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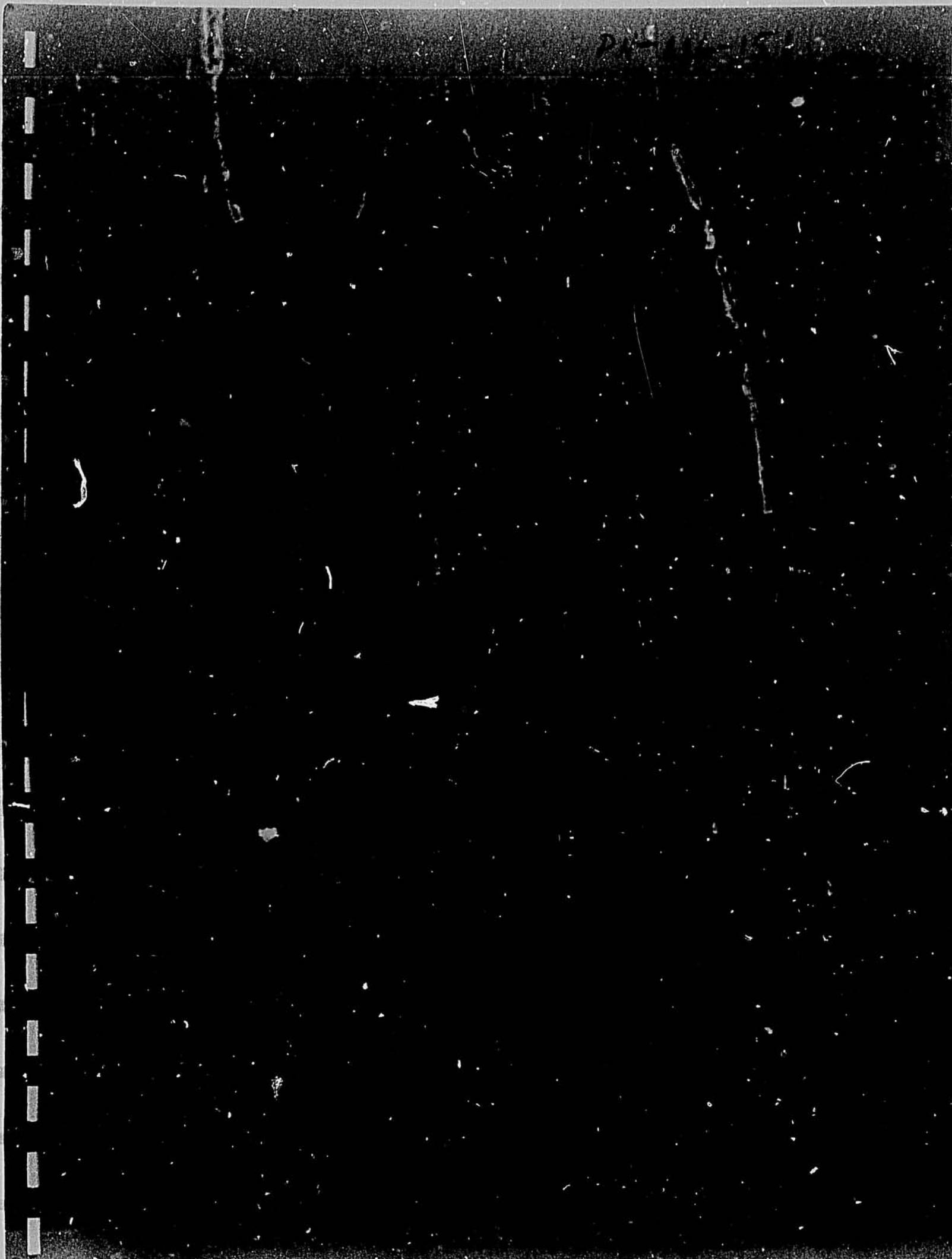
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**EVALUATION IN RURAL COMMUNITY EDUCATION: THE STATE-OF-THE-ART**

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## CHAPTER I

### INTRODUCTION

The literature review that follows is the first phase of a project entitled "Development and Testing Methodologies and Instruments for Evaluating Community Education Programs". The project is funded through a grant from the Agency for International Development to the Human Resources Development Center at Tuskegee Institute.

The purpose of the project is "to develop and test evaluation tools, both instruments and methodologies, that can furnish more and better information for the rural community education program planner and implementor". More specifically, the use of the developed evaluation tools should produce information of the following types:

1. Determine program impact on individuals, the community and the achievement of wider development goals,
2. Identify and assess effectiveness of various programmatic elements and their interaction with various community characteristics to assist planners to:
  - a. Identify communities on the basis of their characteristics, in which a given type of education program would be most apt to meet with success, and
  - b. Identify the optimum set of education program elements to ensure success given a specific set of community characteristics,
3. Assess costs.

The research concept underlying the project is based on a process of iteration. That is, first the "state-of-the-art" is

to be established relying on the extent literature concerning theory and practice. This will then be modified through comparison with an actual situation. Tentative instruments and methodologies will then be formulated, reviewed, field tested, reviewed again, and finally field tested on a full scale. The literature review is, therefore, the first step in the iterative design.

The literature review takes as one of its starting points that rural community education is a part of national planning and development activities in less developed countries. It views the goals of rural community education programs and their evaluation as one of a unified set of national goals interacting on each other to produce "balanced development". The review is sensitive to the task of education as a process producing changes in attitudes through the acquisition of knowledge and skills. With respect to the community context, it uses a view of communities and nations as empirical sociocultural systems. Such a conception is sufficiently flexible to encompass a wide range of community forms found in many nations.

The review of literature is organized into three parts. An overview of concepts related to community education covering selected literature on community education, community development and nonformal education is discussed to establish a conceptual framework of rural community education as referred in this study. A theoretical construct is then developed dealing with models and approaches to community education in the United States, and rural community education in the less developed countries. An overview of concepts of evaluation, and general designs and methodologies

in evaluation are then presented, thereby completing the theoretical design of community education evaluation.

The next section considers selected case studies and evaluations of community education in LDC's. These representative studies examine the state-of-the-art of various community education and related programs, with specific emphasis on the general purposes and/or objectives of the program; the basic approaches used in implementing the programs; and any pertinent remark concerning assessment of the overall results and/or findings; and their limitations and/or constraints.

Finally, a composite of variables and indicators extracted mostly from the review of the literature is presented and a data bank of variables and indicators for evaluating rural community education programs in LDC's is, thus, developed. The identification of variables and their indicators is by no means complete. The data bank will be constantly developed throughout the life of the project.

This document is a second essay in pulling together and summarizing the data collected to date. It is important to note at this stage in the project that this review of the literature is more indicative than definitive; it can be considered neither exhaustive nor the last word on the subject. The data presented here reflect the progress made to date in a continuous process of achieving the objectives of the project.

CONCEPTS RELATED TO COMMUNITY EDUCATION

There are a diversity of terminologies, definitions and interpretations that relate to community education used by many authors, organizations and agencies dealing with educational processes at the individual, social group and socio-cultural levels. An example of the multitude of these terms, with parameters or descriptors which identify their generally accepted definitions is presented by Wilder (USAID) in a discussion paper on "Planning Rural Education", as follows:

<u>Term</u>	<u>Parameter (s) Specified</u>
1. Nonformal education	Administrative arrangement (by exclusion)
2. Out-of-school education	Location of learning activity
3. Life long education	Time frame
4. Adult education	Client group
5. Formal education	Administrative arrangement
6. Community education	Location/objective
7. Literacy programs	Content
8. Functional education	Content/objective
9. Extension education	Pedagogical approach/learning mode approach
10. Agricultural extension	Client group/location/pedagogical
11. Basic education	Content
12. Women's programs	Client group
13. Fundamental education	Content
14. Family life education	Client group/content
15. Rural education	Location
16. Pre-service, in-service and vestibule education	Relation to time of application

Thus, any set of definitions, classifications, or typologies, of necessity, will have to be arbitrary and regarded as neuristic devices capable of being altered or discarded, depending upon their relative utility. (Adams, 1975). Accordingly, in an attempt to develop an operational definition and

to establish a conceptual framework for community education as it relates to this study, the following concepts are briefly discussed: community education, non-formal education, and community development. The rationale for the selection of these concepts is based on the review of literature which indicates that despite the difference in terminology, in essence the content of these concepts is, to a large extent, the same as community education as perceived in this study.

### Community Education

According to the Education Amendments of the Community Education Development Act of 1974:

A "community education program" is a program in which a public building, including but not limited to a public elementary or secondary school or a community or junior college, is used as a community center operated in conjunction with other groups in the community, community organizations, and local governmental agencies, to provide educational, recreational, cultural, and other related community services for the community that serves in accordance with the needs, interests, and concerns of that community.

One limitation of this view of community education in the United States is the mandated practice that community education programs are best coordinated and facilitated through the public school system and implemented in a public building. In practice, community education programs exist in varied forms outside the public education system and its physical facilities. For example, some programs exist as extension arms of private universities while others exist in coordination with other service agencies

in the community.

A more comprehensive definition of the community education concept is given by Totten and Manley (1970):

The concept of community education includes the total realm of educational experiences available to individuals and groups to enable them to learn how to use their knowledge for the fulfillment of their wants and needs. It encompasses all of the individuals, organizations, agencies, and places in the community from which people learn what is offered by all elements of the entire community. It is a continuous process extending throughout the life-time of an individual.

David H. Dean (1974), in his examination of the literature in both community schools and rural education, also views community education as the use of the schools by the people to provide for their needs and desires. However, for rural areas, Dean uses a deficit model to modify his view of community education:

The best definition of rural education is that which occurs in school systems which have fewer of the advantages inherent in heavily populated trade and manufacturing centers and at the same time fewer of the advantages that accrue to such areas.

Community education has been conceptualized by Phillip A. Clark (1971) as a vehicle for accelerating positive change "in our very antiquated and nomothetic regular school programs". Clark visualizes community education as serving five primary functions:

1. A means for putting the ideas, wants and needs of the people back into the education system that serves them.
2. A means for providing vocational, academic, recreational, enrichment and leisure time educational experiences to community members of all ages.

3. A means for cooperating with other educational agencies serving the community toward common goals and identify overlapping of responsibilities and voids in services provided.
4. A means for community members to understand, evaluate and attempt to solve locally, such basic problems as: environmental degradation, over-population, under and unemployment, criminal rehabilitation, health, person anonymity and, probably the biggest of all, man getting along with his fellow man.
5. A working model for faculty and community members to use a springboard for evaluating, restructuring, and making more relevant the regular school programs incorporating the maximal use of facilities, human resources and cooperation between educational agencies.

Lopez (1975) gives emphasis to the mobilization and coordination of existing community resources--programs, local talents, leadership, services--in his conception of community education.

Thus, community education means different things to different people. However, one common thread runs through the continuum of perceptions of community education: community education programs should fulfill the needs of the individual as well as the community by providing a broad range of services through the use of readily available resources. At the same time, the literature on community education reveals few attempts at systematic theory development. Most concepts of community education suggest philosophical conceptualizations of the structure and function of community education. Few, if any, mention the process of social action in which the people of a community organize themselves for planning action. It is for this reason that this review touches on the concept of community development, especially as it relates to rural community education. It seems

generally accepted that one cannot have community education without community development and one cannot have community development without community education (Hackett, 1975; Cheng, 1975).

### Community Development

The literature review on community development shows similarities in purpose and definition: Durham (1958) states that community development consists of organized efforts to improve the conditions of community life, and the capacity for community integration and self-direction. Minicler (1956) views community development as a process of social action in which people of a community organize themselves for planning and action; define their common and individual needs and problems; make group and individual plans to meet their needs and solve their problems; execute these plans with a maximum reliance upon community resources; and supplement resources when necessary with services and materials from governmental and non-governmental agencies outside the community.

In the same context according to Wileden (1970):

....it is the process by which people in ...a community, go about analyzing a situation, determining its needs and unfulfilled opportunities, deciding what can and should be done to improve the situation, and then move in the direction of achievement of the agreed upon goals and objectives.

Community development is a process by which the people of a village are enabled to reach out and avail themselves of

national services which are already in existence (Badean, 1958).

A number of definitions of community development are available. The above mentioned definitions essentially cover the field. Although there is no one accepted definition on the subject, a few important elements appear repeatedly in the literature. These elements together provide a generally acceptable definition of the process (Cary, 1970): (1) community as the unit of action; (2) community initiative and leadership as resources; (3) use of both internal and external resources; (4) inclusive participation; (5) an organized, comprehensive approach that attempts to involve the entire community; and (6) the identification of community needs.

According to the standard United Nations' definition,

Community development is the process by which the efforts of the people themselves are united with those of governmental authorities to improve the economic, social, and cultural conditions of communities, to integrate these communities into the life of the nation, and to enable them to contribute fully to national progress.

It is perhaps because of community development's so-called "infancy" that there exists a plethora of definitions and explanations. However, existing within these definitions and explanations are common descriptors which generally guide us to view community education as a process of providing an opportunity for residents of a given geographical area to initiate and work together with various resources to accomplish individual and community improvement.

It is against this backdrop of perceptions of community education and community development coupled with the need to incorporate related concepts of programs that deal with out-of-school activities and rural people, particularly, in lesser developed countries that the following concept of nonformal education is discussed.

### Nonformal Education

Nonformal education is broadly defined by Ahmed (1975) as:

"any organized educational activity outside the established formal school system—whether operating separately or as an important feature for some broader activity—that is intended to serve identifiable learning clientele and learning objectives".

A more specific consideration of the concept of nonformal education is presented by Niehoff and Neff (1977):

Nonformal education is essentially a method of defining developmental needs and formulating programs of communication and education to increase the participation of the rural poor in agricultural production, and in programs of nutrition, rural health delivery systems, family planning and other programs designed to improve their productivity and welfare, if not their survival.

Nonformal education programs according to La Belle (1977) are generally designed to improve the participant's power and status by either adding to his or her stock of skills and knowledge or by altering basic attitudes and values toward work and life. He further expands his concept of nonformal education with reference to less developed countries as follows:

Nonformal education refers to organized out-of-school educational programs designed to provide specific learning experiences for specific target populations. Normally associated with so-called "underdeveloped" countries, such educational efforts include agricultural extension, community development, consciousness raising, technical/vocational training, literacy and basic education, family planning, and so on.

A contextual definition of nonformal education is provided by Maheshwari (1975) as:

"...an intentional and systematic educational enterprise (usually outside traditional schooling) in which content, media, staff, facilities etc. are selected for particular students (populations or situations) to maximize attainment of the learning mission".

In a summary view of research and analysis of the concept of nonformal education, he further delineates five distinguishing characteristics of nonformal education in contrast to formal education as follows:

- 1) Administrative affiliation---Nonformal education consists of all those educational activities that are not discharged by the formally designated educational agencies and which are not conducted in the system of schooling;
- 2) Pedagogical style---Pedagogical approach to functional education is rigid, teacher-centered and measured in terms of adherence to standards whereas that to nonformal education is flexible, based on the needs of learners and tends to be measured in terms of client satisfaction;
- 3) Function---Functions of schooling are concerned with cognitive learning (literacy, numeracy, general education) related to social reward systems based in school-completion credentials. Functions of nonformal education, however, are those activities that lie outside the recurrent central core of schooling functions;
- 4) Clients---Schools screen people out and select their own continuing clientele. People not affiliated with formal education agencies (educational disaffiliates) are potential clients for nonformal education programs; and

- 5) Reward systems---Functional education is connected with the rewards system of the society, the rewards being generalized rather than specific. The rewards of nonformal education are immediate, specific, and contingent upon what is learnt--employment, higher agricultural yield, etc.

Other important attributes of nonformal education, presented in this discussion paper, include:

- 1) responds to immediate and pressing demands of economic and social conditions;
- 2) client groups are mostly poor;
- 3) concerned mainly with occupational training programs;
- 4) functions mainly in areas subjected to technological, economic and other important changes;
- 5) concentrates on unifunctional and short-term educational needs;
- 6) serves as an educational support for non-educational activities.

While the 'pay-off' of formal education is located several years in the future, the response is demand-based in nonformal education. The article further points out that education for a single purpose (ad hoc), with a short and conclusive life-span is well-suited to nonformal educational approaches. In addition, supportive education or learning in support of some on-going non-educational activity is taken care of by nonformal education.

Perhaps the most distinguishing characteristic of non-formal education is that it has been adopted as an educational strategy for the poor. The exclusion of the poor from the formal schooling has established the need for nonformal education which seeks a raising of the general level of enlightenment across the total society--e.g., education for the masses. In the area of manual skills, for example, the disabilities of

formal schooling creates a situation where nonformal education measures have demonstrated success. Where employees stand to benefit directly from occupational education and disaffiliates from the main body of formal education possess potential occupational skills, nonformal education has been given priority consideration as an educational tool.

A number of definitions of nonformal education are available. The above mentioned essentially provide a background of the concept. In essence, the context of the definitions and concepts is the same, as outlined by Coombs and Ahmed (1974), as follows:

Nonformal education is any organized, systematic, educational activity carried on outside the framework of the formal system to provide selected types of learning to particular subgroups in the population, adults as well as children.

Thus defined, nonformal education includes, for example, agricultural extension and farmer training programs, adult literacy programs, occupational skill training given outside the formal system, youth clubs with substantial educational purposes, and various community programs of instruction in health, nutrition, family planning, cooperatives, and the like, Coombs and Ahmed (1974),

### Summary

It is obvious, as presented in this brief review of concepts related to community education, that it is difficult to establish a clear distinction or boundaries between community

education, nonformal education and community development. What is of essence is all these concepts need to be considered in establishing a conceptual framework of community education as it relates to this study.

In summary, the aggregate of the highlights emphasized by each of the concepts discussed is presented as follows:

Community Education: stresses the use of a public building as a community center, operated in conjunction with other groups in the community, community organizations and local governmental agencies, to provide educational, recreational, cultural, vocational, academic, enrichment and leisure time educational experiences and other related community services in accordance with the needs, interests and concerns of the individual and the community.

Community Development: is a process of social action in which people of a community organize themselves to improve the economic, social, educational and cultural conditions of the individual and the community, utilizing community resources supplemented by, when necessary, with resources from governmental and nongovernmental agencies.

Nonformal Education: refers to any organized systematic educational program, concerned with developmental needs, carried outside the established formal school to provide selected type of learning experiences for a specific target population, both adults as well as children, in areas such as agricultural production, nutrition, health delivery systems, family planning,

community development, consciousness raising, technical/vocational training, literacy and basic education and the like designed to improve their productivity and welfare.

Integrating the content of these concepts a working model of Rural Community Education is developed. The model stresses the following dimensions:

- \* rural setting
- \* economic, social, cultural and educational developmental concern
- \* utilization of available community resources—both human and physical resources.
- \* intervention of external resources, district, regional, national as well as international—when needed.
- \* the target population include rural adults as well as children.

In sum, with these parameters as a framework, the following broad concept of rural community education is adopted for this study:

Rural Community Education: refers to any organized systematic educational program concerned with the social, economic, cultural and educational developmental needs of rural people, both adults, as well as youth, utilizing existing community resources (human and physical), supplemented with external resources when needed, (governmental and nongovernmental agencies), to provide learning experiences in programs such as agricultural production, nutrition, health delivery systems, family planning, community development, consciousness raising, technical/vocational training, literacy and basic education and the like designed to improve productivity and welfare.

In this review of literature, community education, community development and nonformal education, are used interchangeably depending on the source of the literature. However, all are written in reference to rural community education as described above.

COMMUNITY EDUCATION IN THE UNITED STATESHistorical Overview of Community Education

The historical overview of community education reveals that it is not a new innovation. It might not have been known as community education per-se, but the utilization of schools for various activities by the community has been an integral part of American education since the early days of the New England Colonies. Ollie (1974) writes:

. . . "educational literature clearly indicates that the use of the schools by the community for activities other than the 'traditional,' 'formal,' or 'day school' learning experiences for children has long existed as a component of American education. The history of American education, dating from the 'little red schoolhouse' of the early colonies, provides extensive evidence that the school building was used for many community activities, including socials, spelling matches, church services, social debates, town meetings, lyceums, musicals, and plays".

Decker (1972), in tracing the community's use of the school writes that "in the early days of the New England colonies, the school was an integral part of community life". However, the school's position was not as strong in the middle and southern colonies. Politicians and educators in these colonies had a different attitude toward education and schools than did the leaders in the New England colonies. In the middle colonies, the diversity of ethnical backgrounds and of religious affiliation in the settlement prevented any development of systematic educational programs such as those that existed in the early New England colonies. Thus, the history of education in

America is viewed by Decker "as a contest of forces, one favoring a separation of the school from the community, the other force favoring a close relationship between the school and the community".

It was during the latter half of the 1800's, when developments in the area of the agriculture extension service began taking education to the farmer that systematic community education programs were established. These developments began outside the public school and were later incorporated in community education programs (Decker, 1972). Extension education is the root of community development in the United States (Brokensha and Hodge, 1969). One example of the early agricultural extension programs was the Farmers Institute--short programs, ranging from two to five days, with discussions and demonstrations of farming techniques for the men and programs in domestic science for the women (Decker, 1972).

In the early 1900's, the Playground and Recreation Association was formed to promote recreation through the use of schools and playgrounds. After the turn of the 20th century, many precedents, in both practice and philosophy, were established for the use of schools in meeting the needs of the people and the communities. During the period 1900 to 1930, there is recorded evidence of several experiments in the integration of the school and the community and of the school being used to help solve community problems (Decker, 1972).

The problems resulting from the depression of the 1930's sparked the interest and action of citizens in Flint, Michigan

who began using schools as centers for community education. Until World War II, expanded programs were offering instruction in home economics, agriculture education, and community improvement. Decker (1972) also cites several other descriptive accounts involving the use of schools in helping to solve community problems that were published during the years of World War II and shortly thereafter. Most of them were accounts of community school programs in rural areas and small towns in Kentucky, North Carolina, Alabama, Georgia, New York, and California.

Thus, during the 1930's, 1940's, and early 1950's, the community school concept steadily gained acceptance among most American educators, until 1957 when the Russian sputnik was launched into the first space orbit. Suddenly, there was a virtual reversal in the community school trend and critics of education denounced those schools which had been trying to develop life-centered curricular programs.

Educational philosophy again began favoring the basic principles upon which community education is based in the late 1960's. In 1963, the Mott Foundation established a community education center at Northern Michigan University and was the first of what was to become a regional network of centers whose purpose is the promotion and dissemination of community education.

In 1966, the National Community School Education Association (NCSEA) was formed for the purpose of promoting and expanding community schools, and it now serves as "a clearing house for the exchange of ideas, the showing of efforts, and the

promotion of programs" (Decker, 1972).

Thus, the philosophy of community education evolved to its present form over a period of several hundred years, and the evolution was neither steady nor continuous. The evolution "occurred in those periods of educational history when the forces favoring a close relationship between the community and school were dominant.

Today, there are more than 3,860 community schools in 876 districts in the United States, spread in practically all of the 50 states, with some 60 colleges and universities providing leadership and vital support to many of these communities (Decker, 1972).

#### Selected Approaches to Community Education

To illustrate some of the major characteristics of both community education programs and the communities which support these programs, two selected approaches--the Flint process and the Tuskegee Institute process--are presented. These two approaches to community education prevailed during different periods in American history to solve the pressing, social and economic problems emanating from the depressed conditions of the communities in the respective periods. The approaches, both of which have served as models or archetypes for replication in many communities in the United States and abroad, began during periods when education was closely linked to the community.

#### The Flint Process

The Flint process is presented by programs which originated in Flint, Michigan as an effort to solve large social problems

that occurred during the Great Depression of the mid-1930's. The community school programs in Flint began as an action-oriented response--through active citizen participation in the educational process--to the social crisis of the times. The communities which support the Flint programs were characterized by many of the social problems that still exist in communities today: unemployment, juvenile delinquency and crime, lack of financial resources, minority and highly mobile populations, poor land use, inadequate and substandard housing, and health problems.

The leaders of the community education movement in Flint did not begin with a full-fledged concept of community education--they had no founding philosophy or rationale for a community education program design--but, rather, they gradually drifted into the philosophy as the concept developed from attempts to solve the national problems of the depression (Campbell, 1972). The citizens of the Flint community, whose interest and action were sparked by the social problems of the times, began using, with the support of the Mott Foundation, schools as centers for community education in 1935. From a modest effort to provide recreational and social programs for delinquent youth, the community education programs in Flint developed and expanded to include instruction in home economics, agricultural education, and community improvement for the entire community. Decker (1972) writes that "Flint Community Schools have become the model for community schools because they began with local citizens' efforts. Foundation support was only given when the strength of public support was shown and when other funds

were not available".

In Flint, therefore, the dedicated activity of laymen in civic affairs was a distinct advantage to the success of their community education programs. In the urban/suburban areas of Flint, where the residents were economically and culturally on approximately the same plane (white, Anglo-Saxon, and middle class), an advanced form of community spirit and cooperation was found in the form of active citizen participation (Campbell, 1972).

Other noteworthy features of the community school/education movement were the organizational plan for administering programs and the dissemination procedures. According to Campbell (1972) "before Frank Manley created the position of community education coordinator (director), programs had tended to start out grandiosely (being administered on an overload basis, with day-time teachers administering and teaching at night) and gradually, faded into oblivion". The role of the community education coordinator, therefore, became vital to the success of the program. The coordinator was a professional, responsible for a variety of public relations activities and for administering evening activities and sponsoring community councils and block clubs. However, the most important new leadership position was the home-school counselor. The position was equivalent to the extension agent in rural, farm areas and helped mothers learn such home economic skills as stretching the family budget, preparing meals from left-overs, and using surplus foods wisely. In addition--perhaps even more important--the counselor provided mothers with helpful advice about child rearing and family planning. The last

significant aspect of Manley's organizational scheme was the presence of a community school council, as well as citizen's block clubs, in each neighborhood with a community school program. The community school council served as a liaison between the community, the board of education, sometimes, city officials-- the mayor or city manager and councilmen, and the school (Campbell, 1972).

The procedures used to disseminate information about community education began in 1955 with the first community school workshop in Flint, Michigan. By 1967, more than 12,000 people from all over the world came to Flint to see community education in action. The National Community School Education Association was organized in 1966 and holds, once a year, a meeting for its members and others interested in community education. All members receive a small publication containing news from the field. The regional directors, however, are perhaps the most effective in disseminating information to the public (Campbell, 1972).

In summary, two distinguishing features of the Flint Community School Programs were: 1) the recreation activities which included not only sports such as basketball, volleyball, tumbling, wrestling, and gymnastics, but also cultural activities, which educators, only a few decades ago, considered as "wanton destruction of school property", such as roller-skating, square dancing, and theatrical performances; and 2) the variety and extent of adult education classes, designed to train adults in the basic academic and citizenship skills (Campbell, 1972).

### The Tuskegee Institute Process

More than half a century before the depression of the 1930's--

just after the close of that period of some achievements and many tragic blunders known as Reconstruction--Booker T. Washington, a former slave and brilliant leader of the Negro race, founded Tuskegee Institute. This marked the beginning of an adult education movement that was to have world-wide significance, particularly in the developing countries in Africa and in parts of Asia. The Tuskegee Institute process of community education began during the agricultural extension movement in the late 1800's when education occurred outside the public school and was taken directly to the farmer.

Blackwell (1973) cites the following as adult education programs highlighting the Washington era: 1) Agriculture and Vocational Education, 2) Home and Family Living, 3) Religious Education, 4) Community and Economic Development, 5) Teacher Education, 6) Intergroup Relations, 7) International Education, and 8) Health and Sanitation. The needs of the rural people at that time are well-documented by Washington's personal social survey of the community, Monroe Work's study of the health conditions, and the periodic reports of the extension workers. Abject poverty, with all of its attendant problems, marked the conditions of black people, which dictated, in large part, the kinds of adult education activities needed for Macon County, Alabama and also the felt need to extend the services of the normal school to the community (Blackwell, 1972).

The communities in Macon County differed noticeable from the communities in Flint, Michigan. Located in rural, southeast Alabama, Tuskegee and the surrounding community had a large population of uneducated, poor, black citizens whom Dr. Washington

encouraged to develop good moral character and industrial efficiency, resulting in ownership of property.

Although the Tuskegee Institute process began during an earlier period in American history and addressed a totally different set of needs, for a different target group, than the Flint process, there are some similarities between the two. Both approaches stressed the importance of community support and participation to the successful operation of the programs. Some of the social problems were similar such as poverty, poor health, unemployment, inadequate housing and poor use of land, however, strategies for attacking these problems differed.

Dr. Washington, unlike the leaders of the community school movement in Flint, Michigan, began by carefully studying the conditions of black people and assessing the community needs by personally visiting the churches, homes, farms, shops, and other places of business in the Tuskegee community. He started, therefore, with a founding philosophy and rationale for a special kind of community education program that was designed to up-lift a rural, and underprivileged group of people. The founding philosophy and rationale for a community education program in Tuskegee were based on the fundamental human needs of disadvantaged residents in the community. Not for the purpose of solving large social problems, such as juvenile delinquency and crime nor for providing social and recreational programs for an already prosperous and educated group, did Booker T. Washington establish a community education program in Tuskegee. Rather, his mission was to develop a school for the purpose of training Negro teachers

in the basic social, technical, and vocational skills of everyday living. Through industry, thrift, and the development of moral character, the blacks, Dr. Washington felt, were best able to improve the quality of their lives and to receive recognition and enfranchisement.

### Current Community Education Programs

Community education programs, patterned after the Flint Community School Program, are generally optional in nature and are offered in the late afternoon or evening, weekends, and summers in a public school. They are viewed by many community educators (Minzey and LeTate, 1972; Seay and Associates, 1974; Totten, 1970; Decker, 1975; and others) as logical extensions of the regular, required school program, interrelating with it and supporting it in such a way that the end result is one integrated curriculum for all people in the community.

Two basic types of learning activities and experiences, delineated by Gatewood (1974) are those for adults and those for school-age students. Programs for each type range as follows:

### Learning Experiences for Adults

- high school equivalency programs
- adult noncredit special interest programs
- programs for the aging
- programs in economics and money management
- recreational activities
- public affairs and community development
- home and family improvement and support activities

- art appreciation and participation programs
- vocational competency programs
- programs for the mentally and physically handicapped
- programs for the unemployed, delinquents, ex-convicts, those in prison, unwed mothers, single parents, and the hungry.

#### Learning Experiences for School-Age Students

- enrichment activities to broaden the existing curriculum, expand the six-hour instructional day and nine-month educational year
- socially-oriented activities to balance the academic program
- recreation activities for fun
- skill development activities such as cooking, sewing, wood-working, model building
- activities for fun organized around regular subjects like mathematics and science
- student service programs such as helping disadvantage youth, the aged, free baby-sitting services, and car pools for people who vote
- programs on crime and narcotics
- programs to assist learning difficulties and physical and emotional problems.

While community school programs in urban areas are administered through the public school system and are generally social, cultural, and recreational in nature, community education programs in rural areas are viewed primarily as outreach adult education programs or as extension education, administered through a Land-Grant or Community College. Learning experiences in rural community education include such program areas as agriculture, vocational training, health, religion, business and economic development, adult basic education, continuing education and housing. Methods of instruction include short courses, seminars, workshops,

institutes, demonstration projects, and radio and television programs.

To give an example of the scope of community education activities in a rural area, Tuskegee Institute's adult education and outreach activities have been selected. Blackwell, (1973) categorizes recent adult education programs as follows: 1) Teacher Training, 2) Religious Extension, 3) Food and Nutrition, 4) International Adult Education, 5) Cooperative Extension, 6) Community Development, 7) Professional Development, 8) Manpower Development Training, 9) Health and Career Education, 10) Housing, 11) Human Resources Development, 12) Intergroup Relations, 13) Farmers' and Workers' Conference, 14) Home and Family Living, 15) Business Management.

The major focus of Tuskegee's outreach continues to be on programs related to the State, however, many programs have regional, national, and international influence. Some of the current programs by geographic area of influence are:

#### I. The Black Belt

- \*a. Multi-County Adult and Basic Education Program
- \*b. Retraining Program for Displaced Farm Workers
- \*c. Mental and Child Health Program
- \*d. Cooperative Hospital Service Program
- \*e. Cooperative Multi-County Obstetrical and Pediatric Service Program
- \*f. Public Administration Conference for Small Businessmen
- \*g. Dietary Workers Training Program
- \*h. Special Training Program for Workers in Nursing Homes and Small Hospitals

#### II. State Programs

- \*a. Annual Farmers Conference
- \*b. Labor Mobility Program

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\* Especially for the disadvantaged.

- c. Annual Conference for Teachers of Vocational Agriculture
- d. Annual Food and Nutrition Workshop
- e. High School Principals Workshop
- \*f. Rural Religious Extension Service

### III. Regional and National Programs

- a. Annual Professional Agricultural Workers
- b. Annual Conference for Trades and Industries
- c. Annual John A. Andrew Hospital Health Programs Clinic
- \*d. High School Equivalency Program for Dropouts
- e. Summer and Full-Year Institutes for High School Science Teachers
- f. Summer Conference for Vocational and Industrial Teacher Educators
- g. Annual Veterinary Medicine Forum
- \*h. Pre-Service Training for Child Development Workers (Headstart and Child Day Care Centers)
- i. Graduate Study Leading to Advance Degrees (Masters Level)

### IV. International Programs

- a. Agricultural Training in Poultry in Senegal, Mali and Mauritania
- b. Ranch Management Training in Guyana
- c. Livestock Improvement Program in Kenya, Switzerland and Guyana

Today, most of Tuskegee Institute's outreach activities and programs are coordinated by the Human Resources Development Center (HRDC). The Center currently has five distinct components: 1) Co-operative Extension Service (CES), 2) International Programs, 3) General Extension, 4) Program Development and 5) Community Services. Under the General Extension component are four sub-divisions: a) Community Food and Nutrition, b) Community Education, c) Special Health Careers, and d) Business Development Office.

In recent years, a number of community education activities and programs have been implemented by HRDC. These are: 1) The Manpower Training Program, providing Vocational training in house-building (courses in carpentry, masonry, plumbing, electricity, and basic education), bulldozer operation (courses in basic

education, operation of different equipment, development of dams, building roads, and land clearing), and welding (courses in basic education, welding and metals according to layouts, repairing worn machines, etc.); 2) The Mid-Alabama Adult and Vocational Education Demonstration and Training Center--an 11 county comprehensive educational and training program for about 450 functional illiterate Adults in the Black Belt area of Alabama; and 3) The Alabama Migrant and Seasonal Farm Workers Program--a federally funded program to serve as a rehabilitation agency for migrant and seasonal farm workers in the areas of vocational training, Adult basic education, job-related education, pre-vocational training, college assistance, and GED preparation.

#### Emerging Models of Community Education

Community education has come a long way from its conception of the multitude programs that are presently being implemented throughout the country. Moreover, many alternative models are constantly emerging from the Flint Model and the subsequent programs that evolved. Parson (1976) cites the following programs as innovative and emerging models of community education:

#### The No Extra Bucks - No Extra Bodies (NEB - NEB) Models:

This model is usually implemented with the leadership of building principals who are willing to expand their roles beyond that of a traditional principal. Community members become mobilized through community councils, often providing a great deal of volunteer leadership to programs. Under this Model, heavy reliance is made on agencies, institutions and resources in the community to provide programs to meet the needs of the community.

### Community College Models:

The emerging community college models of community education tend to fall into two categories. In one model the community college plays a very central role in the initiation, administration, and development of community education programs. In the other model community colleges play a more supportive role, coordinating, facilitating and developing community education programs being operated locally within their service area.

### Recreation/School Models:

There appears to be a growing movement toward cooperative development of community education programs between public recreation agencies and public schools. This cooperation comes, to some extent, out of mutual needs being fulfilled by working together. On one hand the public recreation agency needs access to public school facilities to develop recreation programs and meet community needs. On the other hand, the public school needs help in financing the additional costs involved in implementing a community education program.

### Community Human Resources Centers:

By definition, the Community Human Resources Centers are places planned and operated cooperatively in schools and other agencies with and for community citizens. Operation of these centers allows for individualized attention, facilitates community participation in planning and decision making, and provides a comprehensive educational process in which people serving functions are coordinated with cultural, educational, recreational and social services.

Cooperative Extension Service Community Education Models:

Models for the involvement of Cooperative Extension in community education are in the early formative stages. Extension's role in community education is a natural one, with its commitment to making the resources of the land-grant universities via the staff of specialists in agriculture, community development, family resources, 4-H youth work, marketing, environment, and related subjects who work with county and area agents, accessible to helping people throughout the country seek solutions to their problems.

## CHAPTER IV

COMMUNITY EDUCATION IN LESS DEVELOPED COUNTRIES

In the past quarter century, the focus of a wide range of inquires, research, and pilot experimentation in developing countries has been in the area of education for rural community development. This section of the literature review includes the following sub-sections: Background and Overview, Typology of Programs, Methods and Approaches in Program Implementation, and Summary. The focus is on selected aspects of community education which educators, researchers, development analysts, and policy-makers have considered crucial for rapid and effective development of rural communities in Africa, Asia, Latin America, and the Caribbean.

Background and Overview

As reported by Niehoff (1977) from the second international conference and workshop on nonformal education held at Michigan State University:

The use of nonformal educational methods to increase agricultural productivity, foster rural development, and improve the living standards of the rural poor is not new. Many private organizations, missionary and others, and governments of developing countries have for many years fostered programs to achieve these aims. But the programs of private organizations have generally and understandably been small in scope for a limited clientele, and often experimental in character. Government programs have likewise been highly inadequate in scope and quality to do more than scratch the surface of the needs and potentialities of the rural poor. (p. 29)

A number of economic, political, and social trends have influenced the recent upsurge of interest and research in non-

formal education (Srinivasan, 1977; Niehoff, 1977); Coombs, 1976; and other proponents of nonformal education). These trends illuminate the need to greatly expand efforts to increase the participation of the rural poor in the improvement of their own conditions, with some help from their government and private organizations. Niehoff (1977) reports that: "Fortunately, the activities of the private organizations and governments have provided a useful experimental base, however modest, for expansion of these badly needed activities and improved approaches". He indicates, however, that there is also room for more massive efforts of governments and international agencies, commensurate with the needs of the rural poor, to build on these methods and experience. Coombs (1976) states that:

The world-wide upsurge of interest in non-formal education since 1970, principally exhibited by developing countries and external assistance agencies, has generated along with many useful ideas and insights, considerable curiosity, misapprehension, and controversy, especially within the educational community itself. (p. 281)

However, interest in nonformal education, was sparked not by educators, but by general policymakers and development analysts who were becoming increasingly concerned by the deepening crisis in formal education and by the need to find stronger educational means for attacking rural poverty. La Belle (1970) writes that pressures, both inside and outside the educational establishment, have influenced educators to seek out new strategies for providing planned experiences to enhance learning. For example, population growth pressures, increased school costs, empirical assessments of the efficacy of schooling, and

questions of relevance and equality have "shaken a number of individuals from their school-bound complacency".

Once the status of education as a developmental tool is determined, there is the question of what educational strategy is most appropriate to the problem at hand. Grandstaff (1970) states that:

It is here that we can probably most accurately locate the genesis of the concept of nonformal education. The concept arose in response to a clear recognition that formal schooling was, in many cases, an almost totally ineffective tool for accomplishing the educational goals of development programs. (p. 296)

Since 1970 there has been a rapid spread of awareness of the existence of nonformal education, accompanied by an almost electric excitement about its possibilities (Coombs, 1976; Brembeck, 1975; Brembeck and Thompson, 1973). Within the past four years, there have been more international, regional, and national seminars and conferences on nonformal education than in all previous history combined. Increasingly, formal education is becoming involved by offering courses in nonformal education at all levels of education - primary, secondary, and post-secondary. While faculty members are pointing their research in this new direction, graduate students are being encouraged to write their dissertations on some aspect of nonformal education (Coombs, 1976).

In addition, a number of national governments, external assistance agencies, and voluntary organizations are adopting important policy modifications and innovations and have made new organizational arrangements to facilitate the planning and

strengthening of nonformal education.

World Bank, for example, whose lending program had previously focused almost entirely on formal education projects, has now committed itself to major support of nonformal education projects over the next five years. Likewise, UNESCO, long the apostle and defender of formal education, has been giving more attention and encouragement to nonformal education (specifically, work-related literacy training) through organized seminars, publications, and in its cooperative field work with UNICEF, while UNICEF has increased its help and emphasis on nonformal education by giving almost total educational support to Indonesia at the request of the Indonesian government. In numerous countries, USAID is actively supporting a variety of nonformal educational projects and is conducting extensive research in this area. In addition, organizations such as the International Labor Organization, the Food and Agriculture Organization, and the World Health Organization, long extensively involved in nonformal education in their respective fields, lately have been critically re-examining their previous policies and conventional 'models' in light of critical studies in this field and are making substantial changes in them. Finally, World Education is sponsoring a number of functional literacy and family life education programs in Africa and Asia.

La Belle (1976) describes recent developments in the area of literacy. He points out that the armed forces, ministries of education, municipal and state agencies, and many private organizations have been carrying out literacy campaigns, particularly in Latin America for a number of years. For example,

in Ecuador, the National League of Newspaper Writers began a literacy campaign in 1942 and subsequently, the government passed a literacy law in 1944. The University of Massachusetts, with support from USAID, has implemented an extensive and comprehensive nonformal educational program in Ecuador, designed to raise the level of consciousness of the rural poor, through the use of various games based on the principles and concepts of nonformal education as set forth by Paulo Freire. Other countries in Latin America and the Caribbean also began literacy campaigns in 1944, and in the summers of 1942 and 1943, school teachers in the Dominican Republic were used to teach reading, writing, and arithmetic. However, La Belle points out that the little evidence available indicates that these early efforts were not very successful.

Evans (1976) mentions one example of a successful literacy campaign, launched in Cuba in 1961, that was to develop the "New Socialist Man". This program was successful because of the relative ease of travel and communication on the island, the existence of only one language, the density of the population, the limited goal of literacy equivalence to only first grade level, and the level of literacy in the country prior to the campaign. Other examples of a successful large-scale literacy programs are MOBREAL in Brazil, JAMAL in Jamaica, and the Thailand functional literacy program.

Throughout the world the educational arena has been characterized by sweeping attempts to renovate and expand on-going and long-standing adult education programs. Clearly, nonformal education is not new and has, in fact, been in existence since the

stone age, but what is new is the conception of nonformal education as a new force through which educational and socio-economic change is believed to occur at both the individual and societal levels, and the vision of it as an exciting new strategy for combating poverty, ignorance, inequality, ill-health, and oppression (Bock, 1976).

Concerning the scope of existing programs, Coombs (1976) states that: "There are a far larger number and variety of nonformal education programs in virtually every country, including the poorest, than anyone would believe until he starts to count them". For example, in Columbia alone there are over 10,000 nonformal education programs and activities (Adams, 1975). Coombs points out, however, that most nonformal education programs are small in scope and serve only a tiny fraction of the total potential clientele that could benefit from them. In most instances even large-scale, nation-wide programs, such as agricultural extension, health and family planning, and literacy programs are benefiting but a fraction of those they are meant to serve.

Countries with a strong tradition of private voluntary organizations (generally truer of Anglophone than Francophone countries, with Hispanic-speaking countries falling in between) are likely, according to Coombs, to have impressive numbers of privately sponsored nonformal education programs. Although they are small in scope, focusing on limited areas, they have a good record of success, are more likely aimed at helping the poorest of the rural poor, and are more likely to be multipurpose and community-based than the government-sponsored programs.

The principal funding agencies for many of the nonformal education programs in developing countries are the United States Agency for International Development (USAID) and the World Bank. With much soul-searching and thoughtful analysis of alternatives for helping to improve the living conditions of the rural poor, these sponsors have funded a number of nonformal education programs in the fields of agriculture, family planning, health delivery systems, trade training, and other fields related to rural welfare (Niehoff, 1977).

For each program area, there are a number of specific goals and objectives of nonformal educational activities, which vary from program to program, but all of which are for the purpose of rural development. The development of goals and objectives or the setting of priorities for nonformal education programs is based upon the learning needs of the clientele populations. In describing the educational crisis of today, Coombs (1976) illuminates the learning needs of the rural poor in terms of how to "eke out a living in an economy that offers very limited opportunities", how to "rear, nurture, and protect a family in a hostile and insecure environment", and how to "play constructive roles in the development and progress of the local community and nation".

#### Typology of Programs

With the abundance, diversity, and complexity of nonformal education programs in virtually every developing country in Asia Africa, Latin America, and the Caribbean, there can be no one typology of programs to characterize nonformal education

activities. The literature was found to contain a number of classifications of nonformal education programs, which varied according to such factors as program sector, educational goal, development goal, and educational technology of programs. Brembeck and Thompson (1973), for example, present a classification of nonformal education based on activities related to participation or non-participation in the labor force:

1. Activities related to development of skills and knowledge of members of the labor force who are already employed:

- agricultural extension
- farmer training centers
- rural community development services
- in-service training in manufacturing and commercial enterprise as well as government agencies
- labor education conducted by trade unions
- apprenticeship arrangements
- most "learning-by-doing" activities in trade, marketing, cooperatives, and social and political organizations

2. Activities designed to facilitate access to employment:

- youth brigades
- village polytechnics
- counseling
- vocational training in the military
- other programs to build skills for entry-level jobs

3. Activities not specifically related to labor force:

- adult literacy programs
- nutrition and health clinics
- homemaking classes
- family planning
- wide-range of political education schemes; e.s., radio programs, newspaper, speeches, discussions

Coombs and Ahmed (1974), on the other hand, have grouped nonformal education activities into three categories based on (1) the educational needs for rural development; (2) approached to rural extension and training; and (3) training programs, designed to provide skills for specific clientele populations. Each of the three categories are outlined below:

1. Educational Needs for Rural Development:

- a. General or Basic Education: literacy numeracy, and elementary understanding of science and one's environment, etc.
- b. Family Improvement Education: designed to impart knowledge, skills, and attitudes useful in improving the quality of family life on such subjects as health and nutrition, homemaking and child care, home repairs and improvements, family planning, etc.
- c. Community Improvement Education: designed to strengthen local and national institutions and processes through instruction in such matters as local and national governments, cooperatives, community projects, etc.
- d. Occupational Education: designed to develop particular knowledge and skills associated with various economic activities and useful in making a living.

2. Approaches to Rural Extension and Training:

- a. The Extension Approach: emphasizes the communication of information about innovative techniques or technical practices.
- b. The Training Approach: emphasizes systematic and deeper learning or specific basic skills and related knowledge.

- c. The Cooperative Self-Help Approach: emphasizes bringing about changes in the rural people themselves--through self-discovery and initiative, leading to self-help and self-management.
- d. The Integrated Development Approach: emphasizes a broader view of rural development and its coordination under a single "management system" the essential components (including education required to get agricultural and rural development moving.

### 3. Training Programs:

- a. Programs to provide farm families with ancillary skills for home improvement and better farming, and for earning extra income through sideline activities.
- b. Programs to provide rural young people with employable skills for off-farm use.
- c. Programs to upgrade and broaden the skills of practicing artisans, craftsmen, and small entrepreneurs.
- d. Integrated training and support programs to promote small industry and other nonfarm rural enterprises.

Lowe (1975) discusses the following five types of programs designed for the educationally underprivileged in developing countries: (1) functional literacy, (2) cultural literacy, (3) community development, (4) mass education campaigns, and (5) vocational training:

#### (1) Functional Literacy

The term 'functional literacy' has been defined by John Bowers, a literacy specialist formerly with UNESCO, as: "comprehensive education and training for illiterate and even semi-literate adults, with a literacy component

built in". Because, in practice, the major UNESCO-sponsored pilot experimental programs are 'work oriented' "the term functional literacy has come to mean not literacy that is functionally related to, or aims to promote, technical/vocational training, but the whole amalgam or combined programs of technical/vocational training-cum-literacy". Lowe summarizes the preconditions essential for launching literacy programs as follows:

There must be an adequate supply of the appropriate reading material; an active continuing education program making full use of the mass media and general education programs; specially trained personnel in appropriate numbers with the requisite skills and experience; a high degree of coordination of the activities of all the agencies concerned with national and local development-planners, agricultural extension officers, community development offices, health education officers, mass media producers and so on; an abundant supply of teaching aids and primers; particular attention paid to the educational needs of women; and finally a thorough-going evaluation of each and every scheme.

(2) Cultural Literacy

Paul Freire devised the instrument of 'cultural literacy' to bring about a change which enables the rural and urban poor to become conscious of the social environmental forces that determine their mode of life and to become sufficiently motivated and skillful to influence those forces. In Freire's method, the preliminary stage is for the coordinator to identify the words most commonly used by the group, revealing their constant pre-occupations,

anxieties, and aspirations. The second stage is to select specific words which will be discussed in a group dialogue. Selection is made according to three criteria: phonetic richness, phonetic difficulty, and word content. The next stage is to discuss the actual problems of the participants. Because of the possibility of social action resulting from the participants' emphasis on those aspects of life which call for change, "the method is clearly most efficacious when the public authorities are themselves keen to encourage or at least are not resistant to community initiatives".

(3) Community Development Programs

The purpose of community development programs is to enable communities to formulate their own needs, to identify available resources, and to take remedial action in so far as they can while drawing the attention of the authorities to the measures that it alone is able to take. A practical program might begin with a self-survey of the community, an examination of living conditions, an analysis of employment openings, and a critique of public services. Because community development not only forces people to learn but enables them to apply what they learn to actual conditions, it is considered a highly effective form of education.

(4) Mass Education Campaigns

In a few countries, notably China, Cuba, and the United Republic of Tanzania, it is believed that the only effective

solution to the problem of reaching the educationally disadvantaged is to conduct a nation-wide campaign supported by all the available organs of information and calling upon the educated to serve as volunteer organizers and teachers. The approach of a campaign is to choose one of several critical national problems and to stimulate grass-roots discussion about it, deciding what is wrong and proposing remedial measures. The guiding formula is listen/discuss/act. The critical component in these mass education campaigns is the local study groups who listen to a half-hour radio program, study groups who listen to a help-hour radio program, study an accompanying printed hand-out, consider the problem in the local context and decide what practical action should be taken.

(5) Vocational Education

The essential purposes of vocational training are (1) to enable individuals to acquire and keep up to date qualifications, which will enable them to earn a decent livelihood; and (2) to ensure that the manpower requirements of the national economy can be efficiently satisfied. Lowe points out that in several countries, vocational training has become a major governmental concern for two principal reasons: the pursuit of social equality and the need for workers to adopt to changing conditions of employment. To be socially equitable, Lowe mentions three conditions that are indispensable for national vocational training schemes: (1) they must be available to everyone (to

the uneducated as much as to the educated). This implies the existence of an efficient and nationwide counseling service; (2) paid educational leave must be a right enshrined in law and not an option controlled by employers; and (3) those undergoing training require a subsidy not only for themselves, but for their families.

Ahmed (1975) provides the following categories for nonformal education programs:

(1) Agricultural Extension:

Agricultural Extension is the most common type of nonformal education in the rural areas of the developing countries, and it deals with the most important economic activity of these countries: agricultural production. Other activities include credit, research, agricultural cooperatives and training workshops.

(2) Occupational Training Programs:

A large assortment of nonformal occupational training programs exists in most developing countries. A majority of these programs are concerned with nonfarm artisan, crafts, and skill training. There are, however, farmer training centers, other organizations that concentrate on agricultural training, and still others that combine agricultural training with other kinds of skill training. Some of these offer initial training to youths seeking to enter an occupation; others are for

upgrading and supplementing skills to those already employed (Ahmed, 1975).

(3) Literacy Programs and Basic General Education:

Almost all developing countries have small or large literacy programs for adults and out-of-school youths. The education provided here is the general acquisition of knowledge for particular subgroups in the population. This includes, for example, various community programs of instruction in health, nutrition, family planning, cooperatives, and the like.

(4) Multipurpose Community Improvement:

There is a long tradition in most developing countries of various small and scattered local self-help programs, originating either through dedicated and inspired local leadership or through the sponsorship of a national movement with socio-economic goals. These multipurpose community improvement programs play important educational roles either directly, by including specific educational activities related to the development goals of the programs, or indirectly, by promoting new behavior attitudes through their development activities. They may cover housing, road construction, general construction, or water improvement.

(5) Mass Media Programs:

Educational approaches relying primarily on mass media technology - radio print, television and

film, which can appeal to, can reach and teach people with little or no formal education living in remote and underdeveloped villages.

Etling (1975) refers to several varieties of nonformal programs:

One typology divided NFE programs into the extension approach, the training approach, the cooperative self-help approach, and the integrated development approach (Swanson, 1973, p. 15). Another list of NFE program categories includes adult education, continuing education, on-the-job training, accelerated training, farmer or worker training, and extension service. Sheffield & Diejomaoh (1972) in their survey of NFE in Africa, divide programs into the following categories: industrial and vocational pre-employment training; industrial and vocational on-the-job and skill-upgrading training; training programs for out-of-school youth in rural areas; training programs for adult populations in rural areas; and multi-purpose training programs. Another classification mentions indigenous learning systems, imported models, and recent homegrown innovations (Coombs, 1973, p. 41).

The above typology of programs indicate various types of categorization of nonformal education programs. One breakdown is as good as the other. The main difference lies in the grouping of these learning and development activities into categories which are indicative of the local situation, the target population, different priorities, approaches and the prevailing characteristics at the time of implementing the programs.

#### Methods and Approaches in Program Implementation

Methods, approaches and materials used in the implementation of community education programs have recently received

considerable attention, both by researchers and practitioners in the field. (Evans, 1976; Srinivasan, 1977; Coombs & Ahmed, 1974, and others.) Most of the emphasis has been in the utilization of technology, particularly mass-media, in the delivery of educational programs for rural development.

Evans (1976) points out that:

The technology of education is the choice and manner of combining the various input for educational process: human resources --both trained and untrained, physical resources ranging from texts to electronics hardware, to buildings, and the organizational structures which provide the framework within which the educational process takes place.

In analyzing the characteristics of technology in various nonformal education settings, Evans found one dominant theme emerging which encompasses many of the more specific characteristics: 'locus of control' --where does the locus of initiative, problem definition, solution, administrative control lie--at the center in a government ministry or educational organization or at the local level with the learning groups in the villages? A second major component of analysis in nonformal education programs involves a set of questions about the choice of human resources to be used and the ways in which they will be combined with each other and with the communication technology being used.

With the perspectives presented above, Evans groups the types of educational technology which have been applied to nonformal education programs into four general categories:

## I. Large-Scale Communications Media

### A. Broadcast Television

- (1) One system is designed to bring televised curricula to the formal classroom. Supplementing broadcast television usually takes the form of general cultural programming of opera, ballet, classical music, or other cultural events.
- (2) Another form of educational broadcast television is more structural and is often related to university courses for adults—ranging from language learning, to science, to structural university extension service courses for which the participants can get credit.
- (3) Adults may come to the classroom of a formal school to watch television and are supervised and helped by regular teachers.

### B. Radio

- (1) Instructional radio: located primarily within schools, is the most didactic, and is characterized by a centrally designed and implemented curriculum. Centralized broadcasting is used to reform the system by providing a new curriculum which is received everywhere simultaneously. This model treats all learners as equivalent and functions throughout the system.
- (2) Radio school: (study group approach)—is characterized by organized groups of listeners directed by a trained leader. Primary content emphasis is on basic adult education, backed up by written text material.
- (3) Rural radio forums: (discussion/decision group)—consists of a group of villagers who meet once or twice a week to listen to a radio program and then discuss topics such as the use of fertilizers, as well as questions and answers derived from a discussion in a previous week. Participants are typically better educated members of the village, and the convener of the group is usually a village leader or someone from the village trained outside.

The major source of impact of the radio forums seems to be the group discussions after the broadcast and, where present, the public commitment of both individuals

and the group to take some action after the discussion. This model represents a significant shift of the locus of control towards the learners, which gives them the autonomy to proceed or not with relevant local action.

- (4) Animation: (discussion/participation group)--a strategy which grew out of a French tradition of group dynamics and has been applied extensively in Francophone Africa as well as influencing Freire and the approach which he developed originally in Brazil. The basic techniques involve the development of a trained cadre of discussion leaders who promote a non-directive dialogue in their development problems for themselves and putting those problems in the larger context of their society. The final step involves action to solve problems. The major difference between the radio forum approach and the animation technique is the shift of the locus of control of problem definition from the central staff to the community itself.

The role of radio in the animation approach is secondary or supplemental, and the major process is initiated by the animateur in the community. Success depends not on the radio, but on the process within the community groups.

The essential aspect of this model is the focus on the community-based problem definition, rather than dissemination of information on problems as defined by experts.

## II. Small-Scale Communications Media:

- A. Visual Media of film and video tape: The locus of control is almost entirely with the community members who control the steps of: (a) deciding on the location, setting, and topic for any filming being done; (b) viewing all raw footage or tapes and expressing an opinion about what needs to be added or deleted; (c) actively participating in whatever editing is done; and (d) approving any product that is used outside the community. The resultant process has a significantly enhanced probability of producing learners who are able to apply their learning to their own lives.
- B. Audio Media of cassette recorders: This medium is more distributive and offers the listener some control over the situation in which the listening takes place. Pre-recorded messages on health,

nutrition, or farming practices are combined with portable tape players and extension workers to form an information distribution network.

The use of cassette recorders enhances the effectiveness of the field worker because more families can be reached and because accurate technical information can be presented on tape without having to rely upon a clear explanation from the field worker. There is, however, little evidence of efforts so far to have the users themselves make tapes to share their reactions and their statements of the problems.

### III. Small-Group Instructional Technology:

- A. Use of pictures or sketches: A common technique in the Freirean approach to consciousness-raising through literacy. Scenes depict the local setting and contain some aspect of contradiction. For example, a scene may be a large "hacienda" of the landowner in the background with small "campesino" houses in the foreground.
- B. Games and simulation: As a technology developed for dialogue, games offer a practical way of implementing the pedagogy advocated by Freire. Games serve to pose a problem based on an abstraction of the real world. The learner must take a role, infuse it with his own life experience, act on his own behalf, and learn to see himself as having some control over the outcome of events, at least in the limited context of the games. The locus of activity is with the learner. Once started, the locus of dialogue and the search for understanding lies within the group of players and their interaction. The capability of the facilitator, however, in the long run, is the key to much of the effectiveness of the gaming approach.

There are three categories of games:

- (1) Fluency games: common instructional games used for simple skill training in many elementary school classrooms. The purpose is to provide entertaining ways to practice simple skills of numeracy and literacy. In a rural setting, they help to promote a sense of confidence as villagers cope with market mathematics or learn to recognize numbers and basic words. Games usually consist of dice or cards, pin ball machines, roulette wheels, etc. Advantages lie in its simplicity of form and flexibility in application so that the same format can teach a variety of related skills and be used in an infinite variety of ways.

- (2) Role playing games: involve villagers in acting different situations common to their everyday life. For example, a villager might play the role of a landowner collecting from a tenant.
- (3) Simulation games: involve creating life-like situations drawn from the life of the villager, but is presented in a condensed and more manageable form. It is foreshortened so effects on long-term cycles in agriculture can be understood. Major forces causing problems in the community are dramatized and complex reality is simplified to promote analysis and understanding. Simulations allow communities to deal with issues indirectly which might otherwise be too explosive to discuss.

#### IV. Folk Media:

Traditional drama, song, dance, puppetry, and storytelling have all been the target of exploratory efforts to use what has been called the 'expressive culture' in the development process.

Folk media have a number of attractive characteristics that make them ideal for bridging the gap between the individual learners and the modern, impersonal mass media. They are characterized by a high degree of credibility with their audiences, they are well-accepted, have long-established histories, have many forms--some of which traditionally include improvisation and the inclusion of topical messages--and they provide a link between modern and traditional cultures. As an interpersonal communication channel, they are potentially powerful molders of attitudes and behavior, and they serve to interpret the unknown, to provide spiritual guidance, and to assist a community in merging new practices with existing beliefs and structures.

The major goal of folk media is to get community members to express themselves through drama, puppets, or song on issues of importance to them. As a relatively new and underdeveloped form of technology in nonformal education, folk media will be receiving increased attention in the future as a creative combination of traditional communication and processes which help rural people cope with the pressures which are changing their way of life.

Evans concludes that the issues raised in discussion of the four categories above will likely provide the framework

for future development of the use of technology in nonformal education. He states that "the most basic issue is the emerging importance of the organizational technology as the key to the effective use of communication technology".

In describing three alternative approaches to the traditional information approach (Problem-solving approach, Projective approach and Expressive/Creative approach or 'Self-Actualizing' approach), Srinivasan (1977) reveals a progression from a subject-centered or didactic model at one end of the continuum to a learner-centered and expressive model at the other. The models are arranged along a continuum to enable one to understand the differences among them more clearly, but none of the models are mutually exclusive.

- (1) Problem centered approach: also referred as problem-solving model, focuses the learning experience on the problems of the learner's daily life in order to demonstrate that the knowledge acquired has immediate relevance and usefulness. Group discussion and critical thinking assume great importance. Since full and active personal participation in discussion is more likely when basic trust has been established, a confidence-building relationship between teacher and group is of essence.
- (2) Projective approach: focuses on probing the full dimensions of the problems as perceived and felt by the learners, through discussion of the behavior of characters in a short story, drama (radio, TV, comic strip), involved in a critical incident. The story drama, etc., as a projective device, has a built-in advantage in

that it depicts growth, movement and interaction, and if it is open ended, it invites personal analysis of the process by which conflict builds up or might be resolved.

- (3) Self-actualizing approach: also referred to as expressive/creative model, Srinivasan found difficult to define. To illustrate, therefore, some of the purposes and thinking underlying the self-actualizing process, she has delineated four generalized characteristics of the process of self-actualized learning:
- (a) Learner centered and learner generated process
  - (b) Peer learning
  - (c) Facilitating a positive self-concept
  - (d) Creative imagination

Coombs and Ahmed (1974) approach the implementation of nonformal education programs from a strictly rural development perspective. They present four approaches to rural extension and training and identify them as: (1) the extension approach; (2) the training approach; (3) the cooperative self-help approach; and (4) the integrated development approach.

- (1) The Extension Approach: involves the utilization of extension methods, with the conviction that "an independent agricultural extension service can, by itself, help transform a static subsistence economy into a dynamic market economy while improving the quality of family and community life". Thus, it is a pedagogical and educational method that is a self-contained theory and

strategy of rural development. This approach emphasizes the communication of information about innovative technical practices with regard to agriculture, by means of demonstrations, exhibits, workshops, and so forth.

- (2) The Training Approach: emphasizes systematic and deeper learning of specific basic skills and related knowledge. Training programs typically involve assembling learners in a training center - often a residential center - for a sustained period of instruction broken down into a planned succession of learning units combining theory and practice. It involves a narrow, self-contained view and strategy of development, based on the premise that knowledge and skills by themselves can precipitate the process of development.
- (3) The Cooperative Self-Help Approach: this process of self-discovery and initiative, leading to self-help and self-management, starts with the assumption that the complex process of rural transformation must begin with changes in the rural people themselves-in their attitudes toward change, in their aspirations for improvement, and above all in their perceptions of themselves and of their own inherent power, individually and collectively, to better their condition.
- (4) The Integrated Development Approach: emphasizes a broader view of the rural development process and its coordination under a single "management system" of the essential components (including education)

required to get agricultural or rural development moving. The management system may be highly authoritarian or it may be designed to provide at least eventually an important role for local people in planning, decision-making and implementation. Its cardinal emphasis in all events is upon the rational deployment and coordination of all the principal factors required for agricultural and rural development.

### Summary

The literature on the theory and practice of nonformal education in less developing countries reveals a number of recent trends and influences affecting the use of nonformal educational techniques as tools for rural development. Some authors have referred to a continuum of approaches—ranging from a didactic, subject-centered approach to a learner-centered, dialogical approach—as the central issue underlying the implementation of nonformal education programs. The development of goals and strategies for nonformal education has shifted from an emphasis on macro-level development to micro-level social change efforts involving local participation and collective action.

Nonformal education, therefore, has been viewed as an innovative response to the urgent need to expand learning experiences and opportunities for the rural poor. Despite the recent upsurge of interest and participation in nonformal education among national governments, external assistance agencies, and voluntary organizations, Coombs (1976) concludes that "the subject is still largely in the talking stage."

There are, however, a variety of typologies presented in the literature that characterize nonformal education activities. To highlight those types of programs which have been receiving the most practical attention in the field, a comprehensive classification system has been developed for the purpose of

this study. The case studies and evaluations of nonformal education programs, presented in chapter VI, are grouped according to this classification system, which encompasses most of the content that has been discussed by various proponents of nonformal education. The program types include:

1. Agricultural Extension and Farm Related Programs
2. Occupational Training Programs
3. Literacy Programs
4. Family-Life Improvement Programs
5. Multi-Purpose Community Development Programs.

The variety of methods, approaches, and materials used in the implementation of nonformal education programs discussed in this chapter can be summarized in the following outline of nonformal educational delivery systems:

I. Technological Approach

1. Large-Scale Communication Media: broadcast television and radio.
2. Small-Scale Communication Media: visual media of film and video tape; and audio-media of cassette recorders.
3. Small-Group Instructional Technology: pictures and sketches; games and simulation.
4. Folk Media: drama, song, dance, puppetry, and storytelling.

**II. Andragogical Approach**

1. Problem-Centered Approach
2. Projective Approach
3. Self-Actualizing Approach  
(Expressive/creative Approach)

**III. Rural Development Training Approach**

1. Extension Approach
2. Training Approach
3. Cooperative Self-Help Approach
4. Integrated Development Approach

## CHAPTER V

EVALUATION

A cursory review of the literature reveals that community education as defined by legislators and educators holds certain characteristics in common with all forms of education and educational programs as well as with social action programs, social welfare programs, community development programs, and other programs all of which have been implemented to meet the needs of various communities and populations. This is found to be true in both the United States and abroad.

This review, therefore, is not limited to the literature on the evaluation of community education programs. Rather, it includes the evaluation literature on a number of the programs listed above since it may be possible to adapt the various forms of evaluation designs and methodologies in these areas for use in the evaluation of community education programs in the rural areas.

The review is by no means complete. The field covered by educational and social programs is too vast and the evaluation techniques of these programs too numerous.

Overview

Different nations around the world have had an increased awareness, over the last decade or two, of the needs and social problems that affect various sectors of the world's population. Programs such as social welfare programs, health programs, community action programs, social action programs, and community action programs have been instituted. At the same time, there have been "innovative" programs, experimental programs, programs aimed at young people, older people, rural populations, dropouts, inner-city children, suburban populations, and so on (Weiss, 1972; Cohen, 1970; Mondale, 1972).

The rapid expansion of these programs, however, has not been accompanied by systematic and formal evaluation efforts.

The establishment of these programs has brought about much concern from educators, funding agencies, policy makers and citizen groups over the need to assess their effectiveness. Increased pressures have been placed on program planners and managers to be accountable to their sponsors and taxpayers and to demonstrate how well they are doing (Ahola, 1975; Santallanes, 1975; Forest, 1973; Tripodi, et al, 1971). In spite of the great demand, most educators, including community educators, are still not involved in the formal evaluation of their programs (Farmer, 1975; Santallanes, 1973, 1975; Guba, 1969; Cox, 1975; Stufflebeam, 1975).

Several reasons have been given to explain this lag between program expansion and evaluation efforts. The most common reason given is that most educators do not have adequate understanding of, and have not yet become proficient in, the formal methods of evaluation for accountability and decision making (Guba, 1969; Farmer, 1975; Cohen, 1970).

Forest (1973) asserts that the traditional methods of evaluation have foiled educators in their attempts to assess the impact of their programs. This, she believes, is true because of the little relationship that exists between the basic philosophies and concepts professed in evaluations and the actual evaluations practiced by educators. Farmer (1975) also suggests that there is a belief on the part of some educators that the worth of the program can be determined on a subjective and impressionistic basis. Guba (1969) and Stufflebaum (1971) point out that educators are suffering from an evaluation illness which is indicative of evaluations failure. Some of the clinical signs of this illness are:

1. Avoidance--Everyone avoids evaluation unless it becomes painfully necessary.
2. Anxiety--Anxiety stems from the ambiguities of the evaluation process.
3. Immobilization--Despite the opportunity that has existed for four or more decades, schools have not responded to evaluation in any meaningful way.
4. Vague Guidelines--The lack of meaningful and operational guidelines for evaluation is notable.
5. Misadvice--Evaluation consultants, many of whom are drawn from the ranks of methodological specialists in educational research, fail to give the kind of advice which the practitioner finds useful.
6. No Significant Difference--Evaluation is so often incapable of uncovering any significant information. Over and over, comparative studies of alternatives in education have ended in findings of "no significant difference."

Guba (1969) gives seven reasons why evaluation has failed in practice. These include the lack of adequate definitions of evaluation; lack of adequate evaluation theory; lack of knowledge about decision processes; the microscopic focus (i.e., the individual, classroom, school building, etc.) rather than macroscopic (e.g., school district, the state, or national network) of evaluation studies; lack of trained personnel; lack of criteria, and the lack of mechanisms for organizing, processing and reporting evaluative information.

Guba does acknowledge the great efforts that have been made by authors such as Stufflebeam (1966, 1967), Stake (1967), Scriven (1967), Cronbach (1963), Suchman (1967), Simon (1965), Ott (1967), Bloom (1956), Quade (1967), and others who have worked in the development of methodologies to modernize the theory and practice of the evaluative art. He, however, urges that these efforts be vigorously pursued and made operational as soon as possible.

Several authors, including Fish (1975), Stufflebeam (1975), Santellanes (1973, 1975), have noted that one of the major weaknesses in the field of community education is the lack of effective evaluation system. Fish indicates that the lack of criteria to serve as a measure of program success is compounded by the fact that community education takes different forms in different communities.

Lockheed et al (1977) also report a paucity of literature on the economic evaluation of nonformal programs. This is so in spite of the extensive theoretical literature on the economics of education. They identify several methodological problems which are frequently encountered in the economic evaluation of nonformal education. These include the problem of identifying all inputs and related costs, and the difficulty in isolating the impact of nonformal education from the influence of other factors. Another major problem mentioned by Ahmed (1975) is that benefits from a program can neither be completely identified nor estimated precisely, thus making it extremely difficult to arrive at any definitive estimate of benefit-cost ratio.

Several methods have been proposed and used in the evaluation of education and social programs. In the field of education, the bulk of the literature deals with the evaluation of required, formal education. There is very little with respect to the evaluation of nonformal educational and optional programs of community schools (Santellanes, 1973). In fact, "prior to 1964, the objects of evaluation in education consisted almost exclusively of small programs concerned with such things as curriculum development or teacher training," (Cohen, 1970).

The evaluation methods that have been proposed for educational and social programs are numerous and they vary widely. They range from the informal impressionistic inquiry of an individual or a team to the highly structured,

formal, or experimental approach. Cohen (1970), Weiss and Rein (1969), Kenworthy (1976) and Young (1976), offer new insights into the whole area of evaluation. Among the alternatives offered is the use of broad systems of social measurement such as census data or a system of social indicators for the evaluation of large-scale and broad aimed programs. Kenworthy suggests the application of the General Systems Theory to evaluation.

There is a lot of controversy on the methods to be used in evaluation studies. Not only do the program elements and the community context have a great influence on these methods, but the most basic and fundamental issue is how investigators conceptualize evaluation.

#### The Concepts of Evaluation

The foundation of the current evaluation movement was laid through the work of Ralph Tyler in the 1930's. Merwin (1969) points out that the concepts of evaluation have changed over the years. They have changed in relation to such issues as who is to be evaluated, and how the evaluations are to be made.

The early concept of evaluation equated it with measurement (Ebel, 1972). However, because evaluators were slow to perceive that evaluation was more than measurement, this narrow concept of evaluation dominated the field of education for years. Although efforts were made, starting from the mid-1890's, to survey the inputs and processes of education, very little was done on the assessment of educational outcomes (Andersson et al, 1973).

Currently, the literature is filled with an abundance of definitions and conceptual frameworks for conducting evaluation. The various ways in which evaluation is conceptualized are summarized below. It is recognized that in any evaluation study, several of these concepts may be combined, but,

for the purposes of this presentation we regard them as being discrete.

### Evaluation as Measurement

The early concept of evaluation as measurement was built directly on the scientific measurement movement (Guba, 1969). From this perspective, emphasis is on the construction of objective and reliable instruments for use in the formal educational system (Ebel, 1972; Stufflebeam, 1971). The major disadvantages of this concept is its narrow focus, the amount of time and cost required to produce instruments, the obscurity of criteria used for constructing instruments and the elimination of all variables for which measurement instruments have not been successfully constructed (Stufflebeam, 1971).

### Evaluation as a Decision-Making Tool

Most authors agree that one purpose or role of evaluation is to provide information for decision making about programs. Authors like Guba (1969), Cronbach (1963), Suchman (1970), Alkin (1969), and Santellanes (1975) see it as a basic purpose. Scriven (1967) identifies this concept as formative evaluation. He emphasizes that this is not the definition or goal of evaluation but one of its roles. This role calls for a proactive application of evaluation where information is provided to decision-makers to make decisions about their programs. The information is used as feedback into the program and serves to improve the product (Papagiannis, 1975; Stufflebeam, 1971, 1975).

Alkin (1969) agrees with this when he says that "Evaluation is the process of ascertaining the decision areas of concern, selecting appropriate information and collecting and analyzing information in order to report summary data useful for decision-makers in selecting among alternatives."

Stufflebeam (1971) identifies four settings in which decision making can occur, namely:

The metamorphic setting which is characterized by utopian activity intended to produce complete changes.

The homeostatic setting which is characterized by restorative activity aimed at the purpose of maintaining the normal balance in the system.

The incremental setting--characterized by developmental activity having as its purpose continuous improvement in the system.

The neomobilistic setting--characterized by innovative activity for inventing, testing and diffusing new solutions to significant problems.

In each of these settings he identifies four types of evaluations which correspond to four types of decisions. This is known as the CIPP model and is described as follows:

Context-- serves planning decisions by providing information to assess needs, problems and opportunities to assist in forming objectives and setting program priorities.

Input-- serves decision about program designs and resources by providing information to identify and assess alternative plans to be chosen to achieve selected objectives.

Process-- serves decisions that control program operation. It provides feedback into the system as a means of process control.

Product-- serves decisions about program results and recycling. It assesses attainment during implementation as a means to quality control.

Delargy (1975) sees the ultimate objective of evaluation as being able to help decision makers develop the best programs or process possible. He describes evaluation as part of a process which includes establishing goals, assessing needs, identifying resources and restraints, formulating specific objectives and priorities, generating alternatives, analyzing alternatives, selecting alternatives, developing and implementing process objectives and modifying the whole system when necessary.

### Evaluation as a Tool for Accountability

This is another role of evaluation which Scriven (1967) calls "summative evaluation." It is retroactive application of evaluation that provides information after program effort and implementation decision have been made (Stufflebeam, 1975). The evaluation information in this case is usually used by funding agencies and outside interest groups to hold the service agents--program planners and implementors--for the extent and quality of their work. It also aids the program planners and implementors to describe and defend their work.

### Evaluation as Operational Analysis

The major concern in this conception of evaluation is the extent to which program goals are achieved (effectiveness) and the amount of resources used to produce a given unit of output efficiency (Ferman, 1969). This conception is similar to what Tripodi et al (1971) term "differential evaluation." This is a management technique in which the emphasis is on the amounts and kinds of program activities (effort); the extent to which the goals are achieved (effectiveness) and the relative costs--expenditure of manpower, time, money, physical facilities--for achieving program objectives (efficiency). This procedure is used in the three phases of program development, namely, program initiation, program contact and program implementation.

### Evaluation as Judgment

This conception of evaluation is quite controversial since the problem of the standards to be used has to be contended with. Phillips (1968), Ebel (1965), Stufflebeam (1971, 1975), Stake (1967), Suchman (1970), Mondale (1972) all agree that evaluation should be concerned with judging, determining or assessing the value, merit, worth or quality of something.

According to Stake (1967) the two basic acts of evaluation are description and judgment. He states that three bodies of information should be tapped:

- (1) Antecedents--the conditions existing prior to teaching and learning which may relate to outcomes;
- (2) Transactions--encounters between all participants of the program (i.e., students, teachers, authors, administrators, etc.);
- (3) Outcomes--measurements of the impact of instruction on teachers, administrators, counselors, students, etc.)

He identifies two bases for judging the characteristics of a program with regard to the three bodies of information. One basis is with respect to absolute standards as reflected by personal judgment. Another is with respect to relative standards as reflected by characteristics of alternative programs.

Papagiannis (1975) also emphasizes the judgmental aspects of evaluation, contending that "evaluation leads to and includes judgments, a process whereby we determine worth. If there are no judgments, no application of values to facts, or no comparisons of the information against normative criteria, evaluation has not taken place".

#### Evaluation as a Research Process

In this conception of evaluation the emphasis is on the methods used to determine the extent to which a planned program achieves a desired change in a given population. The logic is to relate components of programs to changes in personal attributes of the population. Evaluation activities in this case rely on established standards of methodology developed in the social sciences. The classical and quasi-experimental designs, using control of matched groups, are commonly used. Suchman (1967) calls this type of activity "evaluative research." The purpose of the experiment is to assist the extent

to which program efforts and intervention strategies are related casually to the accomplishment of program goals.

The classical design calls for the random assignment of people to either an experimental group who participate in the program, or to a control group. The control group either receives no efforts from the program, or, receives a placebo program, or, a regular program rather than the innovative one. The target population is determined and sampled using probability techniques. Objectives of the program are specified and standardized and the criterion variables, considered relevant to effects of the program are defined in measurable terms. The experimental and control groups are then measured before and after the program intervention and compared with respect to change on the criterion variables.

When ideal experimental arrangements are not possible, quasi-experimental designs are usually used (Suchman, 1967; Campbell and Stanley, 1963; Weiss, 1973) In this case, the comparison group, similar to the experimental group on many relevant variables, is selected after the experimental group has received program intervention; or a group similar to the experimental group but which receives less frequent program efforts rather than no program intervention is selected. Authors such as Houston (1969) strongly advocate its use because of the general advantages attributed to experimental designs in general.

Although this concept of evaluation does not differ methodologically from social science research, Papagiannis (1975) points out that it does differ from social science research with respect to purpose. Evaluation serves to provide serviceable solutions for decision-makers, whereas basic research serves a broader, often less practical purpose.

Several authors, including Stufflebeam (1969), Guba (1965), and Weiss

and Rein (1969) have vigorously attacked the utility of the experimental model. For example, Houston (1969) cites Stufflebeam's objections, including the following:

- the model fails to provide for continual program improvement.
- it inhibits improvement, since internal validity requires that the treatment not be modified during evaluation.
- the model provides useful information only after a program has run full cycle; it is almost useless, however, in planning and implementing a program.
- experimental control is generally unavailable, since randomization is rarely feasible outside the laboratory.

Houston, however, states that most of the objections to the experimental model come about as a result of incomplete understanding or unskillful application of the model.

Weiss and Rein (1969) point out several technical and administrative difficulties involved in using the experimental approach especially in the evaluation of broad-aim programs. Since the present study is concerned with the evaluation of broad-aimed programs, Weiss and Rein's characterization of broad-aim programs and their own to the experimental approach will be given in detail. These include the following:

1. The problem of developing criteria. There are so many different ways in which changes related to broad-aim may take place that a very great number of indicators must be included in the study. Too, because of the complexity of program goals, it is often difficult to identify what accounts for any changes.
2. The communities in which these programs are found essentially are uncontrolled. Communities are open to all sorts of idiosyncratic experiences and it will be difficult if not impossible to find a control group.
3. The treatment is not standardized--the form taken by a broad-aim program differs in different communities.
4. The experimental design discourages unanticipated information.

5. Goals that can be operationalized become the leading goals to be evaluated.
6. Conflict over program development--experimental design requires that the program hold still while it is being evaluated whereas program administrators seek to modify the program for maximum effect.

Some investigators, according to Rossi (1972), are of the opinion that there should be an abandonment of any attempt to evaluate broad-aimed programs on the grounds that their aims are not specified clearly enough and their activities are unsystematic. For such programs, it is argued, evaluation is both impossible and irrelevant. Therefore, any decision about them should rest on something other than empirical grounds.

#### Evaluation as Analysis of Form

The emphasis in this view of evaluation is on an analysis of the logic and assumptions of the program designed to achieve some specific impact. This is what Scriven (1967) refers to as "intrinsic evaluation" in which the criteria used for evaluation refer to the program itself. It involves the assessment of the content, goals, attitudes of the participants in the program, etc. and the criteria used are usually not operationally formulated.

Ferman (1969), also a proponent of this view, puts it, "the interest is focused on the blueprint to be used by the program. . . in the light of current knowledge, both pure and applied, about the processes and mechanisms involved in the program."

Stake's (1967) method of processing descriptive data by finding contingencies or relationships among antecedents, transactions and outcomes is an example of this type of evaluation.

#### Evaluation as a Process of Determining if Objectives (goals) Have Been Met

This concept of evaluation grew out of the work of Tyler and others in

connection with the popular "Eight-Year Study on Evaluation" (Guba, 1969). Tyler (1950) defines evaluation as "the process of determining to what extent the educational objectives are actually being realized by the program of curriculum and instruction." Authors like Barr (1953) and Weiss (1972) agree with this concept of evaluation.

How objectives should be classified and stated has been a subject of discussion among several educators. It is generally accepted that objectives should:

- describe an outcome and not a process,
- describe both the behavior to be displayed (form) and the content in which it is to occur,
- be stated at a level of specificity that makes it possible to recognize the behavior should it be displayed.

A distinction is usually made between the general objectives which are the broad goals of a program and the specific objectives which are the narrower day-to-day goals (Reemers and Gage, 1943).

Stake (1970) emphasizes that objectives are high value targets and their formulation implies priorities. Objectives, he states, "presumably identify outcomes that someone thinks are most worthy." Expressed objectives are considered by him to be more important than any other objectives. Guba (1969) identifies some disadvantages that accrue as a result of this notion of evaluation, including the following:

- the criteria for defining the objectives are often mystical and remain essentially undefined

- by placing a major emphasis on outcomes, evaluation becomes a post facto or terminal technique where data become available only at the end of the program.

Scriven (1967) also disagrees with this concept of evaluation. He feels that instead of evaluation just being concerned with how well a curriculum or a program achieves its goals, it should be concerned with how good the curriculum or the program is. He states: "it is obvious that if the goals (of a program) aren't worth achieving, then it is uninteresting how well they are achieved. . . thus evaluation must include as an equal partner with the measuring of performance against intended goals, procedures for the evaluation of the goals."

#### Evaluation of Congruence

Another meaning attached to evaluation is the analysis of the relationship between the proposed strategies and the actual operation of a program. This is what Provus (1971) calls discrepancy evaluation. The emphasis is on the degree of consistency between the ideal and the actual. When discrepancies are identified, efforts are made to find out why, to identify corrective actions possible and to select the best corrective action. This procedure is applied to each stage of program development.

Stake's (1967) second method of processing descriptive data, namely, finding the contingencies between intended and observed antecedents, transactions and outcomes falls under this category. "Congruence," he points out, "does not indicate that the outcomes are valid, but that what was intended did occur."

#### Evaluation as a Systems Assessment

This is a relatively new concept of evaluation. It grew out of the

realization that "programs fulfill other functions and have other consequences besides achieving official goals and that these are worthy of study" (Weiss, 1972). Weiss mentions several authors (Etzioni, 1960; Schuberg, Sheldon and Baker, 1970; Parsell, 1966 and Levison, 1966) who have proposed this idea.

Weiss and Rein (1969) point out the importance of perceiving intervention strategies as attempts to change a system. The systems perspective, they indicate,

- alerts the investigator to the need to identify the forces which are mobilized by the introduction of a program
- alerts the investigator to the possibility that important forces which have few interrelationships with the existent system may appear on the scene
- urges the investigator to think of an action program as one more input into the system
- prepares him to deal with the way the program makes a place for itself, the new stresses it introduces, and the way the system accommodates itself to the program, as well as to address himself to the issues of what the individual and instructional benefits the program brought into being.

Kenworthy (1976) sees Community Adult Education as a "social system whose relationships and attributes may be analyzed for its openness (an open system being one in which inputs are received from and outputs are released into its environment--House, 1973); its wholeness, (i.e., every part of the system is so related to every other part that a change in a particular part causes a change in all other parts and in the whole system--Hall and Fagen, 1956) and compatibility to its environment."

Using ideas derived from the General Systems Theory, she identifies the following dimensions as a means of checking several aspects of the system: "(1) gaps in the linkage among parts of the system, (2) a lack of consensus about purpose, (3) incomplete or insufficient information flow or retrieval,

(4) blockage in communication resulting in conflict, (5) unbalanced concentration of power, (6) unforeseen change in the context which requires adjustment on the part of the system." Her evaluation framework has components abstracted from the conceptual system of Community Adult Education. The components include the following:

1. The Adult Learner/Instructor Relationships involve the adult learner's attributes and competencies, the needs and goals of adult learning, and the changing role of the instructor as the learners assume more of the responsibility for their own learning.
2. Resource Support Relationship includes the human and non-human resources of the system which affect the activities but are not a part of the permanent or formal system of organization.
3. System/Subsystem Relationships deal with the operational system of the Community Adult Education organization. These are the subdivisions which are a part of the regular or permanent establishment. They include the management staff, funders, board and government.
4. Information/Knowledge Relationship involves the processes of organizing, sending and receiving information.
5. Environment Relationships include the context or situational description of the learning system and involves the other institutions and systems which share that situation with the Community Adult Education organization.
6. Values/Program/Goal Relationship is concerned with the way shared values are clarified and made explicit.
7. Decision-making/Evaluation Relationship corresponds to the guidance system that provides the capacity for present and future performance. Analysis for feedback collected by the evaluator is interpreted in the selection of alternatives for action by the decision-makers.

#### Evaluation as Analysis of Cost

The purpose of this type of evaluation is to relate programs to program outputs. Tripodi et al (1971) distinguish between three types of cost accounting techniques, namely,

- (a) cost-benefit techniques for evaluating the relative effectiveness of alternative programs, strategies, etc. in terms of cost;

- (b) cost-outcome technique which is the determination of the minimum costs that are necessary to produce a given outcome, and
- (c) operation research which provides alternative ways of coordinating program activities within an organization, i.e., assignment of personnel scheduling, allocation of resources, choosing alternative programs, etc.

Lockheed et al's (1977) state-of-the-art paper on cost analysis in non-formal education, and Ahmed's (1975) book "Economics of Nonformal Education" are excellent sources for methodological issues, practices and problems encountered in this type of evaluation. Lockheed et al stress the difference between cost-benefit analysis and cost-effectiveness analysis. Although both types of analyses relate cost of resource inputs to given outputs, cost-benefit \* relates costs to monetary outcomes, while cost effectiveness analysis relates costs to quantifiable but non-monetary outcomes. Both types of analyses presuppose that there is an "output" which can be produced through a combination of various "inputs." They see as a first step in analyzing costs, an identification of all inputs required in terms of physical units. The second step requires an answer to the question "cost to whom?" Ahmed indicates that another question that needs to be asked in addition to "cost to whom?" is whether 'cost' refers to money cost or to cost in terms of real resources used.

The categories of costs include the following:

- hidden costs which are in the form of donations from outside agencies, borrowed facilities, volunteers, "free" radio time, etc. (these costs are usually overlooked in most cost analyses);
- joint costs: isolation of the costs for non-formal education programs which are designed as a complement for formal education;
- capital costs: cost items incurred for uses beyond the current period (e.g., land furniture, buildings, etc.)
- operating or recurrent costs: costs associated with items normally used up continuously or are associated within the fiscal year (e.g., salaries, textbooks, materials, supplies, etc.).

Each cost component is categorized as fixed or variable depending on whether or not the cost item is independent of the level of output. The total cost ( $C(Q)$ ) is separated into fixed cost ( $F$ ) and variable cost ( $V(Q)$ ) and the equation relating the three is known as the cost function. In most of the cost analysis of nonformal education programs, the nature of the cost function is not known and therefore there is little information available for predicting the total cost, the average cost ( $C(Q)/Q$ ) and the marginal cost ( $dC/dQ$ ).

Although Lockheed et al state that benefits should be in monetary terms, Ahmed indicates that all types of benefits should be considered. The problem of estimating all types of benefits is very complicated. One has to contend with what constitutes benefit as well as the nature of those benefits. Benefits, Ahmed points out, can be economic (e.g., increased earnings) or non-economic (e.g., greater efficiency in the management of home and family), individual or social, short-term or long term, etc. Too, these benefits are not mutually exclusive; for example, individual benefits are included in social benefits.

### Summary

The above discussion of the various concepts of evaluation suggests that there is no one single way of evaluation. The methods or frameworks for evaluation may have different degrees of usefulness depending on the function, or purpose, to be served by the evaluation study. The definitions given to evaluation vary. Some refer to just one of the concepts described, while others use a combination of various concepts. Of the definitions encountered in the literature, perhaps the most comprehensive, which takes into consideration the role, process and use of evaluation, is one given by Stufflebeam (1975).

He defines evaluation as the

"the process of delineating, obtaining, and applying descriptive and judgmental information concerning some object's merit; as revealed by its goals, structure, process and product; and for some useful purpose such as decision making or accountability."

In the evaluation of broad-aim programs, several authors have suggested the abandonment of classical and quasi-experimental approaches. A systems approach which allows the evaluator to identify relationships in the educational system and to take into consideration the environmental context is strongly advocated.

More attention is being drawn to the need to develop cost analytic techniques to assess costs and to relate these costs to outcomes especially in the area of nonformal education. The present practice of estimating and predicting costs based on cost models developed for formal educational programs has not proved useful.

#### Methodologies Commonly Used in Evaluation Studies

Methodology is the strategy for the evaluation, and it refers to the methods used to gather and analyze information. Papagiannis (1975) points out that all methodologies reflect the perspectives of those carrying out the evaluation; therefore, they are usually designed to gather information to conform to the requirements of those perspectives.

Several factors have been identified in the literature which affect the form methodologies take. Two factors are the investigator's concept of what evaluation is (Glaser and Backer, 1975) and the design (the plan and structure) of the evaluation study. Factors that affect the design of the evaluation then directly affect the methodology. These include the types of people who may have need of the information (social policymakers, civic

and community leaders, administrators of funding agencies, local administrators, school administrators, boards or ministries of education, advisory councils, program personnel, program participants, people in the community at large, theorists of social scientists, or any combination of the above); the use of the evaluation findings (Stufflebeam, 1975); the kind of information needed (Wood, 1975); when the information is needed (Wood, 1975); the degree to which the program has developed (Farmer, 1975; Steele, 1973); the availability of resources for the evaluation; who is to conduct the evaluation (Wood, 1975); the type of program to be evaluated (Weiss and Rein, 1969; Reischen, 1953; Fish, 1975); and the context or environment in which the program functions--that is the socio-economic, cultural, religious, political and geographical environment (Farmer, 1975; ICED, Ball State University).

The methodologies that are used in evaluation are the same as those in the social sciences. The following are summaries of those data collection and measurement techniques commonly used:

1. The Delphi Technique - This technique is a method of developing and improving group consensus. It was originated by the Rand Corporation for the purpose of using group information more effectively. The Delphi technique involves soliciting opinions from participants on specified topics (needs, prediction, etc.). Participants are then asked to evaluate the list with respect to its importance, chance of success and so on. A summary list of responses from all participants is compiled and distributed to participants whose views are in the minority. They are asked to revise their opinion or to indicate their reasons for remaining in the minority. This process is repeated until a consensus is reached (Cox, 1975; Anderson et al, 1975).

2. The Historical Approach - The historical approach emphasizes a review of past events either to explain something in the present or to predict something in the future. It relies on the use of historical and archival documents and records. It is helpful in examining social action programs or educational programs with development aims since these programs do not lend themselves to more empirical experimental techniques.

The major disadvantages encountered in the use of these programs lie in the fact that the documents used are usually prepared for purposes other than evaluation; documents may be incomplete, and there may be some bias on the part of the recorders which brings in the problems of validity and reliability.

3. Subjective Measurement Methods - These methods are based on unstructured observations of events, open-ended interviews, self-reporting diaries, opinions and judgment of the people involved about various phases of the program. The approach takes into consideration the participants' views and interpretation of events in the program.

The use of direct observers requires that observers be thoroughly familiar with the purposes of the investigation, and have experiences which would make them sensitive to the dimensions under consideration.

Some disadvantages of the use of subjective methods are that it assumes a high level of awareness on the part of the subjects and it depends on the accuracy of the respondents' memories.

One specific form of observation is the participant observation. Because of its uniqueness from other forms of subjective measures, it will be described separately.

4. Method of Participant Observation - This is a method of gathering assessment data through a continuous observation of program staff and/or service

recipients while the program is in operation.

The participant observer is disguised as a legitimate member of the program staff or as a service recipient. The observer seeks to understand how the members of the program come to think, feel and to act as members of the program. The observer can be described as a measuring instrument to study the program. The method allows the researcher to record behavior as it occurs and, therefore, does not depend solely on informant's accuracy in describing his own or others actions.

Several disadvantages have been identified in the use of this method:

- it is difficult to quantify;
- it is possible for the researcher to lose his objectivity by taking on the biases of staff and/or recipients;
- an identified participant observer may cause staff and/or recipients to behave atypically; and
- it is time consuming and expensive.

(Festinger and Katz, 1966; Glaser and Backer, 1973)

5. Objective Measurement Methods - These methods are dependent on mechanical devices such as structured interviews, questionnaires, tests, scales, and so on.

Some advantages of their use are that responses can be summarized, standardized and generalized, they are easy to administer, and they are objective.

Their disadvantages include the validity and reliability problems involved in their construction and their ability to measure. Too, structured instruments are likely to overlook or ignore activities or actions that were not intended by program planners or anticipated by evaluators.

6. Goal-Attainment Scaling Techniques - Goal attainment techniques were developed by Thomas J. Kreskin and Robert E. Sherman of the Hennepin County Mental Health Service in 1968, and have been used in a number of mental health

programs. Briefly, it is an outcome evaluation technique that permits clients or program participants to be involved in setting their own goals and specifying the levels of success. The extent to which each goal has been met is ascertained by clinicians and therapists, and, a summary score is computed indicating overall treatment success across goals (Stelmachers et al, 1972; Walker, 1972).

7. Case Study - The purpose of the case study technique is to describe a program as it unfolds in the process of development. It usually uses both qualitative (observation, informal interviews, records, etc.) and quantitative (questionnaires, rating scales, etc.) data. The information collected is used in relation to a conceptual framework developed by the investigator (Tripodi et al, 1971).

8. Surveys - This method is used when descriptive information is needed from a target population with respect to a program. Once the target population is identified, a representative sample is selected and information gathered from them through the use of questionnaires and interviews.

### Evaluation in Community Education

There is little published literature on the evaluation of community education programs. Cox (1975), in his review of the literature, found that although a number of educators were conducting formal evaluations of their programs, the results of these evaluations have not been published.

A 1975 survey of institutions of higher education (regional centers of community education programs), and, state and local agencies, indicate that the extent to which evaluation is carried out varies from institution to institution. Most state educational agencies, for example, do not conduct evaluations of their own community education programs, or the programs in the local agencies. The few state agencies involved in any kind of evaluation perform on-site evaluations, or depend on the local agencies to conduct their own self-evaluations. Institutions of higher education, generally, provide guidance to local agencies with regard to self-evaluations. Their evaluation strategies consist of the assessment of their own performance in relation to the goals and objectives of the programs. Generally, questionnaires and interviews are used to gather information on participant and user satisfaction, personnel performance, program performance, and program outcomes (Boyd, 1975).

To date, there are very few evaluation designs and strategies in community education that go beyond counting (i.e., the number of programs, the number of participants, the number of teachers, etc.). Cox (1975) gives examples of the evaluation studies sometimes found in the field of community education. They include the assessment of the consequences of adopting community education programs (Decker, 1971); determining the availability and the extent of use of public school facilities for community education

programs (Otto, 1972); assessing the impact of the community education programs on individuals (Doggett, 1971); and assessing the effect of community education on the community (Hiemstra, 1970).

Santellanes (1973) provides a method for conducting the evaluation of optional school programs which follows closely the techniques used by the National Council for Accreditation of Teacher Education and the North Central Association of Colleges and Secondary Schools. The method, which makes use of questionnaires, has three phases. Phase I is a self-study technique developed to help communities take an indepth look at themselves. It is intended for use by community councils and administrators. The twelve areas considered are:

1. The need for Community-School partnership
2. Communication with the community
3. Community-School communication
4. School participation within the community
5. Community participation within the School
6. Community-School self-analysis
7. Community-School cooperative planning
8. Community involvement in program development
9. Community improvement through interagency collaboration
10. Utilization of existing human and physical resources
11. Institutional structure and attitudes, and
12. Toward a sense of community.

Phase II is also a self-study technique but designed to measure the attitudes of principals, faculty and staff members, agencies/organizations, and community residents toward the optional school programs of community schools.

This phase also includes counting activities and participants in the optional program. The measurement and attitudes and tabulations of activities and participants provide a basis for determining progress of the program. Phase III is designed to be used only for those programs with stated goals and objectives. It consists of an outside evaluation team assessing the progress of the optional program in terms of goals and objectives.

Ollie (1974) describes a method for assessing the effectiveness of a community education program. The effectiveness is examined in terms of the impact of the program on existing social conditions, social agencies (both public and private), physical facilities, and overall community organization. The survey method is used in the evaluation. Data collection methods include personal interviews to determine opinions, attitudes and trends in thinking; review of records and documents maintained by various organizations and agencies, including welfare department, manpower agencies, juvenile court, etc., and the examination of census data.

Cox (1975) used the Delphi technique as an evaluation tool. The community education programs are evaluated by focusing in on forty-seven variables which are grouped into five categories, namely,

1. increase in level of funding for community education from other sources as a result of state funding;
2. increase in citizen participation in decision-making in councils, advisory committees and task forces;
3. increase in the number of government, volunteer, recreational/cultural, business and industry, and religious agencies, institutions and groups using school facilities to offer programs and services;
4. increase in educational, recreational, and cultural programs;
5. increase in the number of additional number of hours that school facilities are used after they become community schools.

Cox mentions Turnidge (1973) whose study indicates that factors for successful program implementation include:

1. dedication of the leadership in attempting to carry out the philosophical concepts of community education;
2. having a coordinator trained in community education;
3. willingness of groups outside the school to support proposed program;
4. quick mounting of activities for all ages;
5. willingness of the school to share decision-making responsibilities with program participants;
6. open support of the program by the school board, and
7. close and harmonious working relationships between the coordinator and the total school staff.

Investigators like Stufflebeam (1975), Wood (1975), Burton et al (1976) and Knox (1973) suggest evaluation methods which follow closely the developmental stages of the program (context, input, implementation/process, outputs/outcomes/products). Burton et al's model for evaluating development programs is based on Stufflebeam's CIPP model. The model, known as the Inductive System-Process has three major activities:

- I. Negotiating the Scenario (meeting with interest groups, practitioners, and administrators) to determine:
  - A. Purpose of evaluation
  - B. Role of evaluator in relation to project director and personnel
  - C. Judgements required in terms of the type of information that should be collected
  - D. Criteria needed to assess goal attainment
  - E. Evidence
  - F. Procedures for making judgements

## II. Evidence Collection (from CIPP Model)

- A. Defining Context - includes establishing base lines from which planned attempts to achieve goals can be measured. Inputs, activities, and people involved in the program or pre-planning phase, and reactions to the pre-planning state-of-affairs are also included.
- B. Documenting the Inputs - includes activities initiated and resources used to bring about change and to achieve goals and objectives.
- C. Documenting the Processes - includes the ways the program is implemented. How planning is done, decisions made, communication channels established, policies interpreted or changed, etc.
- D. Documenting the Outputs (results) - includes consideration of inputs, activities, people involved, reactions, KASA changes, practice changes, and ultimate results of practice changes.
- E. Summarization and/or Analysis of results.

## III. Judgements/Evaluation - includes process of setting value on data collected. It can either be descriptive (providing evidence of what occurred) or evaluative (making judgement of the adequacy of what occurred). Includes:

- A. Determining value and meaning of data
- B. Making judgements
- C. Making decisions/recommendations
- D. Revising the ongoing program and/or activities (for formative evaluation) or recycling of program and/or activities (for summative evaluation)

Application of the ISP Model to evaluate the organizational adequacy and operation of the delivery system and to evaluate the attainment goals and objectives in the individual projects (Title V, Rural Development Act, 1972)

Wood describes the three stages commonly used in the evaluation of community education programs as follows:

1. Evaluation of the Setting--seeks information such as:

- individual needs
- problem areas
- relevant attitudes
- potential problem-solving resources
- human and organizational relationships

Community survey is one technique used: volunteer input utilized for door-to-door canvass. Evaluation scope (i.e., classroom, neighborhood, county, etc.) depends upon the particular problem being studied.

2. Evaluation of Action Alternatives--describes what a given situation is, what values and forces are at work and what alternatives are available. Involves chief organizational officers and governing board, the community education leader, and advisory council.
3. Evaluation of Performance--(sources of demand for results of this evaluation are local institutional management and funding agencies located outside the community). Involves specifying goals and objectives, in measurable, behavioral terms.

Objectives should be specified in terms of input/output--what the program director and staff intended to do/responses expected from the clients.

Knox's framework for program evaluation includes context, inputs, process, activity outcomes, judgements, and the application of the evaluation findings. Specific areas and variables to be considered are:

#### I. Context

- A. Examination of setting, i.e., program rationale
  - history
  - current demands and constraints
  - expectations about future development
- B. Deciding on the most important evaluation emphasis
- C. Selecting evaluation models and procedures
- D. Identifying the context in which the evaluation will occur

#### II. Inputs

- A. Participant characteristics (biographical, status, ability, personality, roles.
- B. Material inputs (content goals, performance goals, teacher requirements, participant expectations, community factors, activity.
- C. Staff inputs (roles, characteristics, support inputs, activities.

#### III. Process

Description of intended and achieved transactions that bring together inputs to produce outcomes (teaching-learning process)

Interactional settings (individual, temporary, organizational  
in-service, community)

#### IV. Activity

Examination of:

1. goals and policy
2. program development
3. teacher selection and supervision
4. learner selection
5. teaching-learning transaction
6. learner support and advisement
7. support staff selection
8. administrator selection
9. maintenance of personnel
10. adaptation and change
11. facilities and equipment
12. materials
13. coordination and communication
14. financing

#### V. Outcomes

Immediate: direct changes in learners' knowledge, skills, or attitudes

Remote: benefits to community

##### A. General impact

1. progress participants make
2. proportion who complete
3. adequacy of progress

B. Participant satisfaction - How do students feel about what they have received? Is it adequate?

C. Content mastery - test scores on standard equivalency exams

D. Personality - improved self-image and greater social awareness

E. Work related - increased income, higher employment rate, reduction of welfare rolls

#### VI. Judgements

A. About the extent the intended was achieved in terms                    uts,  
 process, and outcome

- B. About needed changes in activities or expectations
- C. About results involving internal and external comparisons
  - 1. internal judgement--extent to which actual inputs and processes contribute to the achievement of the outcomes and whether the outcomes (benefits) compare well with the inputs (costs)
  - 2. external judgement--analysis of the results of the specific program against external standards

#### VII. Application of Findings

- A. Validity--valid results from well planned and implemented evaluation procedures increase potential use of findings
- B. Communication--results should be relogged to the learner, teacher, administrator, and policy-maker in an understandable form
- C. Commitment--meaningful involvement of users of valid results (in the evaluation process) so that commitment to their use is increased
- D. Timing--result should be provided during a time period in which the results are feasible
- E. Implications--include in the evaluation report
- F. Time--should be allocated for the study and use of evaluation findings
- G. Assistance--technical help should be available and used for additional analysis and interpretation of findings

Ploch (1976) identifies five factors that led to the success of a university based project designed to:

1. inform citizens of distressed communities of choices confronting them in improving the local economy
2. involve citizens in the process of selecting and pursuing one or more of the alternative choices, and
3. demonstrate that a university can be an effective catalyst and resource in mobilizing talent and resources to help solve basic economic problems in two communities.

The factors are:

1. the ripeness of the communities for economic development

2. the use of a team of competent retired business executives to help in gathering data;
3. the cooperation of city managers who were dedicated to economic development for cities;
4. the close working relationship between the town manager and the project director, and
5. the involvement of talented and dedicated students from the University and other staff members who devoted extra time to the project.

Shortcomings of the project include the following:

1. the project goals were too ambitious to achieve given the time frame of the project;
2. the objectives were too narrow, involving only economic development, without considering other aspects of community development;
3. there was a lack of direct contact with the citizens of the community although their input was received through the mail questionnaires.

Watkins and Miller (1974), through the use of the differential evaluation framework, identifies the following factors as important for the success of a community development project:

1. integration of participants into the sharing and participatory process;
2. limited and less complex or more realistic objectives;
3. congruence of expectations of project results between conference participants and project planners
4. the ability to recognize and deal with conflict between various interest groups;
5. adequate funding for task force activities, and
6. establishment of the legitimacy of a new community service program with the already existing institutions which are involved in the project.

Hampton (1973) describes a four-step process for evaluating continuing education programs:

1. Evaluating Reaction of Participants (attitudinal response to program)
2. Evaluating Learning Acquired (quantitative results obtained)
3. Evaluating Behavioral Change (systematic appraisal of on-the-job performance before and after educational experience)
4. Evaluating Program Results (difficult to obtain, so author recommends focusing on evaluating reactions, learning, and behavioral change)

Phases of evaluation presented were: 1) Pre-conference (determining participants' needs and wants and planning to meet those needs); 2) On-going (mid-point evaluation to provide information for redirection); 3) Terminal (at the end to reflect accomplishments in relation to pre-established criteria); and 4) Follow-up evaluation (questioning supervisor, participants, etc. six months after completion of program to determine individual changes or changes in work efficiency).

Steele et al (1973) use Bennett's (1976) framework to examine the impact of extensions programs. They emphasize three categories within the framework-- end results, reactions and people involvement. There are six major benefit areas in relation to the end results. These six areas are considered to be global since they are assumed to deal with major human endeavors where extension contributes. The Table on Page 94 shows the type of information gathered in each of the three categories.

Turner (1976) describes a procedure for evaluation which is used in USAID projects. It relies on the establishment of a logical framework. This framework, he indicates, assists the program designer (and evaluator) to:

TABLE I

<u>Hierarchy Categories</u>	<u>Information</u>
END RESULTS	Six benefit areas (socio-political, social-psychological, physiological and health, environment and natural resources, economic, educational)
Practices, knowledge, attitude, skill, change, aspiration	Open end questions where respondents gave examples.
REACTIONS	Judgments of helpfulness of various contacts Judgments on specific criteria Judgments of effectiveness in serving selected clientele.
PEOPLE INVOLVEMENT	Number, percentage, characteristics of those who had contact with Extension
Activities	Way in which people had had contact with Extension
Input	Program Inventories

1. define a causal hierarchy of project inputs, outputs, purpose and higher goal in measurable or objectively verifiable terms;
2. hypothesize the causal (means-end) linkages between outputs, purpose and goals;
3. articulate the assumptions about external influences and factors that will affect the causal linkages, and,
4. establish the progress indicators which will permit subsequent measurement or verification of achievement of the defined outputs, purpose or goals.

Although the logical framework is primarily a planning device, it is valuable in the reexamination of the original design of the ongoing projects, and in evaluation. The major task of the evaluation being to verify the hypotheses set up in (2).

In addition to the elements of the logical framework, information and action such as the following are also included for the evaluation:

- collecting baseline data;
- review of prior experience with similar projects elsewhere
- provision for experimental, quasi-experimental or other evaluation approaches
- establishment of schedules for recurring evaluations with timing keyed to decision making.

Turner indicates that any meaningful evaluation of development projects should take into consideration (1) changes in the country socio-economic setting which may have significantly affected the project and (2) a reexamination and the clarification of the existing project design. Changes in the socio-economic setting include:

1. changes in the nature and magnitude of the problem to which the project is addressed;
2. the continuing validity of original feasibility data and estimates;
3. changes in physical and environmental conditions;

4. changes in demand and other economic variables;
5. changes in attitudes and other social variables;
6. changes in (host) country development policies and priorities.

Most evaluation frameworks encountered in the literature are designed to assess the immediate impact of specific projects. Bernhart et al (1975), however, have developed an evaluation methodology for assessing program goals beyond the specific project level. The methodology is an extension of the AID evaluation system and it is designed to find ways of measuring "the impact of AID assisted activities on people, institutions and policies, and analyzing the criticality of the AID assistance to national development objectives." The evaluation design is based on a hierarchy of goals which are assumed to be causally related to each other. The goal hierarchy is subdivided into four goal levels and nine impact classes.

	<u>Goal Level</u>	<u>Impact Class</u>
GOAL	I. Institutional	1. Institutional Support 2. Institutional Outputs
	II. Sector System	3. System Support 4. System Outputs
	III. Target Group	5. Target Group Activities 6. Target Group Outputs 7. Target Group Benefits
	IV. National	8. National Group Benefits 9. Societal Benefits

The model for evaluation design based on the goal hierarchy can be used for both formative and summative evaluation of achievement or project objectives at each goal level, as well as case-by-case evaluation of individual projects, groups of projects or comparisons of similar projects. An instrument, which is based on this model provides for:

- identification of the activity being evaluated;
- description of expected goals within the Goal Hierarchy;
- identification of the indicators of goal achievements;
- a time dimension which indicates when results may be expected and when they be verified;
- description of the way indicator data is to be obtained; and
- data on AID and non-AID inputs into goal supportive programs.

Farmer (1975) describes a model for evaluating broad-aimed programs non-formal programs. The model makes use of a decision-making process known as mixed-scanning. The process is attributed to Etzioni (1968). In this approach, the program and its environment are initially viewed rapidly to identify factors which would affect the evaluation process. Once these factors have been identified, dimensional sampling (Arnold, 1970) is used to select a representation from various groups within the population for information. The evaluation process consists of four phases. The first phase involves the consideration of the philosophy, values and assumptions underlying the program; the degree of program development; and the program context. The contextual factors which include the socioeconomic, cultural, religious, political, and geographical aspects of the environment help to determine what can realistically be expected. Phase II considers alternative implementation of the program in terms of intended and observed inputs and transactions.

Phase III considers program consequences. The three main areas of focus are:

1. the acquired knowledge, skills, and affective behavior (attitudes, beliefs, values) that the learner has gained from the program;
2. the way the learner has utilized acquired knowledge, skills, and the affective behaviors in dealing with everyday life;
3. the consequences attributable, totally or in part, to the acquisition and utilization of knowledge, skills, and affective behaviors.

Furthermore, the consequences are classified according to whether or not they were intended or anticipated. The evaluative data on the consequences of the program are obtained by analyzing reports, administering pre and post test to learners, field observation, and field interviews. Farmer emphasizes that in examining the consequences of a program the evaluator needs to identify verifiable (ones with empirical evidence) and imputed evidence (those which interviewees attribute to the program).

Cohen (1970) and Young (1976) are among those who suggest the use of social indicators in evaluation. Young emphasizes that "no matter how else a (broad-aim) program is evaluated, it must eventually face up to the question of whether life has improved for the people involved and for others." She sees social indicator research as the final step in the evaluation. The current practice of comparing different programs when each has been individually evaluated in its own terms is strongly criticized. Social indicators, Young points out, provides a common set of terms in which one can evaluate all (broad-aimed) programs with respect to "how each improved social welfare, in what span of time, for what population and at what cost." Proponents of this approach, however, provide no guidance as to how this is to be done. Sheldon and Freeman (1970) cautions investigators about the use of social indicators in evaluation. Shifts in the behavioral conditions of population over time, they point out, prohibit the opportunities for controlled analyses via social indicators. In their opinion, the emphasis on social indicators as a way of measuring program efficiency hinders the development of adequate evaluation techniques for (broad-aimed) programs.

### Summary of Evaluation in Community Education

In general, there has been little published literature in the area of evaluation of community education. Most of the

evaluation studies have concentrated on detailed descriptions of the activities of the programs rather than the assessment of the effectiveness of the program. An increase in the requests for more rigor in the area of evaluation, especially in community education, has brought about an articulations of strategies, frameworks and designs for evaluation.

In addition to significant variables related to specific projects, some general factors that have been identified to have direct bearing on the success of all types of programs include an examination and analysis of the community and program context (e.g. program history and rationale, and the socioeconomic, cultural, religious, political and geographical aspects of the environment); dedication of the leadership to carry out the philosophical concepts of the program; integration of participants in the decision-making process; adequacy of funding; linkages with existing programs, and communication patterns among the program participants.

Bernhart et al goes beyond the current practice in evaluation by focusing on the impact of programs beyond the specific project level. Their model allows for a careful analysis of impact at specified goal levels. The use of social indicators in evaluation has been advocated by some authors and criticized by others; a need for more research in this area is indicated.

## CHAPTER VI

CASE STUDIES  
AND  
EVALUATIONS OF COMMUNITY EDUCATION PROGRAMS  
IN  
LESS DEVELOPED COUNTRIES

This section contains data on selected case studies and evaluations of community education programs in less developed countries. These data are to provide the main empirical base for the conclusions of the literature review, and more specifically, for the selection of the descriptors, variables, and indicators presented in chapter VII. It was difficult to locate both specific case studies and the corresponding evaluation of the program. The review, therefore, contains evaluation studies, selected on the basis of the availability and accessibility of evaluation documents in the field of community education in less developed countries. Thus, it should be noted that most of the evaluation studies are of programs other than those presented in the form of case studies.

Case Studies

The case studies were selected on the basis of the following criteria:

1. Representation fo the five selected program areas:
  - a. Agricultural Extension and Farm-Related
  - b. Occupational Training
  - c. Literacy
  - d. Family Life Improvement
  - e. Multi-Purpose Community Development
2. Representation of selected countries in Latin America, the Caribbean, Africa, and Asia
3. Notability of programs (frequency of presentation and discussion in the literature)
4. Comprehensiveness of programs (broad-based, integrated, multi-purpose rural community education programs)

5. Similarity of programs to the community education programs in Jamaica (the proposed field testing site for the development and testing of the evaluation methods and instruments for rural community education programs)

A brief description of the selected case studies follows, with specific emphasis on the general purposes of the program, the basic approaches used, and any pertinent remarks concerning an assessment of over-all program results (Coombs and Ahmed, 1975; Ahmed, 1975; Neihoff, 1977; Lele, 1975; and World Education Report, Special Issue on Evaluation, 1977).

I. Agricultural Extension & Farm Related Programs:

In this category, programs such as agricultural extension, farmers training centers, agricultural cooperatives, ancillary skills training useful on the farm, and other farm and farm related training programs are included.

The Farmer Training Centers (FTC) in Kenya; The National Apprenticeship Service's (SENA) Mobile Training Program (Promocion Profesional Popular-Rural, (PPP-R) in Columbia; and The Office of Rural Development (ORD) program in Korea, are presented as representative case studies:

Farmer Training Centers (FTCs):

The FTCs originated in 1934 from a residential nonformal training center in Nairobi. Its approach became the model after which current FTCs in Kenya have patterned their programs since 1954, to provide short-term residential farmer training programs designed to improve agricultural practices and production and to provide refresher courses for agricultural field staff.

The professional staff includes a principal (assistant agriculture officer) who holds an agricultural diploma and agricultural and home economics assistants. The principal is responsible to the local district agricultural officer and to the head of the farmer trainee section in the Ministry of Agriculture.

Through the use of classroom lectures and practical field work experience, farmers are trained, primarily on single aspect of rash crop production or animal husbandry. FTCs have also been used by other government departments and agencies for their courses, including 4H clubs and cooperatives, and for chiefs, local leaders and community development workers.

Limited evaluation evidence shows that despite such problems as gross under-utilization of FTC capacity; difficulty in continuous provision of funds; and a high rate of staff turnover, more FTCs are being built in Kenya and in other parts of Africa; FTC farmers show a higher rate of adoption of recommended practices than other farmers, neighboring farmers are being influenced to become early adopters; and FTC farmers have higher cash incomes than other farmers.

The National Apprenticeship Service's (SENA) Mobile Training -  
Promocion Professional Popular - Rural (PPP-R) Program.

SENA was established in Columbia in 1957 to provide skill training for employed adults and adolescents aged (14-20). In 1967 SENA began a program called "Promocion Professional Popular-Rural (PPP-R) to provide short term, low cost skill training to farmers, farm laborers, rural artisans and small entrepreneurs within their own communities.

"Mobile Units" - traveling corps of instructors - were the means to bring training courses to rural parts. Instruction was practical, mostly demonstration and little lecture. Administratively, it is part of the Ministry of Labor, with regional offices for its rural areas.

The program demonstrates that it is possible to operate a large scale mobile training program that reaches isolated rural areas at relatively low cost. However, some constraints are unwillingness of competent staff to stay in rural areas; unappropriateness of selection design and content of courses for each area; and lack of effective evaluation measures.

#### The Office of Rural Development (ORD) Korea

ORD was established in the early 1950's representing the so-called conventional model of agricultural extension. Its prime objective is to persuade and help farmers increase rice production by adopting improved technical practices, and secondarily, to improve rural family life by teaching home economics to women and offering 4-H type activities for young farmers. Conventional extension techniques and considerable mass media--radio, films, flip-charts, farm bulletins and journals and traveling libraries--are the methods used. In addition to budgetary constraints, ORD has problems with a high turnover of field staff because of unfavorable salary and work conditions, a decline in the quality of mass media, and lack of national and local coordination between ORD extension work and complementary support services. Nevertheless, on the basis of scattered circumstantial evidence, ORD's extension efforts seem to have

resulted in a steady increase in the nation's agricultural productivity and in improvement of family life and income.

## II. Occupational Training Programs

The programs in this category include trades training for rural youth; technical/vocational training; industrial pre-employment training; integrated training and support programs to promote small industry and other rural enterprises; and other work related and on-the-job training programs.

The Vocational Improvement Centers (VIC) in Nigeria; The Mobile Trade Training Schools (MTTS) in Thailand; and the Rural Artisan Training Centres (RATC) in Senegal are presented as representative case studies:

### Vocational Improvement Centers (VIC)

Vocational Improvement Centers, to upgrade the skills of working artisans and journeymen were established in Northern Nigerian States, with the first one opening in 1965. There are now 12 such centers (2 in each state) operating in various towns in Northern Nigeria.

The centers have no physical facilities of their own. All courses are part time and the method of instruction is lecture and practical shop training. The instructors are employed on part time basis from local private industry, government shops and the general and technical schools.

A follow-up study of VICS centers indicates that graduates, who passed the trade tests, and were in government services did enjoy a boost in their earnings. However, there was no clear evidence to reach solid conclusions about the effectiveness of the program.

### The Mobile Trade Training Schools Program (MTTS)

Initiated in the 1960's in Thailand, the MTTS was to provide skill training and improve employment opportunities for out-of-school rural youths and young adults, to meet the increasing requirements for semi-skilled and skilled workers foreseen in the national development plan.

This program is run by the Adult Education division under the Ministry of Education. It is mobile in the sense that after operating at one place for one to three years, the equipment and staff move to another place. The staff is made up of a principal and instructors who are graduates from technical institutes, or vocational teacher colleges. These schools offer vocational courses, such as dressmaking, automechanics, radio repair, typing, and the like. The method of instruction is lecture and practical work is emphasized.

By 1972, there were 54 MTTS schools located in rural towns and provincial centers throughout Thailand. The MTTS managers feel that it has been highly successful and want to expand it, with certain improvements. Critics question the desirability of offering standardized courses for the whole country and of offering particular courses for a given community without first making a reasonably systematic employment market study. They also criticize lack of sufficient follow-up to see whether and how farmer participants are using their training and what benefits have resulted.

### Rural Artisan Training Program (RATC)

The Rural Artisan Training Program is one component of a tripartite rural training system in Senegal established to train rural artisan-entrepreneurs to do any job the farming community may require in the way

of manufacturing or repairing farm implements or constructing houses for the farming community.

The program stresses minimum technical standards and the mastery of all types of operations that a rural craftsman may be asked to do. Lecture and shop work is the method of instruction and the instructors were skill worker level staff from vocational institutions; or apprenticeship from industry.

Follow-up studies indicate that 76% of the trainees are active in their trade, and are using the new skills acquired. They are earning about 50% more than before the training and that 1/3 of them are training apprentices which provides a certain multiplier effect.

Two problems encountered, however, were the difficulty in estimating demands of trained artisans, and determining the content and level of the training.

### III. Literacy Programs

Included in this category are adult education, basic education, functional literacy and cultural literacy programs. The National Literacy Programme (Jamaica); The Functional Literacy and Family Life Planning (Turkey) and the Thailand Project in Functional Literacy and Family Life Planning (Thailand) are presented as representative case studies.

#### National Literacy Programme - Jamaica

The Government of Jamaica established a National Literacy Programme in 1972 aimed at eradicating illiteracy within the shortest possible period, to improve the literacy skills of the adult population and to develop

human resources and so enable each adult citizen to participate meaningfully in the social, economic and cultural development of the country. The target population was all illiterates in Jamaica. The use of the media as teaching aids was implemented and not replacing face-to-face teaching, the use of instructional programmes on Radio and Television and the utilization of taped lessons on Audio-Cassettes were a valuable supplement to the work of the volunteer teachers.

The problems encountered were drop-outs among students and teachers, low quality of teachers, shortage of staff with specialized skills, lack of evaluation, inadequate office space and delays in the implementation of budgetary proposals forwarded to Government--all these were reported in 1973.

#### Functional Literacy and Family Life Planning - Turkey

The project began in July, 1971 and was sponsored by the General Directorate of Adult Education with World Education assistance for an initial 18 month period to help understand that the achievement of a balance between family commitments and resources is possible and lies in their own hands; and to help people attain a high enough level of literacy to reach out for better standards of family and community life. The target population was made up of people in small towns and villages. Curriculum was developed through a series of simple short-problem-dramas, centering on village, family and community life. The instructors were classroom teachers supplemented by visiting extension agents in the field.

Reports from teachers indicated that "learning was taking place" -- the learners were applying ideas assimilated in the classroom in their daily lives, adult learners have formed village producers' cooperative, have built better sanitary facilities, and adopted new farming techniques.

#### The Thailand Project in Functional Literacy and Family Life Planning

The components of this project were functional literacy aimed at educating the adults to live efficiently and productively. To identify and then eliminate obstacles to social and economic development in the learner's community, the program emphasizes 4 aspects of the human condition: 1) earning a living; 2) family economics; 3) health and family planning; and 4) civic responsibility.

The methodology included a problem centered approach, with heavy emphasis on group discussion and participation on a theme relevant to the subject matter; supported by illustration and photographs with suitable textual explanations on single cards; the cards are formed into a book by the participants.

Analysis of the first phase of the project indicated that reading capability increased and there was an upward trend in the mathematical skills. However, there were some constraints -- too much classroom discussion impeded advancement; inappropriate scheduling of classes -- (classes conflicted with busy cultivation months) -- led to irregular attendance; lettering on the cards too small; problems with physical facilities; and transportation problem to and from class for students, teachers and supervisors alike.

#### IV. Family-Life Improvement Programs

Family planning, child care; nutrition, health delivery; and other health related education programs are considered in this category. The Candeleria Project in Columbia; Village-Based-Family Planning in Korea; and the Poshak Nutrition Project in India are presented as representative case studies.

##### The Candeleria Project

The Candeleria Project was a pilot project in comprehensive health delivery with special emphasis on nutrition which operated from 1968 to 1973 in an area near Cali, Columbia. It was an integral part of the existing governmental health service and was approved by the Ministry of Health. University of Valle was used for training of the projects medical students. The project was supported by the Rockefeller Foundation and the purpose was to provide exposure of staff and students to the realities of rural communities in which their students would be involved -- to focus on problems of malnutrition (recuperation and food distribution) -- to design medical service programs on the basis that very few medical problems need the extensive knowledge and sophisticated skills of well-trained physicians to solve.

The target population was the rural communities and the mentors visited the families in their communities once every 2 months to look for evidence of malnutrition and other risk health conditions of the people and get information for questionnaires.

The follow-up study showed that there was a complete elimination of neo-natal tetanus; decrease of diarrheal diseases; decrease in overall

birth rate resulting from an increase in the adoption of family planning methods, and decrease in infant mortality. The levels of income and illiteracy remained static or worse after 1968. More food intake in quantity and quality decreased, but the prevalence of malnutrition was almost completely eradicated by 1973.

#### Village-Based Family Planning in Korea: The Case of the Mothers Club

The Korean national policy on family planning was promulgated in 1961 as a part of the national economic development plan. The primary tasks of field workers were to inform and educate eligible couples regarding family planning and to recruit acceptors and, to provide technical assistance to mothers' clubs. The Mothers' Club is not a family planning agency per se. Rather it is an auxiliary entity which integrates family planning into its comprehensive village modernization activities.

The target population was the villagers; and the Mothers' Club members with the help of the field workers carried messages of family planning and services to the clientele at their homes. Interpersonal communication and non-formal educational methods based on discussion focused on factual information, motivation, creation of favorable attitudes toward the acceptability of family planning and monthly publication "Happy Home" were used to disseminate the program.

More than 50% of Korean villages have Mothers' Clubs as village people themselves may do more to enhance the quality of life than development administered from outside the village.

### The Poshak Nutrition Project in India

The Project Poshak was an integrated program (conducted from 1971-74) designed to improve the nutritional status of preschool children and pregnant and lactating mothers in selected rural areas of Madhya Pradesh, India. It was designed and administered by CARE/India with the support, financial and other, of AID/India, UNICEF, the Central Government of India and the State Government of Madhya Pradesh. The methodologies used were multi-faceted approach ie person to person communication and counseling, films and slide shows and demonstration role playing.

The objective for the project was achieved, however, there was some difficulty in enrolling pregnant women because of superstition, and did not want to be examined by male doctors. Most of the villages were inaccessible due to topographic and climatic difficulty, and population which was sparse and scattered. Health Centers were greatly understaffed too.

### V. Multi-Purpose Community Development Programs

In this category programs designed to strengthen local and national institutions such as comprehensive rural development; community development; cooperative self-help and integrated development approaches; multi-purpose training and the like are considered.

Representative case studies presented are: The Chilalo Agricultural Development Unit (CADU) in Ethiopia; The Pider Project in Mexico; and The Self-Help through Cooperatives-Tanzania's System for Cooperative Education.

### Chilalo Agricultural Development Unit (CADU)

CADU was established in 1967, in Chilalo, Awraja, Arussi Province, Ethiopia. The project covers 10,000 square kilometers and 400,000 inhabitants. Its goals are: 1) to achieve economic and social development; 2) to enhance local participation in development; 3) to improve employment opportunities; 4) to ensure that attention is given to low-income farmers; and 5) to stress research, training, and transferability.

Using the extension method of model farmers and demonstration plot; and research efforts, the program has increased agricultural productivity; improved marketing practices and stabilization of prices. Other activities include rural health programs; promotion of rural industries, building of all weather feeder roads; and water resources survey and soil conservation.

Thus far, the main difficulties in implementation have been basically political in nature and some financial problems.

### The Pider Project

In 1972, the Government of Mexico initiated a comprehensive nationwide program of rural development (PIDER-Investment Program for Rural Development) directed toward the development of regions of rural poverty. The program's objectives were to provide investments and services in selected rural area, in order to: a) raise rural living standards by introducing directly productive activities; b) increase levels of permanent and temporary employment; and c) strengthen supporting productive activities and improve basic social infra structure.

Pider's strategy to achieve the above is threefold: a) increase and focus investments and services of existing agencies on selected poor rural micro-regions with productive potentials; b) decentralize planning and especially execution to state local levels; and c) encourage village and ejido level participation in the planning and execution process.

The project is designed to support: directly productive activities i.e., productive support activities i.e. Feeder Roads; Rural Marketing; Farmer Organization and Training; Extension and Field Demonstration; Rural Electrification; Social Infra Structure i.e. Village/Ejido-Level Educational Facilities; Rural Health--here apart from building health centers, the project will provide for training of about 150 community health workers and 30 auxiliary nurses to have a fuller coverage of rural population, Rural Water Supply; and Materials for Self-Help Projects.

The administration was made up of commissioned staff from the President's office, the Ministries of Public Works, Hydraulic Resources, Land Reform and the Bank of Mexico.

Economic analysis of the project indicates improved agricultural productivity and output and improved standard of living. Increase in overall employment and the contribution that feeder road investments are making to the development of their area of influence are mentioned. A new Agrarian Reform Law was passed and the Ministry's internal procedures were improved. Finally, integrated approach to development on a large scale is itself an important innovation in dealing with the problem of rural poverty.

Self-Help Through Cooperatives - Tanzania's System for Cooperative Education

The cooperative structure is based on "primary societies" at the local level joined by "unions" at the regional level with the Cooperative Union of Tanzania at the pinnacle. Tanzania created a unique nonformal educational network designed to train the members and functionaries of cooperatives at every level. The system is supervised and aided by the Ministry of Agriculture, Food and Cooperatives which employs special staff for these purposes -- to transform the existing marketing cooperatives into production oriented multipurpose societies -- to assist in all possible ways the formation and establishment of "ujamaa" villages -- to stimulate and promote an internal market system -- to organize and run regional wholesale and distribution trade, and at the local level the retain distribution of consumer and agricultural goods -- to improve the organization and administration of agricultural credit and the mobilization of rural savings.

The Cooperative Education Center prepared instructions and materials to conduct local meetings. Magazine articles, radio broadcast, posters and information sheets were all used to publicize meetings and messages.

Quantitatively, the program had reached a high proportion of the society secretaries. Constraints were, the content of the instructional materials was too elementary for some of the learners, shortages of staff and slow progress on courses.

A summary review highlighting the major features of the case studies discussed above is presented in the following matrix.

AM TYPE	LOCATION	PURPOSE, GOALS, OBJECTIVES	CLIENTELE	METHODS, APPROACHES	FACILITATOR, CHANGE AGENT, MENTOR	LOCUS OF CONTROL	FINDINGS, RESULTS, CONCLUSIONS	CONSTRAINTS, LIMITATIONS, PROBLEMS
<u>AGRICULTURAL EXTENSION AND RURAL RELATED PROGRAMS</u>								
Farmer Training Centers (FTC)	Kenya	<ul style="list-style-type: none"> <li>- improve agricultural practices and productivity</li> <li>- provide refresher courses for extension staff</li> </ul>	farmers; their wives; extension staff	extension approaches	FTC principal and field extension staff	Ministry of Agriculture, Agricultural District Officer	<ul style="list-style-type: none"> <li>- adoption of recommended practices</li> <li>- FTCs major source of information for farmers</li> <li>- farmers would like to return to a FTC for further training</li> <li>- FTC farmers have improved incomes and living standards</li> </ul>	<ul style="list-style-type: none"> <li>- underutilization of FTC capacity</li> <li>- financial problems</li> <li>- staff turnover</li> <li>- low morale of FTC staff</li> <li>- use of FTC by other departments and non-farmer courses</li> </ul>
The National Apprenticeship Service (SENA) - Promocion Preccional Popular-Rural (PPP-R)	Columbia	<ul style="list-style-type: none"> <li>- provide short-term, low cost skill training useful on the farm</li> </ul>	farmers; farm laborers; rural artisans; and small entrepreneurs	"Mobile Units" practical, lectures and demonstrations	a traveling corps of instructors	Regional Office Ministry of Labor	<ul style="list-style-type: none"> <li>- enrollment increase</li> <li>- logistically possible to operate a large scale mobile training program that reaches isolated rural areas at relatively low cost</li> </ul>	<ul style="list-style-type: none"> <li>- unwillingness of staff to stay in rural areas</li> <li>- unappropriateness of selection, design and content of courses</li> <li>- lack of evaluation measures</li> </ul>
The Office of Rural Development (ORD)	Korea	<ul style="list-style-type: none"> <li>- increase agricultural production</li> <li>- improve the income of farm families</li> </ul>	farmers; their wives; older children	extension approach; mass media	extension agents	Local branch offices; The Office of Rural Development	<ul style="list-style-type: none"> <li>- significant contributions to rural development</li> <li>- rated highly as an extension service model</li> <li>- increase in agricultural productivity and output</li> <li>- improvement of rural life and income</li> </ul>	<ul style="list-style-type: none"> <li>- high turnover</li> <li>- decline in quality of multi-media system</li> <li>- budget constraints</li> <li>- lack of coordination</li> <li>- problem of allocation of resources and staff</li> <li>- lack of evaluation measures</li> </ul>
<u>VOCATIONAL TRAINING PROGRAM</u>								
Vocational Improvement Centers (VIC)	Nigeria	<ul style="list-style-type: none"> <li>- upgrade the skills of artisans and journeymen</li> </ul>	artisans and journeymen	lecture; practical shoptraining	part-time instructors	National and State Governments	<ul style="list-style-type: none"> <li>- government employed had increase in earning</li> </ul>	<ul style="list-style-type: none"> <li>- lack of evaluation measures</li> </ul>

Table 2. Major Features Of Case Studies Reviewed

AM TYPE	LOCATION	PURPOSE, GOALS, OBJECTIVES	CLIENTELE	METHODS, APPROACHES	FACILITATOR, CHANGE AGENT, MENTOR	LOCUS OF CONTROL	FINDINGS, RESULTS, CONCLUSIONS	CONSTRAINTS, LIMITATIONS, PROBLEMS
Mobile Trade Training Schools Program (MTTS)	Thailand	<ul style="list-style-type: none"> <li>- provide skill training</li> <li>- improve employment opportunities</li> <li>- meet demand of semi-skilled workers</li> </ul>	older youth and young adults	lecture and practicals	Principal and instructors	Division of Adult Education, Ministry of Education	<ul style="list-style-type: none"> <li>- rated successful by program managers</li> <li>- increase in number of MTTS</li> </ul>	<ul style="list-style-type: none"> <li>- lack of systematic employment market study</li> <li>- lack of follow-up study</li> </ul>
Rural Artisan Training Program	Senegal	<ul style="list-style-type: none"> <li>- train artisan and entrepreneurs</li> </ul>	artisans	lecture and workshop	skill worker level instructors	Government	<ul style="list-style-type: none"> <li>- majority active in their trade</li> <li>- graduates earn 50% more</li> <li>- multiplier effect</li> </ul>	<ul style="list-style-type: none"> <li>- difficulty in estimating demand of trained artisans</li> <li>- determining the content and level of the training</li> </ul>
<b>LITERACY</b>								
JAMAL	Jamaica	<ul style="list-style-type: none"> <li>- eradicate illiteracy</li> <li>- improve literacy skills</li> <li>- develop human resources</li> </ul>	illiterates	face-to-face teaching; radio and television; audio-cassettes	field staff; volunteer trainers	Board of Directors, JAMAL Foundation		<ul style="list-style-type: none"> <li>- drop-out among students and teachers</li> <li>- low quality of teachers</li> <li>- shortage of staff with specialized skills</li> <li>- lack of evaluation</li> <li>- inadequate office space</li> </ul>
Functional Literacy and Family Life Planning	Turkey	<ul style="list-style-type: none"> <li>- improve level of literacy</li> <li>- improve standards of family and community</li> </ul>	people in small towns and villages	problem-drama (stories, letters, dialogues); discussion and practicals	instructors in the field; visiting extension agents	General Directorate of Adult Education	<ul style="list-style-type: none"> <li>- participants apply classroom ideas to their daily lives</li> <li>- formation of producers' cooperatives by participants</li> <li>- better sanitary facilities</li> <li>- adoption of new farming techniques</li> </ul>	
The Thailand Project in Functional Literacy and Family Life Planning	Thailand	<ul style="list-style-type: none"> <li>- functional literacy</li> <li>- earning a living</li> <li>- family economics</li> <li>- health and family living</li> <li>- civic responsibility</li> </ul>	rural adult population	problem-centered approach; group discussion and participation; illustration	part-time elementary school instructors	Division of Adult Education, Ministry of Education	<ul style="list-style-type: none"> <li>- participation increased</li> <li>- reading capability increased</li> <li>- materials production</li> <li>- expansion program</li> </ul>	<ul style="list-style-type: none"> <li>- too much classroom discussion</li> <li>- inappropriate scheduling of the classes</li> <li>- lettering on cards too small</li> <li>- physical setting not congenial</li> <li>- transportation problems</li> </ul>

Table 2. (Continued)

The purpose of the evaluation was to provide a basis for improving program design. The major areas for review are: 1) to determine the extent to which family planning has been institutionalized within the National Family Board, the Ministry of Health in Jamaica, and the University of the West Indies; 2) to determine the extent to which targets to reduce fertility have been achieved; and 3) to determine the effectiveness of US and other donor contributions in achieving project purposes.

The evaluation team was made up from University of California and the California State Department of Public Health. The team reviewed previous studies and met with resource people both in Jamaica and the US. They also interviewed individuals - providers, consumers and interested observers.

The findings of the study indicates, budget increase for family planning by the government; growth of clinics; increase in the number of acceptors; institutionalization and integration of agencies.

#### V. Multi-purpose Community Development Program

The evaluation of Tanzanian Community Education is an example of evaluation studies conducted in this category:

##### An Evaluation of Tanzanian Community Education

The new community education program in Tanzania is set up to bridge the gap between the school and the community. This program is composed of a functional adult education curriculum and a complete functional and terminal 7 years primary education.

There was a need for this because of a high rate of infant mortality 18% and illiteracy - 82%. The program was funded by USAID and the World Education provided the technical assistance.

A quasi-experimental design was used with a prepost measurement taken. Data was collected from health clinics and other community agencies. Group leaders kept attendance register, had informal interviews with participants and made home visits. Field supervisors observed classes and central staff made visits to sites.

Participants pointed out how some materials were irrelevant and they were made relevant. During the months of July and August leaders helped participants with their gardening. An external evaluation was made in 1977 by John Pettit and documented changes in literacy and numeracy skills, attitudes about education and development problems, and practices in family planning, agriculture, and health.

#### Evaluation of the Jamaican Family Planning Program

The program was initiated in 1966 by USAID and the Government of Jamaica. The scope of the evaluation includes program developments from that time through the present (1974). The purpose of family planning program was to: integrate family planning and health delivery services; enhance public information and motivation; involvement of institutions and organizations; initiation of teacher training activities; expansion of training and research; distribution of contraceptives; expansion of postpartum programs; establishment of rural maternity centers; and study of social legislation.

TYPE	LOCATION	PURPOSE, GOALS, OBJECTIVES	CLIENTELE	METHODS, APPROACHES	FACILITATOR, CHANGE AGENT, MENTOR	LOCUS OF CONTROL	FINDINGS, RESULTS, CONCLUSIONS	CONSTRAINTS, LIMITATIONS, PROBLEMS
<u>IIPP</u> <u>UNIT</u>								
Cholera cases	Columbia	<ul style="list-style-type: none"> <li>- focus on problems of malnutrition</li> <li>- design medical service programs</li> </ul>	rural communities	field visits; secure information and data on health and nutrition; refer problems to the Service Unit; Health Card; Mother's Almanac were used	Promoters, para-medical non-formal educators	Government Health Services	<ul style="list-style-type: none"> <li>- elimination of neo-natal tetanus</li> <li>- decrease of diarrheal methods</li> <li>- adoption of family planning methods</li> <li>- decrease in infant mortality</li> </ul>	
Age-Based Family Planning Area Case of the Mothers' Club	Korea	<ul style="list-style-type: none"> <li>- inform and educate family planning</li> <li>- recruit accepters</li> <li>- provide technical assistance to Mothers' clubs</li> </ul>	villagers	"Mothers' Club approach" interpersonal communication; non-formal adult education; discussions, monthly publication	Field workers of Planned Parenthood Federation of Korea (PPFK) and members of Mothers' Club	PPFK	<ul style="list-style-type: none"> <li>- program can be legitimized by group activities</li> <li>- Mothers' Club facilitate adoption</li> <li>- village people themselves enhance development</li> <li>- increase in number of Mothers' Club</li> </ul>	
Washak action act in	India	<ul style="list-style-type: none"> <li>- improve nutrition</li> </ul>	school children, pregnant and lactating mothers	multi-faceted approach; mass-ref; demonstration role playing	professional personnel (medical officers, mid-wives, etc.)	CARE/India	<ul style="list-style-type: none"> <li>- improved nutrition significantly</li> </ul>	<ul style="list-style-type: none"> <li>- villages inaccessible</li> <li>- Health Centers understaffed</li> </ul>

Table 2. (Continued)

PROGRAM TYPE	LOCATION	PURPOSE, GOALS, OBJECTIVES	CLIENTELE	METHODS, APPROACHES	FACILITATOR, CHANGE AGENT, MENTOR	LOCUS OF CONTROL	FINDINGS, RESULTS, CONCLUSIONS	CONSTRAINTS, LIMITATIONS, PROBLEMS
<b>V. <u>MULTI-PURPOSE COMMUNITY DEVELOPMENT</u></b>								
- Chilalo Agricultural Development Unit (CADU)	Ethiopia	- achieve economic and social development - enhance local participation in development - improve employment opportunities - stress research, training and transferability	average and poorer farmers and tenants	extension approach	extension agents	Ministry of Agriculture; Swedish International Development Authority (SIDA)	- increased in agricultural productivity - improved marketing practices - rural health services - promotion of rural industries - building of all weather feeder roads - water resource surveys	- political and financial
- Rural Development in Mexico: - The Pider Project-World Bank	Mexico	- raise rural living standards - increase levels of employment - strengthen productive activities - improve basic social infra structure	rural farmers and non-farmers	increase investments and service; decentralize planning; encourage participation in planning and execution process	Government staff	Commissioned staff	- limited impact - increased employment - construction of feeder roads - new Agrarian Reform law was passed	- accessibility - lack of water - demographic pressure - poor agricultural techniques
- Self-Help Through Cooperatives - Tanzania's System for Cooperative Education	Tanzania	- transform marketing cooperatives into production oriented societies; - formation and establishment of "ujamaa" villages; - stimulate and promote internal market system; - organize and run regional wholesale and retail distribution; - improve agricultural credit and rural savings	cooperative staff functionaries; government personnel; local society chairmen; committee members; education secretaries	campaigns; magazine articles; radio broadcasts; posters and information sheets	"special staff"	Ministry of Agriculture, Food and Cooperative	- program reached clientele	- shortages of staff and resources

## Evaluation Studies

The evaluation studies presented in this section are selected on the basis of the availability and accessibility of documents related to community education programs in LDCs. A brief description of these studies, with specific emphasis on the general purpose of the program, the goals, objectives and/or purpose for the evaluation; the methodology used, some results and finds, as well as constraints, problems or limitations are presented.

### I. Agricultural Extension and Farm Related Training Programs:

In this category the Farmers Functional Literacy Program (FFLP) in India and the Impact of Farm Forum on the Diffusion of Innovations in Lahore and Gujrat Districts of West Pakistan, are presented:

#### Farmers Functional Literacy Program (FFLP)

This project, a joint enterprise of three government ministries, was initiated for the purpose of providing participating farmers: training and field demonstration facilities, functional literacy programs, and special type of farm broadcasts.

The evaluation of the program was mainly concerned with providing to the planners, administrators, and policy makers: 1) data for program planning, for identification and selection of areas, villages, and groups of learners as well as for adaptation of contents to environmental conditions; 2) feed-back on program aspects with the object of helping in evolving strategies for program improvement - both conceptually and operationally; and 3) evidence of the impact of the project in terms of measurable results.

The evaluation method used was a case study approach and data collection was conducted by interviews, surveys, impact studies, and from semi-annual reports. Evaluation was conducted by the Ministries of Food, Agriculture and Community Development, Education and Youth Services; Extension Services, Directorate of Adult Education, Universities and Evaluation Panels.

Overall impact was satisfactory: Findings of the evaluation indicated that functional literacy facilities were rated higher than routine literacy work; significant improvement in knowledge, awareness, and adoption of agricultural practices; increase in the level of literacy skills, increased desire for information on agricultural practices, and improved standard of living. There were structural and organizational weaknesses in terms of insufficient inputs, financial, staff, supplies and materials, transportation and classroom facilities.

The Impact of Farm Radio Forum on the Diffusion of Innovations in Lahore and Gujrat Districts of West Pakistan

In 1966, the radio forum was introduced to overcome the problems of limited diffusion of improved agricultural practices to farmers. In 1971, the American University of Beirut sponsored an evaluation of the radio forums to determine: 1) whether a relationship exists between certain selected socio-economic and psychological characteristics and farmers' participation in the radio forum; 2) whether a relationship exists between participation in radio forums and farmers level of knowledge regarding improved practices, their attitudes towards and adoption of them, their participation in extension type activities; and 3) which source of information was more effective in introducing changes among farmers. Through a quasi-experiment design with extra use of a control group (75 participants and 75 non-participants using face to face interviewing during office and home visits, data was obtained that showed: 1) farmers with higher levels of education, larger families, larger farms, and higher farm incomes, and membership in farm organizations, tended to participate more in the radio forum than those without these characteristics; 2) farmers ages and their land tenure status did not affect their participation; and 3) the radio forum was one of the most effective information sources affecting change.

## II. Occupational Training Program

The Polyvalent Adult Education Center's second evaluation study is presented as a sample of an evaluation conducted in this category.

### Polyvalent Adult Education Center

The Polyvalent Adult Education Center in India was established by the Ministry of Education in 1967 to enrich the lives of workers through knowledge and better understanding of their environment; to prepare them for vocational and technical training through general education; and to improve the workers' vacation skills and technical knowledge. The Directorate of Adult Education, with assistance from the Tata Institute of Social Sciences, Bombay, was responsible for this second evaluation of the center to make data available for: 1) feed-back into the program; 2) incorporation with extended programs in India; and 3) modifications and adoptions in other developing countries. The purposes of this study emphasized: 1) to what extent has the polyvalent adult education concept been understood, 2) have the programs matched the needs of the workers; 3) how the program was conceived, organized, and operated, etc. A quasi-experimental design was employed with the use of interviews of participants, policymakers, center staff, local social workers, labor leaders and educationists; visits to industries where courses were conducted; and questionnaires mailed to employers to determine their views of the program. It was found that, in general, the courses had succeeded in meeting the requirements of both employers and workers.

### III. Literacy Programs

In this category the Evaluation of Non-Formal Education in Ecuador and New Methodologies in Adult Education: A Case Study and Evaluation of the Santa Maria Radiophonic Program, are discussed:

#### Evaluation of Non-Formal Education in Ecuador

The University of Massachusetts Non-Formal Education Project, initiated in 1973, was for the purpose of developing new materials and methodologies ( use of games) in conjunction with and in support of existing Ecuadorian non-formal education programs. Under contract with USAID, the UCLA, Center for the Study of Evaluation conducted an evaluation of the U. Mass. NFE project in 1975 to: 1) evaluate the effectiveness of the project, 2) determine its replicability in other regions of the world, and 3) determine factors in the instructional materials that seem related to intended and desired consequences in the participants as individuals and as social groups. Through the use of summative and formative techniques; experimental pre-post test control group design and an intervention impact study, the evaluation team sought answers to thirteen questions which were to provide information on the kinds of changes observed and characteristics of the materials and procedures related to outcome. Data was collected from U Mass documents; staff interviews; observation and participant interviews; literacy, numeracy and critical-consciousness tests; and demographic profiles of participants, leaders and communities.

Results of the Evaluation Study include

- Radio programs, printed comic books, and traveling education fair were used to raise the level of interest in further education.
- Dice and cards were not effective in increasing literacy, but bingo was effective in increasing numeracy skills.
- Unless a well-trained facilitator available to lead and support the group, the games become nothing more than recreational.
- Material characteristics varied with learner characteristics.
- All four games stimulated initial interest, but they varied in their ability to maintain interest.

Some difficulties encountered in this evaluation were financial, supervisory, and physical conditions.

New Methodologies in Adult Education: A Case Study and Evaluation of the Santa Maria Radiophonic Program

Innovative aspects of the adult education system, developed in the Dominican Republic under sponsorship of Radio Santa Maria, were studied and evaluated in 1973. The focus of the radiophonic program is on the implementation of some of the elements of 'lifelong education' in the context of a country undergoing relatively rapid socio-economic development. The focus of this study was on how educational institutions can respond to the growth needs of individuals all along the life trajectory. The basic approach was the case study method, with questionnaires used to collect information about the field teachers, and tests to measure student achievement. The conclusion of this study is that at least 4 aspects of the educational methodology in the radiophonic system provide significant adaptations of the concept of lifelong education: 1) adults are trained to gain access to technical and professional positions;

2) students are trained to be active and creative in discovering knowledge and fashioning this into a personal integration; 3) through correspondence courses, broadcast classes and group discussion, learning involves the whole human personality and its relationship with social reality; and 4) participants develop a critical awareness of social change in the community and in the nation.

#### IV. Family Life Improvement Programs

The three evaluation studies included in this category are: the Maternal and Child Health Aide (MCHA) project in Tanzania; The Integrated Family Life Education (IFLE) in Ethiopia and the Evaluation of the Family Planning Program in Jamaica.

##### MCHA Training Project Tanzania

This was a joint Government of Tanzania - U.S. AID evaluation project with technical assistance from the American Public Health Association in 1973. The project provided funds for the construction and equipping maternal and child health aide (MCHA) training centers one for eighteen of the twenty regions of Tanzania and to assist the Government in training health workers who would provide comprehensive MCH services including child spacing in the rural areas. The technical assistance was provided for the development of MCH services under a contract with Loma Linda University - California

The purpose of the evaluation was to obtain an indepth assessment of progress and problems in project implementation to determine the degree to which the trend of the project had been directed toward meeting

its goal and purposes. This was accomplished through on-site visits interviews and review of reports and correspondence. Each 'End of Project Condition' output and input contained in the PROP was examined and recommendations were provided for future actions. The evaluation would be used by the USAID mission in preparing a revision of the PROP planned to be completed by mid-FY 1977.

The team was unable to make any observations on the trained MCHA providing services because the first class graduated only 2 months prior to the evaluation and they had not yet been posted. It will be important for people associated with the project to observe closely and evaluate the performance of the MCHAs in their new position so that any weaknesses and problems can be identified and corrected.

The Integrated Family Life Education (IFLE) was sponsored by Ethiopian Women's Association (EWA) to create an environment of learning that may change the people of Ethiopia. The project was divided into 3 pilot program: 1973-1975; 300 learners in 3 sites second cycle: 1975-1977; 1500 learners in 6 sites. Expansion phase: 1977-1982; 10,000 adults in 12 sites.

The Institute of Development of Addis Ababa University conducted a survey in 1974 of 3 sites and pinpointed the most severe problems. The purpose of this evaluation was to develop an integrated approach to adult education in health, nutrition, agriculture, family planning and civics; to help participants cope with life problems, with special emphasis on self-help and income-generating activities; to use all available human and material resources; and to enable participants to use literacy, arithmetic and problem-solving skills as tools for development.

The purpose of the evaluation is to find out the extent to which

- 1) selected communities achieve self-reliance;
- 2) the new "education" will change the daily habits of life of both children and adult and
- 3) to what extent do children in standard 7 achieve selected cognitive and attitudinal objectives (the latter compared with non-CEC children).

The evaluation was carried out by the Tanzania Evaluation Team (TET) and was sponsored by UNESCO and International Bank for Reconstruction and Development. Quasi-experimental design was used and 8 communities formed the target population. Tests, questionnaires, check-lists and opinionnaires were used to collect information for feedback to the curriculum center, the teacher colleges ministry officials and others who need it. The evaluation is ongoing and when this report was made there was no available findings, conclusions or results. (Moshi et al 1975).

A summary review highlighting the major features of these evaluation studies is presented in the following matrix.

PROGRAM TYPE	LOCATION	PURPOSE, OBJECTIVES	EVALUATORS	METHODOLOGY			FINDINGS, RESULTS, CONCLUSIONS	CONSTRAINTS, LIMITATIONS, PROBLEMS
				DESIGN	DATA COLLECTION	DATA SOURCE		
<u>AGRICULTURAL EXTENSION AND FARM RELATED PROGRAMS</u>  - Farmers Functional Literacy Programs	India	- to collect data for program planning - for feed-back on program - to assess impact of the project	Government Ministries; Universities and other agencies	case study approach	interview; observation; survey, etc.	district offices; farmers and government agencies	- overall impact satisfactory - positive attitude of functional literacy facilities - improvement in agricultural practices - increase in literacy skills - increased desire for information - improved standard of living	- insufficient input of resources
- Farm Radio Forum	Pakistan	- to determine: - relationship between socio-economic and psychological characteristics and participation - relationship between participation and knowledge, attitudes, and adoption of practices - effective source of information	American University of Beirut	quasi- experimen- tal	interviews in agricultural extension office and at home	150 farmers; 75 partici- pants 75 non- partici- pants	- farmers with certain characteristics had favorable attitudes towards the forum - farmers with higher educational level and income; larger families and farms; participated more - farmers' ages, land tenure status did not affect participation - effective source of information	
<u>OCCUPATIONAL TRAINING PROGRAM</u>  - Polyvalent Adult Education Center	India	- to provide feed-back - to determine: - awareness of concept needs - organization and operation of program - community support - impact - strength and weaknesses	Ministry of Education and Social Welfare	quasi- experimen- tal	interviews; question- naires	participants; policy-makers; center staff; social workers; labor workers; educationists	- establishment of rapport between center and others involved - increased awareness of program - course requirements were met	- lack of clear- cut goals and objectives

Table 3. Major Features Of Evaluation Studies Reviewed

STUDY TYPE	LOCATION	PURPOSE, OBJECTIVES	EVALUATORS	METHODOLOGY			FINDINGS, RESULTS, CONCLUSIONS	CONSTRAINTS, LIMITATIONS, PROBLEMS
				DESIGN	DATA COLLECTION	DATA SOURCE		
LITERACY								
- Ecuador Nonformal Education	Ecuador	<ul style="list-style-type: none"> <li>- to evaluate the nonformal education project</li> <li>- to determine its replicability in other regions of the world</li> <li>- to determine factors in instructional materials that relate to consequences in participants</li> </ul>	UCLA Center for the Study of Evaluation	experimental (pre-post-control group)	U. class documents; interviews; literacy, numeracy, critical consciousness tests; demographic profiles of participants, leaders, and communities	participants, staff, leaders, communities	<ul style="list-style-type: none"> <li>- learning materials and resources effective</li> <li>- dice and card games more effective in literacy; bingo effective in numeracy</li> <li>- facilitator's presence important</li> <li>- games varied in maintaining interest</li> <li>- others</li> </ul>	<ul style="list-style-type: none"> <li>- financial</li> <li>- supervisory</li> <li>- physical</li> </ul>
- Santa Maria Radio-Phonic Programs	Dominican Republic	<ul style="list-style-type: none"> <li>- demonstrate validity and advantage of life-long education concept</li> <li>- provide an appraisal of innovations in radiophonic schools</li> </ul>	Radio Santa Maria	case study	questionnaires tests	field teachers; participants	<ul style="list-style-type: none"> <li>- program adaptable and life-long education</li> <li>- responds rapidly to educational need</li> </ul>	- lack of funds
<u>FAMILY HEALTH PROGRAM</u>								
- Maternal Child Health Aid (MCHA)	Tanzania	<ul style="list-style-type: none"> <li>- to assess implementation</li> <li>- to determine goal and purpose achievement</li> </ul>	Loma Linda University - California	descriptive	on site visit; interviews; review of reports, documents and correspondence	documents; report correspondence	<ul style="list-style-type: none"> <li>- improved health care in the rural areas</li> <li>- expansion of MCHA facilities</li> </ul>	

Table 3. (Continued)

PROGRAM TYPE	LOCATION	PURPOSE, OBJECTIVES	EVALUATORS	METHODOLOGY			FINDINGS, RESULTS, CONCLUSIONS	CONSTRAINTS, LIMITATIONS, PROBLEMS
				DESIGN	DATA COLLECTION	DATA SOURCE		
- Integrated Family Life Education	Ethiopia	<ul style="list-style-type: none"> <li>- to develop an integrated approval</li> <li>- to help participants cope with life problems</li> <li>- to use all available human and material resources</li> <li>- to enable participants to use skills for development</li> </ul>	Ethiopian Women's Association	quasi-experimental (pre-post tests)	participant interviews; home visits; class observations; site visits	participants; health clinics and other agencies	<ul style="list-style-type: none"> <li>- some materials irrelevant</li> <li>- decreased attendance during rainy season</li> <li>- changes in literacy and numeracy skills, attitudes and practices in family planning, agriculture and health</li> </ul>	
- Jamaican Family Planning Program	Jamaica	<ul style="list-style-type: none"> <li>- to determine the extent of which family planning has been institutionalized</li> <li>- to determine the extent of reduced fertility</li> </ul>	University of California and the California State Department of Public Health	descriptive	interviews; review of reports	resource people; participants	<ul style="list-style-type: none"> <li>- increased budget</li> <li>- growth of clinics</li> <li>- increase of acceptors</li> <li>- institutionalization and integration of agencies</li> </ul>	
<u>COMMUNITY DEVELOPMENT</u> - Tanzania Community Education Program	Tanzania	<ul style="list-style-type: none"> <li>- to assess communities self-reliance</li> <li>- to assess the impact of the new "education"</li> <li>- to assess the extent of achievement of cognitive and attitudinal objectives</li> </ul>	Tanzania Evaluation Team (TET)		survey; test; observation; questionnaire; check-list	CEC - "Ujamaas"		

CHAPTER VII

VARIABLES AND INDICATORS

FOR

EVALUATING RURAL COMMUNITY EDUCATION PROGRAMS

This section suggests an initial set of variables and indicators for evaluating rural community education programs to be verified through actual field comparison and testing. The composite list is grouped into the five program categories previously identified and into two more categories which have broad applicability: Overall Variables and Indicators for Rural Community Education Programs and General Demographic and Socio-economic Variables and Indicators.

In most cases, the variables and indicators for one program category apply, directly or indirectly, to each of the other categories. The criteria for judgement as to the degree of importance a particular set of variables and indicators has for a particular program, depend upon the goals and operational objectives of the program. In describing the variables and indicators, an attempt was made to consider their practicality, quantifiability, and adequacy. For each variable, a range of indicators are presented for consideration in developing instruments to evaluate rural community education programs.

The case studies and evaluations have provided the main empirical base for the selection of the program-specific

variables and indicators, while the theoretical literature, both in community education and in evaluation, has provided the basis for the selection of overall variables and indicators for planning, implementation, and evaluation of rural community education programs. The selection of variables and indicators, however, is a continuous process. The literature presented a voluminous array of elements to consider in the evaluation of programs and has provided a framework for the development of methodologies and instruments.

With regard to this project, the variables and indicators are primarily for the purpose of assessing the impact of rural community education programs on three different levels: individual, community, and national development. However, measurement of change and judgements with respect to the impact of intervention of rural community education programs on the community will be the primary focus of methodologies and instruments that are to be developed and tested.

I. Agricultural Extension And Farm-Related Programs

<u>Variables</u>	<u>Indicators</u>
1. Improve agricultural practices	1. Adoption of practices
a. fertilizers	a. percent using fertilizers
b. insecticides, pesticides and other chemicals	b. percent using insecticides, pesticides, and others
c. machinery and equipment	c. type, size, cost- effectiveness; percent using machinery and equipment
d. improved seed variety	d. type; percent using seed
e. upgrading of livestock	e. percent adopting improved practices in livestock production
f. management	f. effectiveness, efficiency
(i) marketing	(i) purchasing, storage, stabilization of prices; incentive price for farmers
(ii) record keeping	(ii) type of records; percent of farmers keeping records
(iii) credit	(iii) source; type, amount; number and percent using credit
(iv) use of resources	
- land	- optimal use of land for production; size; lease/own; cost- effectiveness; crops/unit land; livestock/unit land
- labor	- source (family, hired); part-time, full-time
- capital	- change in net-worth

<u>Variables</u>	<u>Indicators</u>
2. Production	2. Change in yield/unit/farmer;
3. Improve income and living standards	3. Change in income; change in living standards
4. Establishment of cooperative systems	4. Type (credit or consumer); size; number and percent of members
5. Supportive services	5. Availability, accessibility
a. extension	a. use of extension (number of contacts; percent using extension services)
b. mass-media (radio, television, news- paper, illustrations, etc.)	b. type; degree of information; level of applicability; percent using media
6. Staff development	
a. recruitment	a. source, number of recrui- tees; method
b. in-service training	
(i) entry level of trainees	(i) level, number of trainees
(ii) type of training (agricultural ex- tension, home economics, management of trade centers, model farmers, others)	(ii) content; type, number of instructors; structure; duration; method and materials; type of facili- ties
7. Youth activities (youth clubs)	7. Formation; number of members; type and number of activities (Projects)
*8. Farmer Training Centers	

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\*Refer to variables and indicators in  
Occupational Training Programs

## II. Occupational Training Programs

<u>Variables</u>	<u>Indicators</u>
1. Upgrading of skills and knowledge	1. Entry requirements; number completed training, number pass trade tests, number self-employed; level of competence; performance on the job
2. Improve employment opportunities	2. Number employed in area of training; part-time or full-time employment; employment status (temporary or permanent); increase in earning or income
3. To meet manpower demand (skilled and semi-skilled)	3. Supply of skilled or semi-skilled
4. Attrition and or drop-out	4. Number of participants; attendance; drop-out (attrition)
5. Popularity of program (courses)	5. Number of participants/course/program
6. Fees	6. Free, subsidized amount; stipend amount
7. Feasibility study	7. Demand supply of graduates; availability of qualified staff; methods and materials used; change in enrollment; maintaining standard; practical work done; content and level (standards)
8. Cost-effectiveness	8. Return/participant cost/year

<u>Variables</u>	<u>Indicators</u>
9. Cost-benefit	9. Ratio of inputs to outputs; return/participant cost/year
10. Use of skill outside of employment	10. At home; in the community
11. Flexibility and adaptability of facilities	11. Residential; permanent; temporary facilities
12. Program structures	12. Residential; part-time; regular
13. Recruitment	13. Method and number of recruitees; source (government, business, industry, farm, etc.)
14. Opportunity cost	14. Change in income vs acqui- sition of skill, knowledge and attitude
15. Duration of training	15. Days/weeks/months per training
16. Multiplier-effect	

## III. Literacy

<u>Variables</u>	<u>Indicators</u>
1. Reading with comprehension (letter recognition, syllable recognition, word recognition, oral reading)	1. Degree of skills in reading (percent of scores obtained in a reading test; average number of words read/minute)
2. Functional writing (name, words, sentences, passages drawn from problems in everyday life)	2. Degree of skills in writing (percent of scores obtained in a writing test; legibility; average number of words written/minute; correct use of punctuation marks)
3. Arithmetic (simple problems involving addition, subtraction, multiplication, and division; knowledge of local weights, scales and tools used in everyday life)	3. Degree of skills in arithmetic (percent of scores obtained in a math test)
4. Critical consciousness	4. Degree of critical consciousness skills
a. participant perception of self, others, community	a. rating scale (scored according to positive strength of each response)
b. conceptual maturity	b. percent of scores on Draw-A-Man Test (scored on points for features: eyes, ears, nose, etc., and details: hat, shoes, ect.)
5. Curriculum materials	5. Adequacy of materials
a. content	a. type and number of courses offered; degree of relevance to needs

<u>Variables</u>	<u>Indicators</u>
b. scope	b. level of concentration
c. sequence	c. rank order of importance or difficulty
<b>6. Method of instruction</b>	<b>6. Appropriateness and effectiveness of methods</b>
a. teaching aids (hardware, software)	a. availability, accessibility, and adequacy of aids
b. interaction (group, teacher-participant, participant-participant, participant-learning materials)	b. type and number of meetings; attendance; participant attitude (rating) towards interaction
<b>7. Teacher performance</b>	<b>7. Rating scale scores (assessed by participants and supervisors)</b>

IV. Family Life Improvement Programs

Variables

Indicators

Health Delivery

- |   |   |
|---|---|
| 1. Health facilities (hospitals, clinics, mobile units, other primary care centers)     | 1. Availability, accessibility, and extent of development; number of facilities/total population; number of beds/total population |
| 2. Health personnel (doctors, nurses, aids, paraprofessionals, technicians, volunteers) | 2. Availability; number of personnel/total population   |
| 3. Visits (new, re-visit)   | 3. Number of visits/health facilities/time  |
| 4. Pharmaceutical products  | 4. Availability, accessibility; adequate amount and types; number of products/total population                                    |
| 5. Reduced mortality  | 5. Change in number of deaths/total live births; causes of death  |
| 6. Reduced morbidity  | 6. Change in number with disease/total population; type of disease  |

Maternal And Child Health Care

- |   |  |
|---|--|
| 7. Services   |  |
| a. preventive (child spacing, immunization, child welfare, ante-natal | a. availability, accessibility, adequacy of services |

Variables

Indicators

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- |   |   |
|---|---|
| <p>b. mid-wifery</p> <p>c. curative (physicians, health auxiliaries)</p> <p>8. Clinic attendance (new, re-visits)</p> <p>9. Equipment, energy, and supplies (vaccines, food supplements, kerosene lamps, etc.)</p> <p>10. Record-keeping</p> <p>a. clinic records</p> <p>b. personal data cards (growth card for children; antenatal cards for mothers; family planning card)</p> | <p>b. availability, accessibility, adequacy of service; number of midwives/total female population aged 15-44</p> <p>c. availability, accessibility, adequacy of service; extent of development of services</p> <p>8. Number attending clinic, by type of condition; number and percent of first and re-visits</p> <p>9. Availability, accessibility, adequacy of each</p> <p>10. Regularity; accuracy</p> <p>a. name, age, village, symptom, diagnosis, treatment</p> <p>b. demographic data; health data; data on use of contraceptive measures</p> |
|---|---|

Nutrition

- |  |  |
|--|--|
| <p>11. Nutritional improvement</p> <p>a. cognitive change</p> <p>(i) knowledge</p> <p>(ii) understanding</p> | <p>11. Nutritional change</p> <p>a. enhanced awareness</p> <p>(i) percent knowing about food and nutrition</p> <p>(ii) percent understanding relationship between nutrition and health</p> |
|--|--|

Variables

Indicators

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(iii) attitude

(iii) percent with positive attitude about nutrition and health

b. behavioral change

b. adoption of nutritional practices

(i) acquisition

(i) percent getting adequate amounts and types of food

(ii) storage; handling; preparation

(ii) percent adopting practices to protect nutritive value of food

(iii) consumption

(iii) percent of adequate consumption based on family needs

c. effects of malnutrition

c. reduced malnutrition

(i) morbidity

(i) type of disease; number of disease incidences/total population

(ii) mortality

(ii) change in number of deaths/total live births

12. Food procurement

12. Adoption of improved practices

a. grow and/or raise

a. type of food on livestock; size of enterprise

b. buy

b. source (market, store, farmer, etc.); cost

c. distribution

c. type of food; source (local farmer; imported, etc.)

- \*13. Nutrition education
- a. training
  - b. duration
  - c. other aspects

Family Planning

- |   |   |
|---|---|
| <p>*14. Acceptance (couple)</p> <ul style="list-style-type: none"> <li>a. acceptance by couple</li> <li>b. continuing acceptance by couple</li> <li>c. on-going record-keeping</li> <li>d. positive change in knowledge, attitudes, and practice regarding family planning</li> </ul> | <p>14. Change in level of acceptance</p> <ul style="list-style-type: none"> <li>a. number of accepting couples (directly from family planning intervention)</li> <li>b. number of acceptors twelve months after program intervention</li> <li>c. monthly and cumulative number of acceptors</li> <li>d. degree and extent of change (as measured by tests scores, ratings, etc.)</li> </ul> |
| <p>15. Acceptance (women)</p> <ul style="list-style-type: none"> <li>a. overall primary acceptance</li> <li>b. current acceptance</li> </ul>  | <p>15. Change in level of acceptance</p> <ul style="list-style-type: none"> <li>a. number willing to try contraceptive measures (evidenced by having ever used them or by stating the likelihood of future use)</li> <li>b. prevalence of contraceptive practice at time of record</li> </ul>   |

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\*13. Refer to indicators in Occupation Training Programs

\*14. Means the taking of service and/or advice from a family planning program, i.e., having an IUD insertion or receiving pills, etc. (Adoption of recommended practices)

VariablesIndicators

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c. continuing acceptance	c. percent of women starting the practice who continued use for specified period
d. public acceptance	d. passage of pertinent social legislation
16. Fertility	16. Reduced fertility/time period
a. general fertility rate	a. number of births/total female population, aged 15-44
b. age-specific fertility rate	b. number of births/total female population, by specified age groups
c. marital fertility rate	c. number of "legitimate" births/total married couples, spouses present
d. children ever born	d. total children ever born/total population, by age, race, marital status, and sex
e. children under one year	e. number of children under (at time of census)/total female population, aged 15-44
f. parity (condition of having borne children)	f. number of children ever born minus the number of children under one year/total female population
g. childless	g. number of women with zero children ever born/total female population

V. Multi-Purpose Community Development Programs

<u>Variables</u>	<u>Indicators</u>
1. Increased local participation	1. Frequency of assemblies; attendance at meetings, etc.
2. Public services (roads, water supply, sewage, parks, energy, etc.)	2. Availability, accessibility, and extent of development of services
3. Community facilities (churches, community/civic centers, public health centers, schools, social service agencies, etc.)	3. Availability, accessibility, and extent of use of facilities
4. Commercial facilities (shops, artisan enterprises, bakeries, hair dressers, etc.)	4. Number of facilities/total population
5. Housing	5. Adequacy
a. condition of houses	a. percent of houses unchanged, improved, extended
b. use of housing	b. used as originally planned (e.g., dining room used as a bedroom)
c. space	c. measurements in relation to household size, facilities, equipment
d. sanitation	d. percent of units with latrines, adequate drainage, adequate animal shelter or dens, etc.
e. costs	e. costs/total family income/consumption
f. tenure status	f. percent who rent or own homes
g. means of acquiring house	g. percent loan, self-help, government subsidized, etc.

<u>Variables</u>	<u>Indicators</u>
6. Areas, institutions, facilities for children's activities	6. Degree of development of playground, day care centers, nursery schools, etc., and extent of use of facilities
7. Feeder roads	7. Milage of roads built/period of time; maintenance of roads; frequency of use; etc.
8. Enhanced economic, social, and educational status	8. change in status/time period
a. development efforts	a. degree (little, none, etc.); source; target population
b. agricultural productivity	b. size of arable land; type and size of enterprise (crops, livestock); method of production; output/unit/enterprise
c. level of illiteracy	c. percent of target population illiterate
d. schools	d. availability and type of institution (numbers and level of education); percent attending by age group
e. land tenure system	e. percent of share cropping, lease, own, etc.; average size of land holding
f. income	f. average income/farmer/unit
g. employment opportunities	g. change in temporary and permanent employment
h. increased investments and services	h. amount of local investments (by local people, by external source); type and extent of development; number of services/time period
9. Soil conservation	9. Control measures (planting trees; terracing; campaign, etc.)

Overall Variables And Indicators  
For  
Rural Community Education Programs

VariablesIndicatorsInput

## I. Resources

1. Human (staff, community leaders, technical assistants, target population)
2. Physical (facilities, equipment, teaching materials)
3. Financial (source and amount of funding)
4. Structural (organization, administration, and management)
5. Psychological support (sanction, conviction, committment, leadership)

## I. Availability, accessibility, adequacy, and use of internal and external resources

1. Demographic data; opinionnaire, questionnaire, and skills test scores
2. Amount and quality of space electricity, plumbing; maintenance; serviceability; relevance
3. Percent of funding from public entities, participants, private entities, self-financing activities, individual donations, international agencies; total amount, cost/participant
4. Efficiency, effectiveness of role delineation or organizational structure
5. Degree of support from target population, government (local and national), external assistance agencies

## II. General statistics (population by specified characteristics; births; deaths, community facilities, etc.)

## II. Census data; vital statistics data; community survey data; etc.

VariablesIndicatorsProcess

## III. Activities

1. Coordinating (inter-agency, intra-agency; between program administrators, community leaders, target population, and external assistance agencies)
2. Surveying (community context; needs assessment)
3. Programming (class meeting, seminar workshop schedules; curriculum development)
4. Training (in-service staff; participant)
5. Promoting (advertisement, solicitation)
6. Evaluating (formative and summative; internal and external)

## III. Type; duration; effectiveness; efficiency of activities

1. Type and number of meetings/time period; attendance at meetings; attitude assessment; degree of local population
2. Demographic profile; comprehensiveness; adequacy; pre-post measurements
3. Sequence of operations; convenience to participants; relevance to participants' needs; flexibility; accessibility of meeting places
4. Appropriateness, adequacy, effectiveness of instructional methods; participant attitude (rating) towards training; attendance; drop-out rate
5. Timeliness; effectiveness; coverage
6. Appropriateness; timeliness; effectiveness; relevance to need; target group; usefulness; reliability; validity

Output

## IV. Impact

## IV. Positive change as a result of community education program intervention

VariablesIndicators

- |   |   |
|---|---|
| <p>1. Individual (knowledge, skills, attitude, behavior)</p>  | <p>1. Test scores; participant observations; questionnaire and opinionnaire results</p>   |
| <p>2. Community (participation in community activities; community improvement through self-help, self-reliance; co-op formation; resource allocation; expanded role of traditional institutions; "multiplier effect"; employment opportunity)</p> | <p>2. Degree of participant involvement in the community; level of physical, financial, social, educational, and cultural development; availability, accessibility, and adequacy of resources; degree of involvement of institutions and agencies; number of similar programs developed; availability of jobs</p> |
| <p>3. National (contribution to national goals—economic, social, cultural, educational, and political)</p>  | <p>3. GNP (total market value of goods and services produced in a year); benefit/cost ratio; employment market for participants (full-time; part-time, temporary, permanent); survey results of changes in community cohesiveness, independence, and community development</p>                                    |

General Demographic And Socio-Economic

Variables And Indicators

<u>Variables</u>	<u>Indicators</u>
1. Age	1. Percent of people in specified age groups; average age
2. Income level	2. Percent average income per year; median income
3. Sex	3. Percent male and female
4. Ethnic background	4. Percent of people in specified ethnic groups
5. Marital status	5. Percent of people married, unmarried, widowed, separated, living in free union, never married
6. Population density	6. Total population/square mile (P); $\text{Log } (P) = \text{Density}; \text{Log } (1/D)$
7. Level of education	7. Percent of persons with specified levels of education; median school years completed
8. Employment status	8. Percent employed and unemployed
9. Occupation	9. Percent of people in various occupations
10. Religious denomination	10. Percent of people of various religions
11. Migration	11. Number of persons/1000 residents, living outside and inside their community residence for the last five years
12. Rural	12. Number of persons/1000 persons living in rural areas

VariablesIndicators

13. Labor force participation

13. Number of persons in the labor force/1000 persons

14. Public assistance

14. Number of persons receiving public assistance/1000

15. In-school

15. Number of people in school

16. Resident status

16. Percent of residents and non-residents; average distance from teaching site

## CHAPTER VIII

SUMMARY, CONCLUSION, INFERENCES AND IMPLICATIONSSUMMARY:

This review of literature is the first of a series of tasks that represent the process of iteration in developing and testing of methodologies and instruments for evaluating community education programs in LCD's. The purpose of this initial task was to conduct a review of the literature (1) to establish the state-of-the-art, and (2) to identify an initial set of variables and appropriate indicators derived therefrom; (a) for assessing program impact, (b) to describe programmatic elements of community education programs, and (c) to characterize the community context.

The review of literature considered the following issues in establishing the state-of-the-art: (1) selected concepts related to community education were discussed to develop a conceptual framework and parameter of rural community education; (2) a review of community education in the United States and LDC's was presented coupled with; (3) theory and practice in evaluation of community education was presented to develop a theoretical construct of the state-of-the-art.

At this stage of the review of literature it was found that there are various ways of organizing and categorizing community education programs. Thus, for the purpose of this study, the following comprehensive classification system of

community education was adopted: (1) Agricultural extension and farm related programs; (2) Occupational training programs; (3) Literacy programs; (4) Family-life improvement programs; and (5) Multi-purpose community development programs. In accordance to this breakdown the last section of the literature dealing with selected representative case studies and evaluation studies in each of the categories was presented, thereby completing the state-of-the-art.

Finally, an initial composite list of variables and indicators for each of the program types was extracted from the review of literature, and thus, a data bank of variables and indicators developed. Moreover, two other broad-aimed categories that have overall applicability were identified and the appropriate variables and indicators included. The identification of variables and indicators is to be a continuous process with additional variables and indicators to be included during actual field-testing. At that point, more exhaustive and directed efforts can be made to identify indicators appropriate to the specific educational component involved; otherwise, considerable time could be spent identifying indicators that may have no bearing on the goals and objectives of the target community education programs.

### CONCLUSION AND INFERENCES

The following is a list of some broad inferences revealed in the review of literature that have implications to this study:

1. There are a diversity of terminologies, definitions and interpretations that relate to the concept of community education particularly dealing with LDC's.
2. There is a phenomenal difference in content, method of approach, clientele context, etc., in community education as applied in the United States and LDC's.
3. Most evaluation models have been developed and applied in the United States, but few of the so-called classical approaches have been applied to the evaluation of rural community education in LDC's.
4. Most of the case studies and evaluation studies were descriptive types mainly concerned with output or product outcome—i.e., summative evaluation.
5. Most evaluation and case studies were short-term-goal oriented programs mainly to assess impact on the participant and not on the community or the broader developmental goals.
6. Most of the evaluation literature points out the need to assess the community context. However, community context pertaining to social, political, geographical, cultural, environmental aspects has not been clearly articulated in the Community Education literature.

### RECOMMENDATIONS AND IMPLICATIONS FOR DEVELOPING AND TESTING METHODOLOGIES AND INSTRUMENTS FOR EVALUATING COMMUNITY EDUCATION PROGRAMS

1. The concept underlying the educational or developmental program should be articulated and clearly defined before the evaluation of the program.
2. In the evaluation of rural community education programs the context; planning (input); implementation (process); as well as product (output) evaluation need to be addressed—i.e.,—both summative and formative evaluation concerns need to be included.

3. Evaluation should be a continuous process from conception to termination of the program.
4. There should be follow-up evaluation studies to determine impact after the termination of the program.
5. A feed-back design should be built into the evaluation framework to aid program operation at different stages of implementation.
6. The evaluation design should be flexible to account for unanticipated variables, conditions and/or situations.
7. The evaluation design should have a broad applicability and generalizability.
8. There is a need to formulate an evaluation design that would look at the long range impact from the intervention of the program beyond the participant to include impact on the community as well as broad developmental goals.

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