nation, and it is his obligation to be responsible for the prudent, practical and intelligent use of the nation's natural resources and protection of its assets and environment while contributing to its governance.

9. Finally, development of complete man includes the development of affective domain, to enable the educand to habitualize positive values and attitudes in which his priorities and concerns are not limited to himself, but extend outward to the family, community, country and the international brotherhood. Without this component, the education process will only produce handicapped children - a generation of crippled beings with motor skills and rudiments of brain-power but without any compassion of the heart.

10. Why must one keep repeating this triad of psycho-motor, cognitive and affective domain in the betterment of the human being? Because a careful examination of curricula reforms, in the name of modernization, that have been tried or implemented in developing communities/nations in the past two decades, will reveal a serious fault: namely, the significant neglect of substantial inputs for development of the affective domain of the individual - that sphere of education which nurtures values, attitudes, norms and standards which distinguish the compassion and humanity of man from all other creatures of the world. Repeatedly, these curricula changes have stressed psychomotor skills and cognitive instruments - breeding vocational-technical manpower with high psychomotor skills but with inadequate foundation in those values which ensure human feelings of love, compassion and kindness -- the values that preserve, nurture and build upon the traditions and cultural achievements of society. This lack of quality of heart does not give us complete satisfaction although we may experience great material progress. Material development is necessary and beneficial for mankind, but it provides us mainly physical comfort, not mental peace through which genuine world peace can be achieved. The so-called curricula modernizations are built upon psycho-motor and cognitive foundations, and are virtually vulnerable in the affective domain, which might result with serious problems affecting the world peace development program.

11. Except, in the Philippines where the EDSA People's Revolution of 1986, which brought in its wake a remarkable shift in the educational curricula. I refer to the deliberate and purposeful stress on Values Education. That is the component that completes the triangle of

comprehensive and worthwhile education. What if we have a skilled entrepreneur or businessman or a scientific genius or brilliant strategist - they would not be complete if they are poor in spirit, in attitude, and in values (including human feelings of love, compassion and kindness) that mark the greatness of the Filipino people, as reflected in their historical traditions, the spirituality, and the power of EDSA. A persistent improvement in Values Education as a symbol of capturing the EDSA spirit in the education of Filipino children and similar efforts in other countries of the world is what is needed. For value education as well as for upgrading skills and knowledge, we need a continuing system of education. Can distance education provide that? Let us examine the issues.

II. DISTANCE EDUCATION: A DEVELOPING STRATEGY IN EDUCATION

12. There are at present over one billion children and youths under 15 years of age in Asia and the Pacific. Providing educational opportunities to this large number of young people is a major problem facing these countries. The number of illiterates is growing faster than the expansion of literacy; either through primary education or through out-of-school literacy campaigns. In the 1990s, illiteracy remains the major obstacle to development.

13. A silent revolution in education is taking place all over the world. It is the emergence of distance education as an alternative system of education. In recent years, distance education through open universities has been catching up in several countries - developed and developing, socialist and non-socialist. In Asia, a number of countries have started open universities during the last decade. Let me dwell on just one part of the globe today, the countries that comprise South Asia. The combined population of the seven countries (Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka) that constitute South Asia is more than one billion - almost one-fifth of the world's population. The economic realities of trying to provide universal education through conventional systems has forced governments in the region to search for cost-efficient ways to provide fair and equitable access to education. Open Universities are already established in India, Pakistan and Sri Lanka, whereas the governments of Bangladesh and Nepal respectively are actively considering the development of such institutions. In India, more than 20 per cent of its universities have distance education courses in the arts, sciences and technologies, and a number of Open Universities have been opened, of which the latest is the Indira Gandhi National Open University. Bangladesh is seriously considering the establishment of an open university to provide opportunities for young Bangladeshis who seek entry to university places, of which there are over 100,000 every year who cannot be accommodated. In Maldives, a distance education center is being planned for the teaching of English, for teacher-training, health education, population education, and technical-vocational education. Nepal has formed a task force to consider the establishment of a distance education system. In Pakistan, the Allama Iqbal Open University is being strengthened to improve its existing programs. Similarly, the government of Bhutan has

initiated plans to expand their current limited distance education programs.

14. In this region alone, distance education is currently servicing the education and training needs of over 500,000 students in a wide variety of courses at levels ranging from literacy programs to higher degrees, and assisting the poor and those residing in far-flung rural areas to develop functional literacy, livelihood skills, self-reliant enterprises, and information useful to their own personal growth. Distance education is the means for millions of teachers, new and in-service to upgrade themselves; for government employees to achieve higher educational levels; and for millions of farmers, extension workers and rural families to get up-to-date market information, more employment skills and production know-how. Without detracting from the achievements and usefulness of the schooling system, the overriding concern is how to promote self-reliance as a strategy for education thus liberating the learner to achieve the ultimate goal of education for all (which I doubt could be achieved without full use of communication technologies)^{1/} - especially for the deprived. Such liberation will ensure that once equipped with self-learning capabilities, learners will become their own best teachers and will not be dependent upon the provision of a school and a teacher to acquire knowledge. Ignorance is the singular great enemy; liberation of the learner is the ultimate mission; and self-reliance the strategy for education.

15. There is great scope for distance education in Asia and the Pacific, especially as resources for regular formal and non-formal education programs cannot match the growth of the social demand for education. Experience shows that as universal primary education is achieved, pressures for the expansion of secondary schools will build up. A shortage of teachers often leads to unbalanced curricula and poor teaching in many secondary schools in developing countries. There is potential for distance education as: (i) an alternative route to regular secondary programs (out-of-school programs); (ii) as a supplement to regular teaching in subject areas where teachers are not available or are inadequately qualified for the curriculum; and (iii) a mode for professional development of teachers by providing in-service training to teachers. Distance education can also provide pre-service teacher education. This may compensate for the lack of specialist staff and increase the number of trained teachers in a limited timeframe. Distance education can also make a positive contribution to tertiary education by reducing the pressure on governments which find it difficult to increase expensive educational facilities and resources.

16. The distance education strategy could entail not having children come to school, but having the school reach out to children and enter their very huts. This is now possible because of the pervasive influence of broadcast media, particularly radio, which can reach

^{1/} "..... modern technologies can fill the educational gap where financial and human resources are lacking. Communication media can play a crucial role in the pursuit of education for all." World Conference on Education for All, Jomtien, Thailand, 5-9 March 1990.

virtually all corners of the world today. Farmers, in tea plantations in Sri Lanka, in paddy-fields in India and Pakistan, tending to sheep, cows, and goats in the countryside, are now able to listen to radio broadcasts day and night at prices within their reach. The hut, the farm field, the fishing canoe, the village gathering place - can all constitute the new classroom, the new school and can create genuine access to educational opportunities. The use of radio for educational purposes allows students, especially girls, to continue their farm and home chores without disruption, while they assimilate lessons from broadcasts. With the additional provision of distance education support services, including print materials, scheduled tutorials and lectures on-site, group work sessions, etc., students can develop enthusiasm and commitment for learning with the ultimate goal of becoming self-reliant. Such a scenario need not only be a dream, it could be a reality, even today. It is essential that educational policy-makers re-examine their commitment to traditional formal schooling, and consider seriously the efficacy and cost-efficiency of multi-media distance education technologies to realize the goal of education for the deprived.

17. Perhaps the most important target group in distance education are the illiterates. The number of illiterates has increased in developing countries despite increased school enrollments. The conventional approach to adult literacy, which involves the mobilization of vast numbers of paid or 'volunteer' teachers, is inadequate to meet this challenge. In Bangladesh, a mass education program aimed at combating illiteracy on the principle of one literate teaching another illiterate student (each one, teach one) had to be abandoned after 18 months. New methods based on mass media, particularly TV and radio, offer an alternative. Illiterates are often not sufficiently motivated to acquire literacy. One reason for this is the poor quality of many literacy education materials. The electronic media may raise the level of awareness among adults of the advantages of literacy. The use of electronic media can be supplemented by specially-prepared printed materials suited to neo-literates as an integrated system of distance education.

18. Moreover, literacy can also be linked to vocational education. Where skilled craftsman and craft instructors are in short supply or are themselves deficient in some areas of their craft, distance education may yield impressive results, with possible improvement in literacy as well. The Asian Development Bank's Regional Seminar on Distance Education (1986) marks, in my view, a turning point because for the first time, the focus was on a new approach, distance education, and not its justification as a secondary supplement.

19. In the 1990s, distance education, based on the use of modern communications and multi-media materials, is predicted to be the major new movement in human resource development.^{1/} The inherent cost-

1/ Sharma, Motilal; "Liberation of the Learner: A Self-Reliance Strategy for Education," Resource Paper presented at the Round Table Conference on Distance Education for South Asian Countries, Islamabad, Pakistan, 6-8 November 1989.

effectiveness of multi-mediated distance education suggests that this mode of instruction is the best, if not the only available alternative. Furthermore, the scope of satellite-based distance education should be examined in this context since the space system offers vast advantages over that of the terrestrial system, especially when warranted by the appropriate location, area and diversity of the country concerned. Also, the satellite media are ideal for implementing cooperative multi-national programs in distance education.

20. Through the use of new communications, access to good educational programs can greatly be extended to large audiences in rural and remote areas with tremendous flexibility in subject matter content, in locations served, and with a choice of narrow or wide band formats. Two new technologies, namely satellite communication and fiber optic cable, have dramatically enhanced educational capabilities, but others such as the VHF terrestrial radio telephone, cellular radio technology and various new mobile communications techniques are making important contributions. Satellite and fibre optic transmission technologies are in fact complementary. Satellites are still best for broadcasting to provide for rural and remote access, while fibre optics are well suited to linking centers of learning, university campuses, etc. Fibre optic-based educational networks can also be "piggy-backed" onto public telecommunications networks at a modest cost. Today the future for educational transmission costs is very promising. Fibre optic cables can now be made for about \$1.00 a foot, while micro-terminals complete with microprocessors and printers can be purchased for about \$2,000. The fibre-optic line brings in sound and picture quality that antenna-bound TV viewers can only dream of.^{1/} Within the next 10 years satellite transponders could probably be purchased for as little as \$250,000. In short, the reduced costs of technology could make a large number of educational services available, through distance education mode, to more and more people on a global basis. Where appropriate, we must examine, evaluate and utilize the many new transmission and programming capabilities that are now available from advanced communications technologies especially satellites. Now, the question is not whether developing countries can afford the peaceful uses of outer space. Rather, it is whether they can afford to ignore them. Furthermore, effective coordination through regional cooperation could help realize the potential of such remarkable technologies.

21. The Asian Development Bank's initiative in the distance education arena stems from a professional staff paper published by the Education Division (IFED) of the Bank in 1985.^{2/} This paper laid the groundwork for a major Regional Seminar on Distance Education which was organized by the Bank in Bangkok in 1986. The Bangkok Seminar gathered together a group of internationally renowned distance education experts

1/ Asia's Cable Revolution. ASIaweek, 16 March 1990, pp. 20-22. ("A combination of theater, library, school, personal computer, newsroom, stadium, opera house and even shopping center open 24 hours", Gushes Hong Kong Cable Communications".)

2/ Sharma, Motilal; Distance Education: Staff Paper, Asian Development Bank, 1985.

and the papers presented for the Seminar (now published in two volumes^{1/} are recognized as a seminal resource in the field. One of the recommendations of the Bangkok Seminar was to give serious consideration to the establishment of a mechanism for engendering regional cooperation in Distance Education. As a follow-up of this recommendation, the Bank sponsored a Round Table Conference on Distance Education for South Asian Countries in 1989 which was held in Pakistan. The function, form, operational feasibility and financial viability of such a mechanism provided the central agenda of the Round Table Conference. The papers prepared for the Round Table Conference have been published by the Bank in a book form.^{2/} In addition, the Bank is preparing projects in this field in Bangladesh and Pakistan and is considering increased involvement in other countries in this area.

III. EDUCATIONAL BROADCASTING IN THE SERVICE OF THE DISADVANTAGED

22. Third World countries, in whatever region of the world, are burdened with problems of huge population, illiteracy, poor health, poverty, harsh living conditions, oppressed women population, wastage of human resources because of lack of grooming of children and women, and large populations which are powerless to decide their fates and environmental problems. Time is running out on these nations. A comprehensive, integrated educational delivery system is needed - but one that can be delivered fast, without delay, in a language that people understand, and one which they will find useful. What else but broadcast media can do this? Using high-technology and modern hardware, such as satellites, and the more common radio which is pervasive throughout the developing countries, such a system using the distance education mode can break through boundaries such as geographical terrain, social taboos, barnacled traditions, even illiteracy, and teach and talk to the disadvantaged about values, knowledge, skills and experiences which will generate basic literacy, livelihood capability, community spirit and information thus covering the three domains of development of man through the process of education: the cognitive, psycho-motor and affective domain to prepare the complete man.

23. Conventional methods of imparting instruction are now inadequate. The school is no longer the sole purveyor of knowledge and shaper of social attitudes. Mass media such as radio and television play a crucial role in the dissemination of knowledge. As mentioned above, radio has the advantages of wide reach, low cost and can be used even in areas without electricity. Properly designed and supported radio projects can improve learning and, in certain cases, reduce costs. Television can also be an extremely powerful instrument for spreading education. Space technology, with the invention of the direct broadcast satellite (DBS), has made possible the reception of television programs

1/ Asian Development Bank, Distance Education, (Volumes I and II), 1987.

2/ Asian Development Bank, Distance Education, Publication No. 2, 1990.

in very remote areas. This has reduced capital costs in Canada, Japan, India, the USSR, and the United States. Many European countries, the USSR, Canada and India all have operational DBS systems. Many other countries have initiated efforts in this direction.

24. There are several reasons for increasing the use of mass media in education. First, the educational systems of several Asian and Pacific countries are not suited to meeting the challenge of economic growth which is primarily based on agricultural and rural development. In these countries, the technological expertise needed for rural transformation has not yet reached the village people. In many cases, extension workers lack the training needed to teach adults, and advanced communications technology should be incorporated into new teaching techniques. Second, in many countries the human and financial resources available for education are limited. Mass media can provide the means to offer education in selected fields to large numbers of people without costly overheads and infrastructure. Third, educationists and policy planners are increasingly aware of the decline in the quality of education, despite quantitative gains. Mass media can widen the access to the best available teaching talent and benefit a larger number of people.

25. Basic knowledge as well as advances in health and family welfare, nutrition and agriculture can be communicated effectively through modern mass media. Education in civics, social responsibility, legal rights and national cultures are other areas where the potential audience is the entire population, young and old, illiterate and literate. The skills of TV and radio journalism can be coupled with the knowledge of experts in a wide range of fields to produce effective programs.

26. The work of several educationists, planners, implementors and policy-makers in both the developed and developing countries, has laid the foundations for one's concern to help in the alleviation of the deprived, especially those in the rural communities including women. Modern science and high-technology can undoubtedly be brought to the service of the disadvantaged man (the poorest of the poor, or the deprived, in the original words of Mahatma Gandhi), to the deprived rural communities, to the most far-flung villages, and achieve a better quality of life for them in ways that are more rapid, more innovative, more interesting and more participatory, than traditional methods of educating people within the four walls of the classroom. The conservative approach which proclaims that sophisticated technology can be adopted only step-by-step by developing countries has often been proven counter-productive and was ably explained by the noted Indian Scientist, the late Dr. Vikram Sarabhai.^{1/}

"...a developing nation following a Step-by-Step approach towards progress is landed with units of Small Size, which do not permit the economic development of new technologies. Through

^{1/} Address to the U.N. Conference on the Exploration and Peaceful Uses of Space, 1968.

undertaking ventures of uneconomic size with obsolete technologies, the race with advanced nations is lost before it is started."

27. Fortunately, many developing countries are in a position to start with a clean slate. And the developing countries have demonstrated their capability to take quantum leaps to attain new levels of technology. Viewed in this context, trends in broadcasting technology (including satellite), though enormously complex and costly, acquire significant relevance for developing countries. The application of satellite technology in support of distance education will be useful both in terms of quantity and quality (by expanding the reach of radio and television) if distance education were to cover larger numbers; a satellite link can easily connect rural areas, remote centers and backward regions with the urban centers. Space technology offers means of reversing the trend of development that often treats the urban areas as the center and spreads to rural areas slowly. The new technologies also change priorities. It is possible to give attention to the underprivileged people without succumbing to the pressures of the urban elite in the matter of providing educational opportunities.^{1/}

28. The most serious problems confronting deprived societies today where broadcasting can play a special role include: (i) high unemployment and underemployment; (ii) low economic performance; (iii) erosion of national cultures and deterioration of cherished national values; (iv) the search for peace; (v) the deprivation of opportunities for women; and (vi) continuing neglect of the rural disadvantaged.

29. What can educational broadcasting, in the context of distance education, do to help disadvantaged rural communities in addressing the above six issues in searching for practical solutions? First of all, we must emphasize that distance education can provide such a variety of flexible, self-directed, self-paced, and convenient ways of learning, that it could be the most effective educational weapon to reduce the huge gap between the masses and the elite. This gap has resulted in dual societies where, firstly, the distance between the vast majority of the deprived extends so far and wide compared to that of the elite, who enjoy most of the country's resources (including media), material benefits and social services especially in education. Millions of farmers, workers, small businessmen, adolescents, and especially women, have either never been to school, or have had to drop out early in their schooling - and will never ever return for the rest of their lives. They therefore are unable to contribute to their own and the nation's development. Secondly, for these dropouts, school leavers, illiterate adults, and out-of-school youth, educational broadcasting through distance education can play its role as continuing education and act as a complement to formal schooling or an alternative to classroom education. It would concentrate on training for productive and employment skills, and for literacy promotion. Thirdly, educational broadcasting can upgrade the skills and

1/ Sundara Rajan, Mohan: Satellite Applications in Distance Education Through TV and Radio, in Asian Development Bank, Distance Education (Vol. I), 1987, pp. 421-491.

competence of those who are already employed or self-employed in a variety of skills - such as community development, rural enterprise and entrepreneurship, agricultural extension, and health and family planning campaigns.

30. Thus, to be specific, in the employment sector, educational broadcasting can increase the awareness of common folks on the severity of employment problems, the options open to them, and the encouragement to participate in resolving this problem. The elite and public administrators have failed to check this dilemma. The deprived, unemployed, out-of-school youth, and the handicapped need information on job availabilities, labor trends, and opportunities for education and training. It is educational broadcasting - the use of radio and TV (necessarily not satellite but terrestrial links) that can cut across physical barriers, cultural constraints, and financial scarcities, and directly reach the disadvantaged families. Up-to-date information on farm technology; prices of vegetables, rice and corn; supply of fertilizer and pesticides; market fairs; continuing education opportunities - all of these are educative in themselves, in the war against unemployment and deprivation.

31. In the cultural sector, one of the worst tragedies of our times is the weakening and erosion of the national cultures of developing countries. In the sweeping reforms for vocational-technical education, technician training, manpower-building, and economic-directed human resource development, too much attention has been given to the development of psycho-motor and cognitive skills - to the detriment of the affective domain. As a result, western concepts about modern living, material tastes and penchant for luxury and wasteful habits have taken hold of one's mind and have affected the lifestyles of the youth everywhere. The bombardment by violent, pornographic, anti-nationalist, and negative values as portrayed in some western movies and TV, all breed attitudes, values and cultural visions that are alien to the society itself, as if the citizenry were living in a totally different environment. The past is abolished, and emotional ties to the great and stirring moments in the nation's history are swept away by sensational media events. Within its own ranks, therefore, educational broadcasting should recast its contents, methods and image. It can be made a powerful force for cultural strengthening and reforms. It should broadcast factual and truthful presentations, inspiring cultural shows, nationalist pride in our own achievement - the positive side of the nation - rather than using, without discretion or wisdom, wholesale cheap alien movies and programs that only further isolate the viewers from the national soul.^{1/}

32. In the economic sector, there is need to improve the quantity and quality of information and statistical data that can contribute to the betterment of people's lives. Unfortunately, much information is kept away from the masses, usually by the elite and government itself in the mistaken notion that common folks are unable to handle such

1/ Sundara Rajan, Mohan, Popular Science in Mass Media, Allied Publishers, New Delhi, 1985.

information and may only contribute to further instability of the nation. This is not true. The more informed the people, the better they are able to appreciate efforts by the elite and the government to remedy the deficiencies of the society, and the better they are able to get involved, and to participate in policy-formulation and decision-making for national growth. If educational broadcasting is to play a vital role in this information-dissemination, it cannot do so without helping to bring the information and data down to the language and understanding of the common masses. Sophisticated language and jargon which serves to keep people uninformed should be avoided. Instead, simple and straight communications should be the language of educational broadcasting.

33. In the pursuit of peace, educational broadcasting has tremendous potential. The trend towards hot music, hot drama, hot videos, hot commentaries, and so on, cause untold anxieties and tensions among listeners and their families. One small incident, one curse, one wrong look - and things explode. The peaceful environment is turning into a violent environment and nice, gentle people erupt into violent people. Educational broadcasting can, with appropriate programs, help in developing positive humane values, human feelings of love, compassion and kindness. In the case of women in development, I must say with a deep sense of shame that women continue to be among the most deprived members of society, especially in the rural areas of the developing countries. They work hardest in the farm fields, in fetching water from the wells, in overseeing the children and the house, and virtually in making both ends meet. But who looks after them? Educational broadcasting can come to their aid. It can provide programs for women in a variety of situations and scenarios - and with the proper mix, can provide value-building, skills-improving, and knowledge-accumulating opportunities for women in rural areas. Educational broadcasting can indeed play a vital role in the liberation of women.

34. Finally, for the rural disadvantaged, educational broadcasting can become their "shadow classrooms or schools", that is, assume the functions of a teaching environment without walls, without teachers, without fixed schedules, and without the constraints of formal schooling. By listening to the radio, being exposed to radio-vision, and where available, to television and video cassette records, they can attain proper attitudes and values, basic skills and knowledge, and threshold literacy to become self-reliant and liberated citizens. Talking on the use of television, a famous American broadcaster, the late Edward R. Murrow, said: "This instrument can teach, it can illuminate and it can even inspire. But it can do so to the extent that humans are determined to use it to those ends; otherwise it is wires and lights in a box." The question whether mass media (particularly radio and television) is necessary or not is in a way becoming academic as the spread of mass media technology has been remarkably rapid in the past three decades. In addition, thanks to the rapidly declining cost of electronics it has penetrated vast areas of the world especially with the advent of the Space Age. The point of caution is that "the mass media should be culture-led, not technology-driven." This implies that the shape of the communication system is derived from an intimate knowledge of the society it serves. It means that in terms of the content of mass media, its appropriateness to cultural values and

attitudes must be the first consideration.^{1/} Also, the print materials cannot be used straightway in the electronic media. They need to be suitably rewritten, re-targeted and re-evaluated before countrywide application.

35. Indeed, notable projects in distance education involving radio and terrestrial television have been implemented by Bangladesh, India, Indonesia, Malaysia, Nepal, Pakistan, Philippines, Republic of Korea, Sri Lanka and Thailand. Some countries such as Maldives, Nepal, Pakistan and Philippines can, in view of their geographical nature, further explore the scope for providing satellite links for distance education projects.

36. The People's Republic of China (PRC) has accorded an important role to distance education through television, which is for the time being land-based. It would only be a matter of time before satellites are used for education in China, given its fast-developing space capability. PRC has already stated that "in order to have a nationwide television transmission system and to raise the cultural and scientific levels of the broad masses by satellite television education, it is imperative to develop a broadcasting satellite." PRC has declared its intention to place a domestic communication and broadcast satellite in the geostationary orbit "after the Experimental Communications Satellites are launched." The Chinese planners have not hesitated to take advantage of Western technology. In April 1984, China placed its first experimental telecommunications satellite into geostationary orbit. Since conventional universities cannot satisfy the growing demand for scientists, engineers and technicians, the Government has decided, among others, to expand the Television University System (TVU). The TVU system, started in the early 1960s, was halted during the Cultural Revolution but resumed in 1979. The TVU enrollment is expected to triple to 1,300,000 students by the end of 1990. The Central Radio and Television University and 28 provincial television universities have been set up; the latter operate over 500 branch schools (with audiovisual centers) and work stations which supervise television classes. In addition to broadcasts, audio-cassettes and booklets are distributed. China plans to double its enrollment in higher-level education by the end of 1990, through rapid expansion of its polytechnics and the Television University. A substantial increase in the skilled labor force is envisaged as a result of TVU enrollment, as the Government had decided to enroll an increasing percentage of recent middle-school "graduates."

37. Finally, effective involvement of the electronic media in distance education calls for a true integration of the media into the courses. In other words, teaching should be considered incomplete without the inputs from radio or television. Otherwise, the tendency to finish a syllabus in print to the exclusion of other exposures would dominate. The need to allot a crucial role for media should be reflected in future curriculum revision.

1/ Chanter, Alaine and Jackson, Keith: The Role of Communication in Development, Sydney, International Training Institute, 1984.

IV. STRENGTHENING DISTANCE EDUCATION THROUGH BROADCASTING: THE PHILIPPINE CASE

38. In the Philippines, despite high literacy rates, participation ratios, and an exemplary network of thousands of schools throughout the archipelago, there are still many problems in education. Such problems include: (i) the need to increase efficiency, particularly in increasing the cohort rate, which in turn will increase the participation rate without requiring new investments in facilities and teachers, and improving the retention rates at the different levels; (ii) the need to upgrade management throughout the system, especially at the district levels if the policy of decentralization is to have any real meaning at all; (iii) the need to reduce regional disparities in both the participation rates and student achievement ratios; (iv) the need to increase quality education, particularly in raising student achievements, upgrading teacher performance in instruction, and in producing skilled manpower responsive to the demands of the economy here and abroad; and (v) the need for more funds and resources to finance land acquisition and development, to construct schools and classrooms, to furnish them, and to hire full-time teachers and staff, and to procure textbooks, facilities, and equipment. The problem of financing has become more serious with the new Constitutional requirement to provide free secondary education - not alone primary education - to all Filipinos regardless of their socio-economic status.

39. So formidable are these problems that apparently the conventional system of education is unable to resolve them because of its various constraints. But traditional live-in training is beyond the financial capacity of the government. So educational broadcasting with distance education mode is a good solution. In the Philippines, the network of broadcasting media is very extensive and influential but needs a new orientation towards education both formal and non-formal. There is also the technical scope and possibility of using the satellite medium. There is virtually no area in the country where families do not have good radio reception. Whether in the farms, or fishing villages, in remote high mountains or lowlands, radio is available. In terms of TV sets, the Philippines again leads many Asian countries in terms of receivers available to millions of families, averaging 14 persons per TV set - higher than Indonesia, Sri Lanka, and Pakistan. Even pay-TV is now available.^{1/} However, TV as a means of entertainment should not prevent planners from attempting to use it for education as well. In the broadcast field, therefore, the Philippines have tremendous potential power still to be used for education, science and culture.

40. What is the state of distance education in the Philippines? There appears to be a few programs in some state and privately-run institutions. They have had some achievements in college education, and more so in higher degrees, such as teacher-education, and business and management courses. Then there are a few radio programs and

^{1/} Tuning In to the World, ASIaweek, 23 February 1990, p. 13.

correspondence courses in farming, agricultural extension, and livelihood training. But it is difficult to say whether a system in distance education exists in the Philippines, in which these separate efforts by private and government institutions are being coordinated properly by duly-constituted central authority; whether there are agencies that set standards and norms, prescribe qualifications and establish the criteria for allowing distance education institutions to operate and to offer courses and programs; and whether professional standards and ethics are being applied throughout the system, and nurtured through continuous training, research and development, extension services, etc. In that context, what exists in the Philippines are a number of programs, but not a system of distance education in the technical sense of the term.

41. Yet the ingredients, and the need, are there. There are over six million out-of-school youth, and millions more who are dropping out from school system every year. Over 12 million adults, who have finished high school or college, have never again taken any self-improvement courses or training opportunities since their last graduation. Millions more of working adults and professionals are seeking for second-chance education, looking for training courses that will enable them to improve their skills and knowledge, sharpen their work attitudes, but at a time and a place which is convenient to them, practical to their work schedules, and which will not cost too much. People in government include 1.5 million civil servants; the thousands of members of the armed forces; the 350,000 public and private school teachers; people in the private sector; young boys and girls working in industries, households, supermarkets, who want to upgrade their qualifications, and those engaged in development projects. They all seek educational opportunities. In addition, over 6 million housewives need education who should not be deprived of such opportunities. And distance education, supported by strong media facilities (educational broadcasting) is one answer, and a very powerful one at that.

42. How do we develop the distance education system in the Philippines? What strategy can we use? There are two options. One is the piecemeal approach. The other is the total and comprehensive. I propose the total and comprehensive approach, not the piecemeal approach, if the goal of liberation of the learner and education of the deprived is to be attained at the national level. All populations in the country must be serviced, at once and in the shortest time possible. In fact many of the problems such as inadequate recognition of the products of distance education and resources are due to a piecemeal, ad hoc approach. Either you have it all or nothing. There is no half measures in these matters.

43. The University of Life, which has reasonable experience in distance and non-formal education, if properly upgraded in terms of educational technology, equipment for educational broadcasting and adequate management, and trained staff, can be the immediate answer to address this issue. This can be converted into a National Open University of the Philippines. It would be a national resource center for distance education and non-formal education. Its other role will be to act as a center for educational broadcasting, developing and providing programs, audio-visual materials, teaching aids, and learning packages,

undertaking research and project development activities, self-learning materials for study at home. Its clientele would reach out across all sectors of society of all ages, gender, regions and beliefs. Its programs can be linked up to degree or non-degree courses. It will provide student support services through establishment of a network of regional and local study centers. Such a National Open University can set up networks of regional campuses throughout the Philippines, especially in strategically-located islands. It can link up with radio and TV stations.

44. An important requirement would be granting of due status to those who graduate from this University. They should, in no way, be discriminated against those from the regular universities. In other words, the curriculum, the teaching, the standing and the recognition by the government as well as the professional bodies, should warrant equal status. The private sector too should accord them equal status. In sum, Open University is not open to any compromise on quality standards. Education central to development strategies involves the full use of available resources - above all, human resources. In education, I take this to mean the liberation of the learner and empowerment of the deprived. The programs of such an Open University can range from agriculture to industries, to services and to raising awareness. Open learning systems would have no boundaries, limited only by its resources (including broadcasting media), management capability, public support and imagination. Perhaps only Japan exceeds the Philippines in this part of the world in terms of radio and TV stations, and amount of airtime being made available for daily broadcasts to millions of people throughout the archipelago. Since time immemorial - whether in India, Indonesia, Philippines, Nepal, Sri Lanka, or Bangladesh - the former colonized states have been unable to resolve problems continuously confronting the educational system, namely: (i) the poverty of the masses, especially those in the rural areas; (ii) the alien and foreign structures and processes not only in our educational structures and systems but in the national life; and (iii) the high costs of formal schooling and classroom instruction. The strategy available to the Philippines to wipe out these problems once and for all is a National Open University.

45. Finally, the most potent weapon for self-reliance therefore is the education of people in general - education molded on visions, aspirations, capabilities of the people concerned, in the context of their social-political-economic environments, traditions and cultures. Ignorance should be tackled with serious plans for action, and not with empty rhetoric. The immediate challenge facing government leaders is to devise practical strategies, compatible with cultural norms, that will motivate and prepare the rural communities to take this lead and to implement activities for growth. Furthermore, these strategies need to have appropriate resource support: men, money, media and management.