River-radio: a case study of participatory radio education in Bolivia

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River-radio: A case study of participatory radio education in Bolivia

by

José Luis Aguirre Alvis

A Thesis Submitted to the Graduate Faculty in Partial Fulfillment of the Requirements for the Degree of
MASTER OF SCIENCE

Major: Journalism and Mass Communication

Signatures have been redacted for privacy

Iowa State University
Ames, Iowa

1990
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CHAPTER I. INTRODUCTION

A man who has something to say but cannot find listeners, it is a pity. But it is much worse for those listeners who cannot find anyone who has something to say to them. (Brecht, 1967:120)

Radio has frequently been employed to help tackle large-scale problems in the Third World. But it has often been criticized for being "top-down" in its approach (Byram, 1981:48). In the field of development communication, "popular participation" with a "bottom-up" strategy has been a recurring theme although how a "bottom-up" strategy can be developed using mass media remains unresolved. Even when the discussion of peoples' involvement focused more on the philosophical and ideological aspects of "alternative communication" than on methodology (Byram, 1981:50), the question of how participatory methods and techniques can be used to represent peoples' needs remained.

One difficulty with implementing participation is identifying the appropriate groups or levels to be involved. Gilbert's (1987:59) analysis of community participation raised the question "effective for whom?" In other words, is participation effective for the state, for the community, for a particular political party, or for certain individuals within the community? Other unresolved questions concern the amount or degree of participation required and how the aims
and nature of external and local agents involved in the process will contribute or hinder participation.

Byram (1981) explains that mass-participation approaches still have a major weakness, particularly in terms of the mass media's role in development. Hence, the fundamental question remains: How can radio be integrated into the development process using a participatory approach? And if integrated, who should control the process? A central issue of "popular participation" is that of power.

Background of the Study

Using radio as a key tool in development work is a broad tradition with worldwide applications. The role of this medium in education and community development has been examined in several studies such as that on radio in literacy by Burke, who argues that in the last few decades, communication scholars have given an enthusiastic response to television while relegating radio broadcasting to a position of secondary importance (Burke, 1976:23-27). This is unfortunate because radio broadcasting has much to recommend it, and it is clearly not just a poor relation of the newer and more glamorous television. For instance, radio broadcasting has been used to support new or well-established programs of literacy training. Despite its limitations,
radio is still appropriate for non-literate audiences in rural areas.

Waniewicz's (1972:13-15) study on broadcasting for adult education points out that the experience of many countries has already proven that it is possible for the mass media, and in particular for radio and television broadcasting, to provide the necessary technological breakthroughs to alleviate, if not solve, many problems. Among these problems are a scarcity of teachers, social workers, health workers, and extension agents and a lack of funds and facilities, which are difficult deficiencies to solve through conventional educational means.

But providing educational solutions through the help of radio broadcasting and other mass media have raised other doubts. For instance, Moemeka (1981:23) notes that many doubt whether the mass media can take development education to the village level because after all the media have not yet been able to disseminate information to rural areas on a scale broad enough to reduce the knowledge gap in society. He argues that there is an urgent need to search for the media's potential to ensure general mobilization of the rural population for development. According to Moemeka, the current infrastructure and organization of mass communication systems in the developing world leave no doubt about their
dysfunctional impact.

Although there has been a consensus among practitioners of development about the advantages of radio broadcasting due to its flexible technical capabilities and also to the social-structural conditions of host societies, participatory dimensions of this medium require additional exploration. Recent research, however, has tended to focus on television. Lewis and Booth (1989:2-3) argue that the neglect of radio in research has made it virtually the "invisible" medium.

Objective of the Study

This study focuses on participatory approaches using radio for education and community development. By means of a case study of Radio San Miguel of Riberalta, Beni, Bolivia, the development of participatory approaches in community radio at the institutional level, organizational level, and community level will be examined.

Specific Objectives

This case study on rural radio uses and implementation of participatory approach for education and community development in the Bolivian Amazon has two specific objectives:

1. To analyze the process of communication and education
played by "Radio San Miguel of Riberalta, RSM," in cooperation with another community organization, the "Mobile Teams of Rural Integral Education, EMEIR" (Equipos Móviles de Educación Rural Integral), in developing a unique experience of communication and education focusing on an isolated audience through a series of radio-canoe visits. The specific work conditions of this radio station and the communicative-educative system that has developed for its rural population in the Amazonic region of Bolivia are almost unknown. Therefore, documenting these conditions as an indigenous communication experience and a practical case of community radio for development is of value in itself.

2. To examine the application and development of a popular participatory strategy in mass communication by considering the presence, involvement, and decision making of various individuals in a communication system at. 1) the institutional level, 2) the organizational level, and 3) the community level.

Overview of the Study

The organization of this study includes six chapters. Chapter I deals with the background, the general objectives and specific objectives of the study. Chapter II contains
two parts: 1) the literature review of the related studies and, 2) the literature review of the participatory communication approach. A horizontal perspective of communication, along with an alternative form of communication--participatory communication--will be introduced and conceptualized in this chapter.

Chapter III deals with the Bolivian radio context. It contains Bolivian socio-economic variables, a description of the evolution of the Bolivian radio-education broadcasting system, the rural radio in eastern area of Bolivia, and the historical background of two organizations--Radio San Miguel (RSM) and the Mobile Teams of Integral Rural Education (EMEIR). RSM and EMEIR's experience in media-education participatory communication is the case for this study.

Chapter IV adopts the case study as the research method of this study. The definition and application of case study method will be introduced; several research designs for this study will also be presented, i.e., personal interview, archival analysis, direct observation, and pattern matching design.

Chapter V is the findings and discussion of the case study--the RSM and the EMEIR communication and education participatory approach. It includes the results in five dimensions of pattern matching: origin, organizing,
planning, producing, and sustaining. Additionally, this chapter includes the participatory communication process analysis by applying a participatory communication model in three levels: access, dialogue, and participation. Discussions of the findings in this chapter mainly deal with answering the questions of "Who", "What," and "How" people was involved in the process at the institutional, organizational and the community level.

Chapter VI contains the conclusions from the research and presents recommendations and guidelines dealing with future studies.
CHAPTER II. REVIEW OF LITERATURE

Radio's Place in Latin America

The introduction of radio broadcasting to Latin America occurred in the 1920s and 1930s, concurrently with the commercial "radio boom" in the United States of America. This medium is still important, if not dominant, in most of Latin America.

The countries of Latin America adopted radio in this order: Argentina (1920); Cuba, Brazil, and Chile (1922); Costa Rica and Dominican Republic (1924); Perú (1925); Colombia (1928); México and Bolivia (1929); Venezuela (1930); and Ecuador (1937), (Martínez de León, 1984; Grebe et al., 1986; Lewis and Booth, 1989).

According to "Population Reports" (1986), in an article entitled "Radio--Spreading the Word on Family Planning," the status of the radio in Latin America offers better possibilities than that of radio in Asian, African, or Far Eastern countries. Radio is available in many regions, and sometimes it is the only source of information and contact between urban centers and marginal areas.

There are an estimated 1.65 billion radios in the world, or one radio for every four people. This figure is approximate, and the distribution of radios is very uneven, but it is clear that the reach of radio is broad. In Latin America, there is one radio for every three people; in Asia and in sub-Saharan Africa, one for every ten (Population Reports, 1986:854).
Although these figures demonstrate radio’s high potential to deliver information, more attention needs to be directed to radio’s specific advantages and limitations in most developing countries. In this paper, socio-cultural, language, production, and delivery advantages will be discussed. Constraints discussed will include the technical nature of the medium, its political influence and control, the lack of relevant messages, low audience attention, and equipment breakdown.

Radio's Advantages and Limitations in Developing Areas

**Socio-contextual radio advantages**

In countries where geographical conditions and limited means of transportation and communication divide heavily populated from sparsely populated areas, radio broadcasting is a truly significant means of information, education, and entertainment.

In countries where there is a lack of assigned resources to provide basic services such as education and health, radio constitutes a means of accomplishing these social tasks. Radio is a comparatively inexpensive medium because its installation investment is small and the population can access it cheaply. Proponents of radio for education have emphasized its ability to lower educational costs, and to improve access
to education, particularly in rural areas (Jamison and McAnany 1978:12).

**Radio's language advantages**

1. **Decoding**
   
   Because radio is an audio medium, its major advantage lies in its ability to broadcast in local languages.
   
   To obtain information from newspapers, magazines and printed media we must first learn to read, but once we have learned to speak our language, all we need to understand information from the radio is to pay attention to what is being said. Since most non-literate people receive a great deal of their information by word of mouth rather than by reading, radio takes advantage of the listener's pre-disposition to the aural mode and puts it to good use (Burke, 1976:24).

2. **Message structure**
   
   The blend of the basic elements of radio's language (voice, music, sound effects, and silence) can involve listeners emotionally, and cause them to exercise their imaginations through the different radio formats.

3. **Message temporality**
   
   Although with radio messages are present only during their utterance, radio can repeat messages and saturate the audience, reaching even the less careful listeners.
   
   Radio can repeat messages often, which helps listeners remember them. Also, radio messages reach casual listeners—those who did not seek out these messages. People who listen for entertainment can hear information and educational messages intermixed with entertainment or presented in entertaining ways. Thus radio listeners often learn without intending
Radio has immediacy—programming can be developed quickly to respond to immediate needs by emergency announcement. But immediacy can also be described as an attitude, or feeling, about the message, which people express by using such phrases: "I felt that I was right there" or "They are talking directly to me" (Burke, 1976:25). According to Theroux (1987:25), mental/emotional involvement can be especially stimulated in drama formats.

Radio programming is flexible. Many formats are available for entertainment, information, and education. High-quality radio programs, although not cheap to produce, are cheaper than movies and television programs. One skilled radio professional with a good tape recorder can produce high-quality material for radio (Population Reports, 1986).

Radio programs can foster a close relationship between announcers and the audience. Cabezas et al. (1982) and Hans-Jürgen Daus (1987) introduced a series of formats adaptable to vocabulary and concept-understanding requirements of ethnically and culturally heterogenous populations.

Radio's delivery system advantages

Radio broadcasting presents alternative and complementary ways of making contact with the audience.
through group listening (e.g., the Radio Farm Forum in Canada, the Radio Learning Groups Campaigns in Africa) or through specific format such as the radio-drama and the cassette-forum, (e.g., formats developed by Mario Kaplún in Uruguay, Venezuela, Ecuador, and Brazil).

According to Theroux, another advantage of radio is its localness (1987:5). Low-cost transmitters can be placed in many localities. Localness—the use of familiar voices and music—is also related to the medium. In a trade-off between localness and professionalism, localism can win [e.g., Tabacundo, a dialogue-cassette experience in Ecuador (Hoxeng et al., 1976)].

Radio's constraints

Although the aural nature of the radio has been identified as a potential advantage, the mass of listeners are, in effect, barred from communicating with the broadcasters (Hans-Jürgen Daus, 1987:14-17).

Frequently, radio broadcasting and all mass media are in the hands of "gatekeepers"—government broadcast services, private or government radio stations, or various regulatory bodies. Whether radio stations are government-owned or private, whether they accept advertising and sell air time or not, it is often difficult for development programs to access the medium. Reasons for the little time devoted to
development messages include: 1) production and air-time cost too much; 2) appropriate high-quality material for broadcasters to use is not available; and 3) political or religious disapproval exists (Population Reports 1986:872).

Radio has additional disadvantages such as poor attention levels, broken radio receivers, and low availability of batteries.

Additionally, for many communicators and another broadcasters, radio lacks the glamor of television. Thus, some may want to use TV even when radio would reach a larger or specific audience effectively.

Radio is not well suited for teaching manual or clinical techniques although it can update or supplement previous instruction and can teach subjects requiring little graphic representation.

In contrast to print material, which can be saved and re-examined, radio cannot be used as a reference, it might difficult the messages' recalling. In areas with many small radio stations, as in much of Latin America, it may be difficult to reach a large audience via any one station. In some mountainous countries such as Bolivia, Nepal, and Perú, radio signals do not reach far. This problem is sometimes overcome by the use of shortwave radio.
Radio's Social Profile and its Development in Latin America

Understanding the radio's social setting in Latin America requires a basic analysis of at least three socio-structural factors: 1) the historical development of the medium, 2) the communicators' and scholars' debate about the media's role in development, and 3) contemporary Latin America's cultural emergence and mass media.

Radio's historical development in Latin America

In Latin American countries, European capital investment which succeeded formal political independence was displaced by American capital from the late nineteenth century onwards. The models of broadcasting introduced in the 1920s were consequently overwhelmingly commercial. State ownership in the region is insignificant though each has at least one government owned station. Recent figures (including the Caribbean with Latin America) show 320 radio receivers per thousand inhabitants and a total of 4500 transmitters of which only a little over 600 belong to non-commercial stations. A similar commercial dominance is found in other areas of American influence such as the Pacific and Asian regions (Lewis and Booth 1989:165-166).

Katz and Wedell (1977), Alisky (1981), Grebe et al. (1985), and Lewis and Booth (1989), among others, agree that the adoption of broadcasting in developing countries is related to political and economic dependence factors, the strength of colonial ties, and economic relations with metropolitan powers.
Most of the countries have relied on models of broadcasting developed in the United States, France, the United Kingdom, or one of the colonial nations of Europe that were able to influence or even dictate the pattern of broadcasting in their dependent territories or in those countries over which they exercised some influence (Katz and Wedell, 1977:65).

According to Lewis and Booth (1989:166), the central actor in Latin America's adoption of radio broadcasting systems has been an urban elite that often entrenched its position by supporting harshly oppressive regimes. This has caused some development specialists to reject the mass media altogether as a development tool. Moreover, Beltrán (1976) states that the media's infrastructure has been based on profitability, and thus have implanted habits of consumption and on strengthening an ideology of domination.

According to Martín-Barbero, the 1930s were not merely the beginning of the implantation of the mass media, but also the inception of the mode of life and of the struggle of the popular classes under the conditions of "mass society." Latin America's fragmented societies began experiencing the sense of nation through the radio (1988:454).

The role which the mass media truly played in that period rested in their capacity to make themselves the mouthpieces of an interpellation which from the time of populism onwards was converting the masses into a people and the people into a nation; an interpellation that came from the state, but which was only effective to the extent that the masses recognized in it some of their most basic demands and the presence of their modes of expression (Martín-Barbero 1988:455).
Hence, it was the business of the "caudillos" (populist leaders) and of the media to recodify these demands and expressions. The radio's role was to provide the peoples of different regions and provinces with a first hand daily experience of the nation. As Pareja briefly explains, in the case of Colombia,

Before the appearance and national broadcasting of radio, the country was a jigsaw of regions closed upon themselves. After 1940, Colombia could call itself a country of countries rather than a nation. Radio broadcasting allowed an invisible national unity to come to life, a 'cultural identity simultaneously shared by the Costeños, the Paisas, the Pastusos, the Santanderanos and the Cachacos (Pareja, 1984:177).

Media for development debate and radio's role

Our second factor of analysis regarding the social setting of radio in Latin America deals with the 1970s debate among communicators and technicians of development to re-assign the media's role in development.

A decade or so ago, there was much optimism and huge hopes for the role that mass communication might play in fostering development in Latin America, Africa, and Asia. The mass media, especially radio, were penetrating further into the mass audience of developing countries, and they seemed to have a considerable potential for helping such nations to reach development goals. Some authors even used such terms as the "magic multipliers" in describing the media and what they could do in the development process (Rogers, 1976a:99).

The period of hope that Rogers mentions culminated in a period of questioning. Several decades of practicing Lerner's (1958) and Schramm's (1964) concepts of a diffusive
model of communication for development (Rogers, 1976a:99; Beltrán, 1976:108; Hedebro 1982:9-24) were ending, and social indicators of development showed that little real development had occurred, by "just about any standard" (Rogers, 1976a:99).

The social questioning of development is part of the communication Hispanic America's critical tradition, which, according to Schwarz and Jaramillo (1986:59), did not arise merely as a reaction to capitalist ideology or to alien premises and methods of traditional social science (Beltrán, 1976). The dialectical forces behind it were far more complex. Hispanic America's critical tradition is rarely recognized among the school of critical pioneers although it preceded U.S. concerns expressed in mainstream publications. Pasquali's 1963 work, for example, was a landmark long before Schiller's first major book (1970) was published in the United States. Verón and Mattelart's thought-provoking monographs were already circulating extensively by the late 1960s and early 1970s. And Beltrán's major critique appeared at the same time as Rogers' (1976a, 1976b) analysis of a change of paradigms in the communication field. Hispanic America's critical tradition was also enriched by Freire's (1968a, 1968b, 1969, 1970, 1974, 1976) pedagogic perspective, which brought a humanist and Christian analysis to the study of communication.
The refreshing novelty of a new paradigm encouraged researchers to look for new pathways of communication, to develop new methods of communications research (Rogers, 1976b), and to urge radical change in attitude towards diffusion research (Beltrán, 1976). The type of development communication emerging from the "marketing model" was swept aside, which encouraged the re-conceptualization of development communication from a directive initiative to a "communication system for development," in which the starting point for a communication was often the community discussing the problems of development and their possible solutions (Berrigan, 1979:11).

Bordenave suggested an approach to communication for development in which communications are seen as a part of a system that he described as any set of interacting parts maintaining its boundaries while influencing and being influenced by its environment. That is, communication is a cyclical process which can be influenced by input at any point. A message or communication can emanate from any point and can be added to, questioned, and responded to from any other point. Each point in the process is equal to another. If such an approach to development communication can be applied, the belief is that development will take place because participation in this process is, in itself, an
aspect of development (Berrigan, 1979:11).

The idea of human-centered communication and development in the international forum has been nurtured by international organizations (e.g., UNESCO General Conference at Nairobi, 1976; First Latin American Seminar on Participatory Communication, CIESPAL, Quito, 1978; the Belgrade meeting on Self-Management, Access and Participation in Communication, 1977; and a Congressional Mandate to AID, Agency for International Development, under the U.S. Foreign Assistance Act, 1973) to promote broad participation in development, particularly by the poor in less-developed countries (O'Sullivan and Kaplún, 1978).

Although the notions of participation and social involvement have arisen from several sociological perspectives, there has been increasing agreement with Rogers's development statement:

Development is a widely participatory process of social change in a society, intended to bring about both social and material advancement (including greater equality, freedom, and other valued qualities) for the majority of the people through their gaining greater control over their environment (Rogers, 1975).

A re-conceptualization of communication has also been occurring. Beltrán describes the communication process:

Communication is a process of democratic social interaction, based upon exchange of symbols, by which human beings voluntarily share experiences under conditions of free and egalitarian access, dialogue,
and participation. Everyone has the right to communicate in order to satisfy communication needs by enjoying communication resources...human beings communicate with multiple purposes. The exertion of influence on the behavior of others is not the main one (Beltrán, 1980:31).

Latin America's cultural emergence and contemporary mass media

The so-called hegemonic paradigm, or modernization model, of development communication has greatly influenced Latin American thought in two extreme dimensions: first, the communicators school offered at one point the best grounds for the adoption of a foreign model of communication; and, second, at another point, the same school fomented deep questioning of the hegemonic paradigm. According to Martín-Barbero (1988), the formation-consolidation of the hegemonic paradigm in Latin America had two stages:

The first began in the 1960s, when Lasswell's model, derived from psychological behaviorist epistemology, was translated into a different epistemological space, that of structuralist semiotic, by means of which its "conversión" and meeting with critical research was made possible. This is an "ideologistic" stage, because at least in Latin America, the aim was centered upon discovering and denouncing.

The second stage, which may be called "scientistic," began in the middle of the 1970s. Its new figure burst onto the scene, proclaiming: "that's enough of ideology and denunciation; let's be serious and start to do science." Here the hegemonic paradigm restructured itself through information theory and a positivist revival which prohibited anything being defined as a problem where we did not have a method (Martín Barbero, 1988:448-449).

According to Martín-Barbero (1988), the study of the
processes of communication has been subject to disciplinary and methodological fragmentation in both instances. If the semiotic model—counter-discourse to the Lasswellian model—with its analysis centered on messages and codes, lacked a coherent conceptual framework capable of encompassing and delimiting the field, the limitations of information theory left out both meaning, and power. Moreover, by ignoring the social conditions producing meaning the information-theory model could not analyze the struggle for hegemony, that is, for the discourse that "articulates" social meanings (Martín-Barbero, 1988:450).

The development in Latin America of an alternative to the hegemonic paradigm of communication has occurred both because of the failings of the hegemonic approach and because of new developments' having forced other factors to be taken into account. These real social processes in Latin America have had an important impact on the "object" of study for communication researchers (Martín-Barbero, 1988:451-452).

Current Latin American communication research has focussed on issues such as "transnationalization," "democracy," "culture," and "popular movements." This new agenda has required the abandonment of the previous conception of forms of struggle against "dependency."
To struggle to make oneself independent of a colonial power in head-on combat with a geographically defined power is very different from struggling for one's own identity inside a transnational system which is diffuse, complexly interrelated and interpenetrated (García Canclini, 1983:24).

The new conditions of the transnational debate brought about a self-analysis of the position of the critical communicators, including Martín-Barbero:

The hegemonic paradigm is the one through which we "basically" think about the problems of communication today. This means that my critique is not one of a model from which I am detached, but rather of one inside which we critics to some extent live. This makes the task of outlining and de-constructing it so much more difficult. I believe that the first decisive step towards the construction of another way of thinking about the problems goes like this: we need to "recognize" that the hegemonic does not dominate us from without but rather penetrates us, and therefore it is not just against it but from within it that we are waging war (Martín-Barbero, 1988:447-448).

Two other factors shaping the communication environment of Latin America are new communication technologies and changes in the political forces of the region. The new communication technologies have often been introduced by transnational forces and have constituted a threat to the cultures into which they have been introduced.

In politics, according to Martín-Barbero, a new approach emphasizing popular involvement and initiative has begun. This is a process of understanding democracy in a manner different from that encouraged by the propositions orienting
the thought and action of the left until the mid 1970s--an exclusivist attempt to organize the proletariat with politics as instruments of totalization.

A profoundly new appraisal of the culture is emerging in Latin America...something radically different is happening when the culture signifies the perception of new dimensions of social conflict, of the formation of new subjects--ethnic, regional, religious, sexual, generational--of new forms of rebellion and resistance (Martin-Barbero, 1988:453).

This profound renovation of communication-culture provides an opportunity to perceive new forms of media, reaffirm the pluricultural basis of a region, and reconsider the relation of the indigenous to the urban masses.

According to Maiava (1989), the popular perspective of development is gaining wide acceptance as expression of populist philosophy which includes: participation, empowerment, self-reliance appropriate technology and rural development itself. The aspiration for something different, better, more truly indigenous than Western systems of development and yet as socially and materially effective is palpable everywhere. Stated by Maiava, however, the populism needs "to be analyzed, not just celebrated" if populist concepts will be translated into models of development (Maiava, 1989:3-8).
Participatory Communication:  
A Horizontal Perspective on the Mass Media

Radio must be transformed from a medium of distribution into one of communications. Radio could be the most tremendous means of communication imaginable in public life, a vast channeling system—or rather, this is what it could be if it could not only broadcast, but receive, not only get its audience to listen, but get it to speak, not isolate its members, but put them into contact with one another (Brecht, 1967:137).

The purposes of this section are to examine the concepts of "participation and participatory communication" and to appraise participatory approaches to educational radio broadcasting. The concept of "participation" has been shaped from several points of view, and among policymakers, social scientists or popular groups linked to social movements, there is considerable confusion about its substance and implications (Gilbert 1987; Hall, 1981; Anisur Rahman, 1981a, 1981b; Bryant and White, 1982; Cohen and Uphoff, 1980; Goulet, 1989).

For instance, Anisur Rahman (1981a) considers that this social phenomenon can be explored but not contained in a formal definition. Gilbert, however, considers two holistic definitions to describe participation:

1. Popular participation in development should be broadly understood as the active involvement of people in the making and implementation of decisions at all levels and forms of political and socioeconomic activities (Lisk, 1985, cited in Gilbert, 1987:58).
2. The involvement of a significant number of persons in situations or actions which embrace their well-being, e.g., their income, security or self-esteem (Cohen and Uphoff, 1980, cited in Gilbert, 1987:58).

In the communication field, participation emerged initially as a response by critics of the traditional "top-down" model of communication. Participation, on the other hand, expressed a two-way process: bottom up, grassroots participation, and horizontal communication (Gerace, 1973; Fals-Borda, 1985; Beltrán, 1976, 1980).

The participatory approach was also a reaction to "functionalist" communication (Atwood, 1986:17), which was seen as supporting the status quo (Martín-Barbero, 1982). Functionalist approaches were also seen as the mainstream of North American communication "effects" research (Beltrán, 1976; Esteinou Madrid, 1984).

The rise of participatory approaches has also been due, in part, to a trend away from disciplinary thinking in academia. A participatory focus implies a departure from the traditional way of defining one's "own discipline" and thereby reducing the problem of communication to that of media (Martín-Barbero 1988:454).

According to Fals-Borda (1985), the participatory process leads to the creation of a "true counter-discourse" able to break the major foundations of the traditional
knowledge--Cartesian methods and Kantian empirical presuppositions, because it obscured its political goal--the achievement of power--based on science as source of truth. The guiding view of people's movements is to proceed from the grassroots upwards. Their most effective weapons for mobilization are based on popular culture, rather than on elitist referents. Their greatest ontological challenge is the "practical rationality" of traditional knowledge. The common people want to have their knowledge systematized, objectified by their own collectivities, and advanced consciously by their own leaders while becoming aware of the knowledge of other groups so that their wisdom is seen and respected as being as scientific as any other. This is a counter-discourse to current "development," which hinges on the idea of "people's-participation" (Fals-Borda, 1985:66).

Fals-Borda (1985) recognizes that, in this context, participation represents the break-up of the traditional relationship between submission and dominance and the transformation of subject/object asymmetry into a truly open, in all aspects of life--from the economic and political to the domestic and scientific.

Paulston and Leroy (1975:590) characterize people's movements as follows: 1) emerging class elements (i.e., farmers or workers) are contesting what they view as
oppressive restrictions on their growing aspirations for power and participation, and 2) relative ethnic homogeneity and corporate traditions of social organization enable dominant social elements to tolerate the creation of lower and lower-middle class movement ideologies and alternative solutions.

**Actors, practices and concepts towards "participatory communication"**

Although the critical communication approach includes scholars from the Western and European traditions, the Hispanic American communication mainstream has developed the practice and understanding of participatory, or alternative, approaches to communication.

According to Atwood (1986:18), Hispanic-American communication scholars, oriented by a critical "structuralism," have challenged the legitimacy of the media structure and have opposed the notion of value-free, "objective inquiry." These scholars have emphasized the concept of "praxis." Consequently, communication scholars from Marxist and non-Marxist lines have begun discussing the concept of "social praxis." Theoretical support has come from leading Third-World scholars (e.g., Cardoso and Furtado—theory of dependence; Gonzales Casanova—theory of exploitation; Germani—theory of marginality; Freire—
dialogical techniques; and Gutierrez—liberation theology) who have found an explicit commitment to radical social change. This ferment has resulted in communication favoring the arrival of what Beltrán (1975) has called the "communicology of liberation."

Although the legitimacy of praxis is denied by scholars like Prieto Castillo (1983:89), who believes that the division between theory and practice is false because communication is a theoretical-practical activity, the concept has helped to shift the areas of interest and the practice of communication towards what is called "alternative communication,"—horizontal communication, democratic communication, and popular or participatory communication (Atwood, 1986:19).

The objective of these alternatives has been to foster substantially different structures and processes of communication making egalitarian, interactive, and emancipating discourse possible (Atwood, 1986).

Reyes Matta (1986:190) explains that although the term used to describe this approach is "alternative communication," it also must refer to the relations between alternative communication and the dominated. Miquel de Moragas (1985) makes this point clear by stating that the alternative and the dominant cannot be seen as opposite poles or as existing
in different settings: both exist in the same setting. Therefore, the participatory as well as the alternative co-exist with the dominant. Atwood explains (1986:19) that alternative communication approaches encompassing local, regional, national, and international activities contribute to the creation of a New International Information Order (also known as the New World Information Order) as well as to democratic and popular communication systems.

But it is necessary to clarify that the idea of "democratic communication" espoused by Latin American critical scholars distinguishes "participatory democracy" from liberal Western "representative democracy" (Atwood, 1986:19). The Western capitalist ideology of development is increasingly being rejected not only by vast numbers of oppressed people in Third-World countries, but also by those living in the "pockets of misery" of industrialized countries (Cardoso, 1981:302-303).

Alternative forms of communication are explicit Third-World reactions developed during struggles against colonialism, national and international reactions to neocolonialism, movements supporting quality of life and humanistic development, and reactions against political and economic authoritarism (Reyes Matta, 1986:194).

Consequently, the areas of alternative communication
practices are broad, spanning three specific forms: alternative micro media, alternative media of intermediate development, and alternative macro media. The common objective remains, nevertheless: to alter the inherited political, economic, and cultural structures up to the point at which national and popular sovereignty coincide (Reyes Matta, 1986:205).

Alternative micro media

These practices, also termed folk media (Vella 1979:49), small media or nonprofessional media (White, 1980), or little media (Schramm, 1977) may serve as channels for mediating the interplay between cultural integrity and development objectives (Colle, 1989; Compton, 1980). They are a viable way to touch themes from peoples' cultures (Freire, 1968a). In spite of the precariousness of resources, these media are extraordinarily significant, rich, and diverse.

Alternative micro media offer the opportunity to express a cultural heritage in its own language, which is dramatically familiar and thematically profound (Vella 1979:49). Among folk media are songs, dances, poems, proverbs, stories, tales, legend and drama. Small-scale workshops on audiovisual material, films, or publication of leaflets, bulletins and puppetry are also included as forms of micro media.
Alternative intermediate media

These media have influence at the national and regional level. In general, they do not correspond to the mechanism of popular action at the local level. These media spread their messages within market structures such as alternative radio or popular television. Although many radio or television services co-opt the terms "popular" or "alternative," what is included here as a valid alternative medium is one closely related to and supported by local organizations, whose objectives, programming, and creativity are oriented to the demands of their audience (Reyes Matta, 1986:210-11).

Alternative macro media

At this level are regional and world-news agencies, audiovisual exchange systems, and publications that, in governmental and nongovernmental organizations, promote understanding of information and communication as a social responsibility rather than as a trade process. Examples are Inter Press Service and ALASEI--the Latin American Agency of Information Services (Reyes Matta, 1986:211).

Participatory Communication: Freire's Pedagogy of Dialogue

The effect of Christian pedagogue Paulo Freire on the theoretical debate surrounding social phenomena (1960s-1970s)
in the developing world can be compared to a Copernican shift (Kidd and Byram, 1982) in education and communication practices. His work has had a profound impact on the concept and practice of participatory communication.

The Brazilian educator worked on the basis of interchangeable teacher/learner relationships; the teacher learned from the student. His practice is based on the idea that education is a process of "conscientization--or conscientização," in which

1) peers in solidarity engage in intentional dialogue through which they are becoming conscious of their cultural reality; 2) participants in the dialogue, not as passive recipients of information but as active subjects, recognize that they are in the process of communication, in the process of raising their awareness of self and their awareness of their world; and 3) the process progresses to continually greater consciousness of self, of the world, and the human relation to the world (Fernandes, 1985:62).

Freire (1968a:69) insists that dialogue--the bridge of "conscientization"--requires an intense faith in man, faith in his power to make and remake, to create and re-create, faith in his vocation to be more fully human (not the privilege of an elite, but the birthright of all men). Faith in man is an a priori requirement for dialogue; the "dialogical man" believes in other men even before he meets them face to face. His faith, however, is not naive. The "dialogical man" is critical and knows the power of men to
create and transform. Without this faith in man, dialogue is a farce inevitably degenerating into paternalistic manipulation.

Liberating dialogue, which presupposes action, must be carried on with the oppressed at all stages of their struggle for liberation. The content of that dialogue can and should vary in accordance with the historical conditions and the level at which the oppressed perceive reality.

To achieve this praxis, however, it is necessary to trust in the oppressed and in their ability to reason. Whoever lacks this trust will fail to initiate (or will abandon) dialogue, reflection, and communication, and will fall into using slogans, communiques, monologues, and instructions. Political action on the side of the oppressed must be pedagogical action in the authentic sense of the word, and, therefore, action with the oppressed (Freire, 1968a:53).

Freire's approach has spawned influential concepts for adult education and similar principles of inquiry engaging adults in critical analyses of their powerlessness and impoverishment. His techniques have been utilized in projects in Africa and Asia (Anisur Rahman, 1981b, 1985; Fals-Borda, 1981; Tandon, 1980). According to Kidd and Kumar (1981), however, the Freire pedagogy and its progressive terminology--conscientization, consciousness raising, empowerment, equity, and dialogue--is in danger of co-option and distortion by development agencies, governments, and
organizations using the terminology to continue domestication of the Third-World.

This pseudo-Freirean perspective operates through the following steps:

- Naming the central problem as "poverty" rather than as "oppression;"
- Identifying the cause of poverty as self-inflicted deficiency of the poor, rather than oppression;
- Proposing, as treatment, to change the behavior of the poor through transmission of information and skills;
- Converting Freire's method into a "neutral" classroom technique without politics;
- And defining "action" as coping activity (Kidd & Kumar, 1981:28).

Recurrent Topics About Alternative Participatory Communication

1. Although approaches to alternative communication share the common objective of human development, their level or specific communication approaches may vary widely (e.g., Alternative Communication (Reyes Matta 1981a, 1981b; Simpson Grinberg, 1981); Popular Communication, Grassroots Communication (Martín-Barbero, 1983, 1984; Ossandon, 1981; White, 1980; Díaz Bordenave, 1982) Horizontal Communication (Freire 1969, 1970; Gerace, 1973; Beltrán, 1980); Indigenous Communication (Fals Borda, 1973; Beltrán, 1976; Díaz Bordenave, 1976; Compton, 1980; Colle, 1989; Awa, 1987).
2. Access is a precondition for horizontal communication because, without comparable opportunities for all persons to receive messages, there can be, to start with, no democratic social interaction (Beltrán, 1980). Access by definition infers the ability of the public to approach systems of communication (Berrigan, 1977).

3. Dialogue is the means of horizontal communication, for if genuine democratic interaction is to take place, each person should have comparable opportunities for sending and receiving messages so as to preclude monologue, or monopolization of the word. All participants in the communication process should be identified as "communicators." Thus, the differentiating between "source" and "receiver" is no longer appropriate (Beltrán, 1980).

4. Participation is the culmination of horizontal communication because without comparable opportunities for all persons to send messages, the communication process would remain governed by the few (Beltrán, 1980). Participation implies the involvement of the public in the production and management of communication systems. It also operates at production, decision-making, and
planning levels (Berrigan, 1977).

5. From the perspective of practical viability, access-dialogue-participation constitutes a probabilistic sequence. This is to say that, in terms of degree of difficulty of attainment, access is at a low level, dialogue is at an intermediate level, and participation is at a high level. Having more people receive messages is deemed easier than building the circumstances that make dialogue possible, and dialogue is regarded as more feasible than effectively turning every person into a significant emitter. Access is essentially a quantitative matter. Dialogue is eminently a qualitative matter. And participation is a qualitative/quantitative matter (Beltrán, 1980).

6. The practice of horizontal communication is more viable in the case of interpersonal (individual and group) than in impersonal (mass) formats. An obvious technical explanation for this is the intrinsic difficulty of attaining feedback from mass communication. But the main explanation is political (Beltrán, 1980).

7. For horizontal communication, channels do not go "up" to a communication center controlled by a
higher-status individual and then back "down" again to other lower-status groups, but are direct from one equal-status group to another.

8. It cannot be assumed that participation is always to the benefit of participants. To understand participation, issues such as participation for whom, and the limits of participation need to be considered (Gilbert 1987:61).

9. To get people involved in an "authentic analysis of reality," the instruments and strategies used should include participatory research, participatory evaluation, participatory communication, and popular education. Marginal groups of society must be involved in identifying the problem, designing the research techniques, collecting the data, analyzing the information, and deciding how that information will be used (Byram, 1981; Fals Borda, 1985).

10. The central issue of "popular participation" is that of power; it is concerned with the struggle for the control of resources (economic, social, and political) by, and in favor of, the exploited masses (Byram, 1981). The main obstacle to participation in decision making by poorer group is generally related to the fact that this form of power-sharing
is likely to adversely affect the interests of privileged groups and, consequently, to alter the political power relations in society. Hence, a key aspect of participatory approaches lies in knowing under what circumstances and to what extent central government will introduce genuine decentralization of planning and tolerate the establishment of effective participatory institutions organizations (Gilbert, 1987; Majeres, 1985; Lisk, 1985).

It is not possible to conceive of authentic alternative communication without a strong link to a social praxis feeding and supporting it. The quality of alternative communication depends upon the persistence of participation (Reyes Matta, 1986: 201).

Alternative Radio: Contemporary Forms of Community Participation in the Mass Media

Alternative radio is not an end in itself, it is only a means, an instrument among others that can help a process to develop, but is quite incapable of bringing it to birth unaided. Alternative radio is by definition ephemeral, even if sometimes it can continue for longer than envisaged; but it must never be regarded as permanent. Alternative radio's first duty is to intervene in an alternative way, before trying to be radiophonic (Collin, 1979).
Mattelart and Piemme (1980:325) suggest that the analysis of the possibilities of a medium needs to be done within the historical shaping of that medium. This shaping is not part of an inevitable process branding the medium once and for all in the form it has. But previous experiences provide a base that new forms will have to take into account.

Public involvement in radio broadcasting has occurred in many forms around the globe. Approaches have varied from case to case, and from industrialized countries to developing ones, in terms of such factors as state policy, economic support, external influence, and audience contact.

The global spectrum of alternative radio includes "free-radio stations" in Europe since the late 1970s; "community radio" in Europe and the United States since the mid 1940s (with a specific variant in Britain with its 1960s "independent local radio"); "public-service radio" in the 1970s in Canada, the United States, and Britain; "local radio", "popular radio," and "participatory radio" in the developing countries since the 1940s.

Although the focus of this section is on Latin American radio experiences--local radio, popular radio, and participatory radio--it may be helpful to begin by examining some of the ways in which radio has been used in industrialized societies.
Free-stations

According to Mattelart and Piemme (1980) the "free-stations" revolution is not merely technological. Wherever free-radios have been able to play an alternative role, new types of social practices have always been present. For instance, Lisboa, Bologna, Longwy--Belgian cases--are not just free-radio; they are social movements. The start-up of some of Europe's free-radio stations was connected with the ecological or anti-nuclear struggle. The existence of free-radio as a possible alternative is threatened by the double temptation of commercialism and power politics.

Community-radio

The community-radio experience in the United States, as Barlow (1988) explains, is a case of struggling towards a democratic medium by heightening the level of citizen participation in its operations and by broadening the range of viewpoints in its program formats. The most salient characteristics of these radio stations are their non-commercial status as broadcast outlets, their avowed policy of local community involvement in programming, and the democratic organization of their institutional procedures and practices. Their noncommercial status helps to insulate them from the influence of the profit motive and the capitalist marketplace, thus enabling them to develop alternatives to
dominant commercial broadcasting (Barlow, 1988:81).

A common element among the community-radio experiences is that each takes as its starting point a reaction to the radio of its own country, corrects its distortion and omissions, challenges its assumptions, practices, and usually its style, or perhaps simply reaches parts of the country that mainstream broadcasting cannot or will not reach (Lewis, 1984:140).

The establishment in 1949 of "KPFA" radio station in Berkeley, California by the pacifist Lew Hill and the Pacifica Foundation is usually taken to be the genesis of community radio in the United States. The origin of this type of radio broadcast was the progressive opposition to the repressive political climate of the Cold War era and the desire to facilitate grassroots citizen access to the station's airways and resources (Barlow, 1988:84). Today, Pacifica Radio consists of five non-commercial radio stations.

The KPFA model was the example for the diffusion of community radio in the United States and Canada in the 1960s and involved the most disenfranchised segments of the population—minorities, women, youth, senior citizens, and aboriginal groups (Lewis, 1984; Barlow, 1988).
Public-service broadcasting

Public-service broadcasting has its origin in Britain. This system follows four principles: a non-profit aim, universality of service, unified control, and maintenance of high standards of programming. Public-service broadcasting assumes as its audience rational citizens capable of being led to "high" standards of taste and outlook by a mix of popular and serious programming (Lewis & Booth 1989:7-8).

Lewis & Booth explain that British public-service broadcasting pursues the following principles:

1. Broadcasting is a national asset that should be used for the national good rather than for the benefit of particular interest groups; and

2. Responsibility for broadcasting should therefore lie in one or more broadcasting authorities appointed as "trustees for the national interest" in broadcasting.

What is not explicitly stated in these principles, however, is either the constitutional position of the BBC vis-a-vis the state or who defines the national interest (Lewis & Booth, 1989:6-7). The United States' and Canada's public-service broadcasting experiences, although with several variants, also attempt high-quality (cultural) programming.
Local radio

Local radio in the British case was introduced in 1973. "Independent" local radio (ILR) was the term used for commercial radio, following the precedent of the Independent Television (ITV) set up 20 years before. "Independent" was intended to denote independence from license revenue, in contrast to the BBC, but the members of the regulatory authority, the IBA, are appointed by the government, and its operation is subject to an act of Parliament (Lewis, 1984: 138).

Local radio, community radio, popular radio, and participatory radio

Local radio, community radio, popular radio, and participatory radio have been developed in the Third-World, and especially in Latin America. Although they are distinct, for the purposes of this study they will be considered interchangeably.

The definition of "local radio" by the Development Communication Report (1989/1. No.64) includes behavioral and descriptive characteristics. It includes the following elements:

1. Local stations are physically close enough to the people they serve for listeners to be able to visit. Actual distances vary depending on season, terrain,
availability of local transportation, etc.;

2. Local stations have an open-door policy encouraging local people to visit; producers routinely leave the station to talk directly with listeners;

3. Local radio's formal structures allow local people to regularly express their views on program content through implementing experiences such as program advisory-groups and listening groups; and

4. Local radio stations do not limit their activities to broadcasting; they organize events and community activities that make the stations an integral and exciting part of local life.

The Development Communication Report (1989) explains that listenership figures and preferences and listener turnout at station-organized events are just a few of the ways to measure listener support to local radio.

Cabezas (1986:11) recognizes additional characteristics of local radio. He says that a "popular radio" is a radiophonic communication center generally situated in a rural area and reaching a relatively reduced geographical area--around 100 km--and around 500,000 inhabitants. It is called "popular" because it is concerned with the active Participation of the lower classes, who can take part in radio programming as well as in operating the medium.
Popular radio stations are generally located in regional centers or in places where many public and social activities converge. For example, they can be located in the indigenous marketplace. These radio stations strive to be horizontal by offering programs desired by the community and tend to be substitutes for the lack of services in specific regions. Popular radio helps to express the critical and political consciousness of its society.

The local character of this type of radio station guides its role in the region's culture and involves it in activities favoring the defense and satisfaction of the rights, resources, and needs of the oppressed. It not only serves to express the voice of village leaders or mayors, but also that of the small farmer and people whose ideas are sometimes considered unpopular or impractical. Its local influence and its purposes also lead to its being called Regional Radio for Development (Cabezas, 1980:18). Another characteristic of the local radio is a sense of regional or social ownership. Radio producers often make it clear to members of the community that the station does not belong exclusively to the radio staff. The radio station exists to give the community its "own voice" (Burke, 1989, DCR:7). Finally, this localization may mean broadcasting in one or more languages; or, more importantly, it may re-interpret
messages to suit local needs and conditions (Burke 1989, DCR: 7).

According to López Vigil (1988), there are five basic changes in the practice of participatory radio: 1) contents—from messages detached from the everyday life of audience to those which focus on the community; 2) language—from use of terms and expressions incomprehensible to the audience to the simple daily popular language; 3) intonation—from professional announcers, voices, and codes to the spontaneous familiarity of audience's popular communication; 4) formats—from commercial patterns of programming to creative audience-culture centered programming; 5) finally, sender—from a close access to the medium by the audience to a growing active expression and integration of the audience in radio programming (López Vigil, 1988:59-79).

Goals and Strategies of Radio for Education and Development

Jamison and McAnany (1978) have established that radio broadcasting devoted to development communication pursues four broad goals: to motivate, to inform, to teach, and to change behavior, and the way to achieve these goals depends on a second dimension—radio's strategies (Jamison and McAnany, 1978:18).
Radio's use "to motivate" concerns arousing people to think about and, hopefully, to act on something. Radio's use "to inform" would include, for example, programs on local, national, or international news; farm news; weather; and social activities and services available to listeners. The broad heading of using radio "to teach" includes generalized cognitive skills--literacy, mathematics, or seeking stored information--which are often best achieved by formal schooling. Radio can also teach work skills and activities related to daily life. Using radio for nonformal education is probably its most important development-communication purpose. Finally, using radio "to change behavior" refers to the types of programs recommending a specific activity without trying to explain much about it. Learning is at a minimum and people are asked simply to follow certain directions (Jamison and McAnany, 1978:18-19).

The second dimension of radio's role in development communication concerns its strategies--the way in which it and other resources are organized to achieve certain purposes. There are three main strategic categories: open broadcasting, campaigns, and regular listening groups, as well as a possible additional strategy--a telecommunications category, the electronic creation of interactive contact.

"Open broadcasting" encompasses radio messages not
attempting to organize or send supporting materials to audiences. "Regular listening groups" refer to radio uses calling for organization, supervision, and support of local listening groups meeting regularly to discuss and often act upon radio messages. "Campaigns" may utilize both open broadcasting and listening groups for a short period of time (three to six months), to focus on a specific topic with a limited set of objectives (Jamison and McAnany, 1978:19)

Latin America's Radio for Development and Education: The Mainstream Experiences

The use of radio for education in Latin America began in the late 1940s and spread widely during the 1960s to many rural areas. The Catholic church played a key role in the spread of educative radio.

White (1980), Jamison and McAnany (1978), Luft (1983), and Lewis and Booth (1989) agree on the importance of Latin America's church in the development of the radio school, community, and popular radio experience. This presence can be considered beneficial to communication because it not only began the mainstream experiences of educational radio, but also contributed to the basis for popular communication because of its work with lower-status groups and semi-subsistence peasants.
Although the Catholic church has played a major role and will be the focus of discussion here, other experiences such as radio's use by unions, peasants, worker's organizations, and ethnic or minority groups are also involved in the development of community and participative radio in Latin America.

According to White (1980), Schwarz and Jaramillo (1986), and Luft (1983), the church's role was the result of a tremendous change and revitalization of the Catholic church due partly to: 1) landmarks such as the work of John XXIII (1958-63), who promoted a new understanding between theological doctrine and the contemporary world, and 2) the Second Plenary Conference of Latin American Bishops (CELAM II, 1968), which issued documents based on a socioeconomic analysis of the "dependency model" and the consideration of the Biblical message understood as "theology of liberation."

The Medellín Conference of Bishops (1968) presented the opportunity for church leaders, priests, and the laity to express more unequivocally an "option for the poor." As priests and other religious leaders in the rural pastorate came into closer contact with the daily life, neglect, and exploitation of the peasant, they were moved by the needs of such families and began to supplement insufficient government services. The result was a growing involvement of the
Catholic church in popular education in rural areas. Church-sponsored radio stations were one of the principal methods of reaching masses of impoverished and isolated peasants with literacy and training programs.

Although Catholic-sponsored radio has emphasized the literacy campaign since the end of the 1940s with its mainstream case--Popular Cultural Action Program (ACPO), Radio Sutatenza, the revitalization of the Catholic church has shifted the emphasis to the "consciousness raising" incorporated by Catholic radical movements. According to La Belle (1986:170-171), this change moved radio away from the diffusion of information per se and from a human-capital approach--which through psycho-social and economic orientations foster citizenship and political goals within the constraints of existing social structures--towards a focus on analyzing the social structure perpetuating the peasants' plight.

For example, The Basic Education Movement (MEB)--church-sponsored radio in Brazil which began a nationwide radio school effort in 1961 with the Brazilian government and the Brazilian Bishops Conference (CNBB)--initially emphasized community action in support of change agents for community development. By 1962, the MEB program was transformed into a consciousness-raising movement; and by 1963, it was
incorporated into the Popular Culture Movement affiliated with Paulo Freire. The trend at times apparently resulted in confrontation with landowners, with the wider political and economic structure, and with the cultural ties binding the peasants to local bosses. When the Goulart government was ousted by military force in 1964, the radical impetus in MEB and other movements were gradually eliminated (La Belle, 1986:170-171).

White (1980:18) explains that it was apparent to some church leaders that most of this rural-development activity was not reaching the roots of the problem of the peasant, and they were led to an ever more radical commitment to support mass organizations of peasants, agrarian reform, and profound changes in the rural power structure. The church was inevitably brought into conflict with large landowners and with the ruling elites. This alienated secularized rural and urban elites from the church even more and threw the church back on the support of the lower-status peasant groups. The church found itself a part of the communication channels linking peasant-worker movements and various urban allies into a national independence movement. Peasant groups found in the rural parish structure, with its leadership training centers, small radio stations, and system of educational programs reaching into remote communities, a ready-made
pattern of local and regional communication channels. In many cases, the church began providing the external structures for the process of popular communication.

White (1980:21) explains that the radio-school programs developed in Latin America frequently evolved into lower-status communication networks based on: 1) a series of neighborhood-level organizations for men, women, and youth; 2) paraprofessional or peasant-promoters of neighborhood organizations, who visited isolated communities on horseback or foot; 3) monthly meetings of neighborhood leaders in parish centers; and 4) regional training-centers in market towns offering short courses in community organization, cooperatives, health, and agriculture. In time, this network often formed the basis for federations of credit, consumer and/or marketing cooperatives, small-farmer special-interest organizations, and rural women's organizations.

Acción Cultural Popular (ACPO)--Radio Sutatenza--a church-sponsored project, is recognized as the pioneer of radiophonic education in Latin America. It was founded in Colombia in 1947 through the initiative of the Father José Joaquín Salcedo and is perhaps the world's largest nonformal education program concerned with improving the quality of life of rural populations (Development Communication Report 1980, No. 29:5).
The experience of Radio Sutatenza began with Salcedo's belief that basic education in literacy and mathematics was essential for the progress of the peasants in Colombia. But this basic education also had to embrace health, family, community vocation, and spiritual needs. Salcedo was not concerned with providing a duplicate of formal primary education, but with an alternative form based on agriculture and family life in rural communities (Bishop, 1986:186).

The path drawn by ACPO was promptly expanded in Latin America and led to the idea of "radio schools" or "instructional radio" experiences, which developed their strategies according to several ideological objectives.

The 1960s was the period of peak interest in the creation of major networks of radio education in Latin America—such as Escuelas Radiofónicas de Radioemisoras Bolivia, 1966-1967 (INDICEP, 1971), Bolivian Radiophonic Education (ERBOL, 1987); the Popular Promotion Movement, PPM, in Honduras (Jamison and McAnany, 1978); DESAL in Santiago, Chile, (White, 1983); Radio Schools of the Movimiento de Educação de Base, MEB, in Brazil, (Kadt, 1970); Radio Santa María in the Dominican Republic (White, 1976); and ECCA, Emisora Cultural de Canarias, Canaries Cultural Station, which although located in the Spain Canaries is considered important for the Latin American radio-school development.
Concerning this type of programming, Robert White explains that an encouraging sign of the continued vitality of the radio-school institution is the recent growth of the Latin American Association for Radiophonic Education (Asociación Latinoamericana de Educación Radiofónica, ALER). After years of informal exchange, 18 systems of radio schools formed ALER in 1972. ALER now has 42 affiliated radio-school systems in 17 of the 21 Latin American countries, with a waiting list. Altogether, these 42 institutions enroll approximately one million adult students in formal instructional programs and reach a fairly stable, loyal audience of 15 million with their open cultural and educational broadcasts (White, 1983:122).

Naturally, the process of diffusion of radio educational experiences varied according to the political conditions of the countries adopting them, the interests of sponsors and donors, the infrastructure available to support the effort, and the specific approach of each radio towards education.

McAnany (1975) reviewed the radio-schools approach and, noticing their growth for nonformal education, concluded that, first, radio schools have historically focused on the "campesino" audience in rural areas, where learning needs are greatest; that second, several features of their approach fit
in with important learning principles such as the group-learning approach and multi-media instructional methods (radio, printed booklets, newspapers, and audio-visual aids) coordinated around learning objectives; that third, the radio schools have been built up on an already existing and important structure in rural areas--the parish church; and that fourth, the radio schools, by being mostly private and church-sponsored, have remained free from identification with the government and its policies. Certain negative features of radio-schools were identified, however: first, the heavy emphasis on literacy seems to be a misdirection of effort; second, radio schools often do not involve themselves in community development, claiming to be strictly educational; third, until now, the radio schools have remained relatively small and their impact on rural life limited; fourth, radio schools may have lost their appeal for real change in rural life and may be seen as only another half-hearted attempt by the power structure--this time the church and not the government--to give campesinos the minimum social services to satisfy them with their position in society. Finally, the major efforts of radio schools seem to be focused on mass-media messages, and insufficient attention is paid to feedback from rural groups.
Participatory Communication in Development Radio: 
Unsolved Issues in its Process

This literature review raises several important questions including the following:

1. How does the idea of using radio as a participatory medium for communicational-educative experiences originate in a specific social setting?

2. Under which social-structural conditions is participative radio implemented?

3. Who gets involved in the process of organizing the participatory radio process?

4. Does the introduction of participatory strategies involve the presence and guidelines of outside community agents? If so, what are the nature and objectives of those external agents?

5. Who set goals and objectives for the process of community participation in radio, and how?

6. How do the three aspects of horizontal communication—access, dialogue, and participation—occur at the institutional, organizational, and community levels of the participatory radio process?

7. What changes observed in production, decision
making, and planning levels occur to produce participatory communication?

8. Do isolated lower-class targets of participatory popular communication perceive the medium as radio planners expect? If so, how do they find themselves represented in the medium?

9. How does the participatory nature of the communication experience guarantees its continuity?

10. Is the participatory methodology of communication and education supported as well as strategies of participatory research, participatory evaluation, and popular education?
CHAPTER III. THE BOLIVIAN CONTEXT: A SOCIO-POLITICAL INTRODUCTION

The purpose of this chapter is to discuss: 1) the major socio-political factors in Bolivian society that have influenced media development and 2) the growth and functioning of alternative, or popular, forms of expression. This socio-political framework will present a base for understanding our case study—the communicational-educational experience of Radio San Miguel of Riberalta and the Mobile Teams of Integral Rural Education.

The Bolivian State: Unity and Pluralism

Bolivia has been characterized as a place of permanent political turmoil. Some of the reasons for this are related to the country's racial, geographic, and ethnic diversity. With 424,000 square miles—1,098,168 square kilometers (about the size of Texas and California)—Bolivia is the fifth largest country in South America. Relative to its geographic size, however, Bolivia has a very small population (in July, 1989, 7.3 million). More than half the population (52 percent) is rural; and over 50 percent of this sector is concentrated in the Andean departments of La Paz, Oruro, and Potosí. Less than one-fourth of the population lives in the eastern interior constituting 59 percent of the nation—
departments of Santa Cruz, Pando, and Beni. In 1988, only three Bolivian cities had a population of over 200,000 and only two surpassed 500,000—La Paz, 1,049,800; Santa Cruz, 615,122; Cochabamba, 377,259 (Gamarra and Malloy, 1990:2; Iriarte, 1989:314-317).

The Bolivian population is concentrated in the Altiplano, or upper-land (52.8 percent of the national population), with a density of 14.9 inhabitants per square kilometer. The Valley region has 26.6 percent of the national population, with a density of 9.6 inhabitants per square kilometer; and the Eastern or Tropical Region has 20.5 percent of the national population, with the lowest rate of density, at 1.7 inhabitants per square kilometer. The totals are distributed as follows: Altiplano, 3,412,486; Valley, 1,863,544; and Eastern, 1,652,467 inhabitants (Iriarte, 1989:315).

Bolivia is also characterized by its heterogeneous population framework along racial, ethnic and cultural lines. Approximately sixty percent of the population is racially and culturally Indian; of these over 50 percent are Quechua, 40 percent Aymara speakers. In the eastern lowlands, a small proportion speaks Guarani and other Indian languages. Around 30 percent of the population is racially mixed (mestizos). Although people of white extraction constitute less than 10 percent of the population, they have always dominate Bolivian political life. Racial and cultural hostility have consequently undercut any sense of national identity (Gamarra and Malloy, 1990:2).
Bolivia's geography also has impacted national identity. Gamarra and Malloy (1990) explain that Bolivian geographic and regional diversity has exacerbated racial and cultural diversity. The altiplano situated within the Andes mountains at over 12,000 feet (3,657 meters) has been the core national region. In contrast, the East of the Andes chain, with its semitropical valleys, descends eastward and spreads out into the llanos (lowlands), of the Amazon Basin. This region has been separated from political influence. Few rails or roads link these regions, and vast stretches of the country are accessible only by air.

Topographical factors and the economic realities have contributed to a strong sense of regional identity and intra-regional rivalry in Bolivia. This is the case with the historical rivalry between the so-called Kollas and Cambas.

Historically the resident of provincial cities such as Cochabamba (valley region) and Santa Cruz (llanos region) have viewed the capital city, La Paz (altiplano), as an alien force hostile to their regional interests. Thus regionalist have resisted or tried to dominate the national government, and this regionalism has often been tinged with racial animosity. The people from Santa Cruz, for example, consider themselves white and proudly refer to themselves as "cambas." They look upon the Indian and mixed populations of the mountains and valleys with a mixture of fear and disdain and refer to them derisively as "kollas." This particular mode or regional-racial tension has been a crucial political factor in the last thirty years and has undermined the effectiveness of the national government (Gamarra and Malloy, 1990:3).
According to Gamarra and Malloy (1990), implementation of the Bolivian political constitution, which follows the United States and French traditions, has been guided by a Spanish "bureaucratic patrimonialism." The role of the state, especially since 1930, has been towards and even greater control of the executive branch over the economy and society.

The Bolivian political and economic scene since independence from Imperial control has been a battle for control by intra-elite factions. In this sense, Bolivia has not yet gained political independence. Rather, it has acquired new forms of dependence form within, as well as from without, as with the international economic system.

Perhaps the most crucial factor in understanding Bolivia's political structure is the nature of its economic links to the international capitalist system. Bolivia is one of the most extreme cases of the phenomenon of dependence in all of Latin America. Throughout the colonial period Alto Perú, as it was known then, was one of the principal suppliers of silver to the Spanish crown. By the middle of the nineteenth century, however, the silver mines were depleted and independent Bolivia was left without a viable export commodity. At the end of the nineteenth century, however, mining activities in the "altiplano" revived because of a partial recovery in the silver industry and the first stirring of the new giant, tin. Bolivia was integrated into the international system as a supplier of minerals to, and a consumer of goods made in, the advanced capitalist countries. Bolivia's period of isolation came to an end, and the country experienced a new process of externally stimulated economic development and modernization (Gamarra and Malloy, 1990:4-5).
After Bolivian political independence in 1825, until about 1880, a series of quasi-military strong-men known as caudillos took power, imposing semifeudal forms of government in which the emergent creole elite used the remaining Indian communities in a system of semiservitude known as pongueaje. This patriarchal power structure ended with the War of the Pacific of 1879, in which Bolivia and Perú suffered a humiliating defeat at the hands of Chilean armed forces. The complete discrediting of the Bolivian armed forces and the presence of strong civil actors brought a new mining elite to power. The nature of the new rule was linked to the traditional oligarchy and was oriented to a laissez-faire economic model assuring the outward flow of minerals. In the 1880s, Bolivia began to take on the outward accoutrements of a typical Western democratic political system with a functioning constitutional order, programmatically oriented political parties, interest groups, and so forth. At the same time, new social groups such as an entrepreneurial and commercial elite, a new urban middle class, and an embryonic working class also appeared (Gamarra and Malloy, 1990:3-5).

In 1898, two competing parties--Conservative and Liberal--the first associated with southern silver-mining interests and the traditional elite, and the second
associated with tin interests emerging from an urban middle class of La Paz, divided Bolivian society in civil war. The victorious party--the Liberal--not only moved the seat of government to the Andean capital of La Paz, but rewrote the constitution and established a centralized unitary political order based on a standard Western separation-of-powers system, that is, executive, legislative, and judiciary, in which the office of the president dominated. Gamarra and Malloy characterize the period thusly:

Bolivia entered a new era of political peace, rapid economic development based on the tin industry, and considerable modernization in the urban-based mining sector. However, this development and modernization had no positive effects on the rural sector, where the mass of the Indian populace remained locked as colonos in the hacienda system. The new elites that emerged with tin quickly merged with the more traditional landed elite to form a relatively coherent oligarchy that dominated the nation's political and economic life until the 1930s. At that point Bolivia was a prime example of a formal democracy with legally limited participation. Literacy and property requirements excluded Indian masses and most of the working class from participation in politics: formal political life was the preserve of a tiny upper-class and a relatively small middle-class. Public policy in turn reflected this fact; it was aimed at maintaining a stable rural order and pushing the growth of the export sector (Gamarra and Malloy, 1990:6).

The new political system led to an extremely skewed pattern of development. Gamarra and Malloy (1990) mention that development in the 1920s was based on the economic and political order under the monopoly of small landholding and
exporting elites. The monopolized sources of hard wealth excluded the new urban middle class. The struggle between this elite and the ambition of the middle class helped lead to the national revolution of 1952.

The Bolivian Revolution of 1952, according to Gamarra and Malloy (1990:10), resulted more from the internal fragmentation and collapse of the old elite than from the organized and coherent strength of the party in triumph—the MNR (Movimiento Nacionalista Revolucionario). The radical change bringing about this process has antecedents in the humiliating Bolivian defeat in the Chaco War (1932-1935) with Paraguay. Bolivia lost 60,000 soldiers, 70,000 square kilometers of land, and $50 million in this war. According to Knudson, the soldiers were mainly Indians, most of whom did not even understand the meaning of the term "Bolivia." Their having fought raised a new consciousness about the nation and resulted in hard questioning of the system. This set the stage for subsequent political activity (Knudson, 1979:7).

The MNR, the multiclass political party that brought about a revolution under middle-class direction, moved peasants and workers to adopt fundamental structural changes eliminating the power of "La Rosca," or the old oligarchy of tin barons and large landowners. The nation's
transformation, which soon followed, involved drastic changes such as the nationalization of the tin mines, which were reorganized into a new state mining-corporation (*Corporación Minera de Bolivia*, COMIBOL); the old hacienda system was dismantled through a land-reform program formally sanctioned in 1953; for the first time, universal suffrage enfranchised the majority of the population; and the national military was reduced in size, and the institution reorganized (Gamarra and Malloy, 1990:10).

In Bolivia, revolution initially meant a social transformation incorporating the Indian into the school and political systems. As such, it also involved a series of risks. According to Luft, structural reform impacted rural populations both positively and negatively:

The Indians were officially renamed "*campesinos*" (peasants) in an attempt to raise their status and prestige in the new society. Peasant "*sindicatos*" (unions) began to consolidate a rural power base after 1952; many locals were actually armed as popular militias to help defend the MNR regime. But the gains induced by the MNR proved to be limited in the light of the massive problems faced by Bolivian campesinos. With minimal investment in the rural economy, the agrarian reform was doomed to failure. The rural education code (1955) massively expanded educational provisions to the poor, but failed to take account of the indigenous culture and practical learning needs of the impoverished campesino child. Urban education still dominated as the vehicle for social mobility (Luft, 1983:20).

The MNR's task of constructing a new order was a
difficult one because the MNR needed to overcome the traditional mentality of Indian inferiority. For example, Knudson mentions that although the agrarian reform decree was not signed until August 2, 1953, in the preceding 90 days of deliberation by the agrarian Reform Commission appointed by President Víctor Paz Estenssoro, the fears of the dominant but minority social class became apparent--Dr. Jorge Pinto de la Torre, a prominent public figure, urged that all Indian languages be suppressed in Bolivia and all differences in dress proscribed. Despite such qualms, the agrarian reform decree was published in Quechua, Aymara, and Spanish (Knudson, 1979:30).

Bolivian history shows that recovering the nationalistic spirit of the 1952's revolution is still a political ideal, which has justified the presence of the most radical populist processes, such as the governments of two military-populist generals (Alfredo Ovando, 1969-1970 and Juan José Torres, 1970-1971) as well as those of several repressive military figures.

Nowadays, ethnic groups, urban-popular minorities, and others have began to express their cultural identities through activities such as popular education and conscientization movements. These social processes may be able to shift the political agenda towards the popular and
indigenous.

Luft, mentioning Paulston's studies in nonformal education, describes these changes as the growth of a quasi-revolutionary identity, which takes an anti-structure stance functioning under constraints of intolerance and repression. According to Luft:

The ethnic (indigenous) and social class (rural proletariat) characteristics of Bolivian peasants help to enhance the movement aspects of popular education. Common Indian identity and a desire to overcome exploitative structures give rise to programs which train agrarian leaders and build action platforms. The sponsoring institutions provide a supportive setting for the rural poor to articulate class based strategies for social change. Popular education is designed to build self-esteem and ethnic pride and link geographically and sometimes culturally diffuse pockets of resistance into collective social action networks (Luft, 1983:27).

The strength of these popular manifestations, however, as well as the Bolivian democratic process itself, will depend both on the ability of the country to improve its economic performance and on the role played by the country's elites.

Historically threats to democracy in Bolivia have not come from discontented masses but from elite sectors forced to relinquish rights and privileges. Because of the support from key elite groups, the prospects for the survival of democracy in Bolivia are better today than in the recent past. The major socio-political actors have come to terms with democracy in Bolivia. It is clear, however, that the political survival of political democracy in Bolivia depends greatly on the resolution of the economic crisis. Bolivia's extreme dependence on primary export
products, such as tin and natural gas, reduces the likelihood of recovery from the current crisis. Moreover, political democracy has brought little relief to Bolivia's impoverished massed that have been forced to pay the costs of stabilization and austerity. Unless their burden is alleviated substantially, the prospects for democratic consolidation will remain bleak (Gamarra and Malloy, 1990:24).

Bolivian Radio Broadcasting System

Radio broadcasting technology arrived in Bolivia in 1929. Radio broadcasting experiments in the country were made as early as 1897, however,--when Marconi himself was discovering of radio electric-wave broadcasting in Europe. According to Grebe et al., (1986), an experimental transmitter was built in 1897 by the priest José Clerc, S.J., in the College of San Calixto in La Paz; and his design spawned the construction in 1914 of another transmitter able to broadcast from La Paz to the rural neighboring community of Viacha, 32 kilometers away (Grebe et al., 1986:6).

The first national regulation concerning radio broadcasting was issued in June, 1925, when the government authorized radio licensing for official or private uses of the Bolivian radio-electric system. Three years later, the Costas Brothers--Enrique and Rodolfo--began the installation of "Radio National," (Radio Nacional) which first broadcast on March 3, 1929.
A second important step in Bolivian radio history was the first broadcast of "Radio Illimani" on July 15, 1963. This radio was the first to introduce the commercial radio model, and it stressed the task of national integration—fact well proven by Radio Illimani and Radio National during the Chaco War (1932-1935). In 1937, the Bolivian government took control of Radio Illimani by decree and converted its cultural programming for political and propagandistic broadcasting.

In Chapter II, it was mentioned that the model of radio broadcasting adopted by many Latin American countries followed the commercial structure of radio broadcasting in the United States. In Bolivia, this pattern of diffusion of radio technology took place in urban centers having 2000 or more people, electricity, and an internal market to afford radio operation.

These infrastructural factor could explain the uneven distribution of radio stations in Bolivia's nine departments.

In 1986, 163 radio stations were operating in the country (see Appendix A). They drew a heterogeneous distribution by departments, however. For example, the only capital city of a department in which a large number of radio stations were concentrated was La Paz (22 radio stations from 35). In contrast, Potosí had 23 radio stations, of which 18
were located in several urban community-centers, basically in minor localities (Grebe et al., 1986).

The number of Bolivian radio stations vary constantly because of at least three factors: 1) the growth of FM radio stations, mainly in capital cities of departments; 2) the existence of radio stations considered clandestine and the existence of radio stations working with expired licensed or in very isolated rural regions, without legal permission; and 3) the closing of small radio stations for economic and other reasons.

Although the Bolivian Broadcasting Law (Reglamento General de Servicios Radioeléctricos, 1960) classifies Bolivia's radio stations in three categories--official or government, commercial, and cultural--the actual framework is more complex. According to Grebe et al. (1986), Sánchez recognizes six major categories of Bolivian radio stations:

1. official or government radio;
2. commercial or private radio;
3. union radio (mine, railroad and other union affiliations);
4. religious or clerical radio;
5. educational or service radio, and;
6. FM radio.

Under the category of "official," or "government," radio
station there is only one—Radio Illimani—working in the capital city of La Paz and guided by the government in terms of its internal policy as well as in terms of its personnel. Although not exactly governmental there were functioning two radio stations which belong to the Bolivian army—Batallón Colorados in La Paz, and Radio Topater in Oruro.

The second category, "commercial radio stations," are privately owned, with audience sizes varying according to location. The basic function of these stations is entertainment, which serves upper-class and middle-class urban society. They compete on the bases of their information, music, or sports programming. Their sources of information are mainly international wire agencies such as EFE—Spaniard Service, or packaged materials such as VOA—Voz de América, Voz de Alemania, Radio Suecia Internacional, or Radio Vaticano. These radio stations sell air time to businesses or individuals, and their personnel are not necessarily professional.

The third category, "union radio stations," involves mainly "miner's radio." This phenomena, a unique case of worker's control of a medium, began as a result of the nationalization of Bolivias private mines in 1952. These workers' radio systems have been vital to the development of several Bolivian political processes in which radio played
its role not only as an instrument of information but also as a vanguard of the proletariat. Such radio stations are sustained mainly by workers' contributions through unions. They are dedicated mainly to union and political information and use information mainly from alternative networks linked to working-class interests. Their personnel are not professional and are nominated by the central union organization. These stations have been subject to political repression, censorship, and economic shortages.

The fourth category, "religious radio stations," represents a large number of radio stations belonging to both the Evangelical and Catholic churches. These media exist basically for doctrinal and evangelical purposes; their audience is mainly the urban-working sectors, and their programming offers biblical messages, information, and music. Their economic support comes mainly from foreign donors or from their respective religious organizations. Their personnel in some cases are professional.

The fifth category, "educative radio stations," involves the radio stations associated with ERBOL (Radiophonic Education of Bolivia). This network is the largest association in radio education in Bolivia. These radio stations overlap with the category of religious radio because most of them belong to religious organizations such as the
Jesuits, the Franciscans, etc., or to various churches. Their power varies from 1 to 10kw, and they have as their main audience sub-urban sectors, peasants, and miners. Their programming is cultural-educative, providing planned literacy programs as well as health, agricultural, religious, and historical information. They broadcast in the native languages of Quechua, Aymara, and Guaraní as well as in Spanish and use both national alternative news and international services with similar characteristics. For instance, they use the Chasquihuasi, an alternative Chilean informative service for Latin America. Economic support for these radio stations comes from Catholic agencies, international donors, agreements with the local government, or contributions from the religious organizations or bishopships.

The last category, "FM radio," involves a contemporary and broad segment of mainly urban radio stations. These radio stations have a commercial structure, belong mainly to private owners, and program basically for urban tastes. Their economic support comes from advertisement, and their domain is the diffusion of international music for specific recording companies (Grebe et al., 1986:14-17).
Bolivian Rural Radio

Although the urban radio with its generally commercial structure has attracted most of the attention from scholars and marketers, rural radio is important because of the large proportion of the population living in rural areas and because of the variety of languages spoken. More than 50 percent of the Bolivian population is bilingual. Of 100 people, 56 speak Spanish as their first language, 26 speak Quechua, and 18 speak Aymara (Iriarte, 1989:322).

The incorporation of the native and urban-popular sectors as mass media audiences is a recent phenomena. For instance, Knudson, in his analysis of Indian treatment by the Bolivian press, describes it as follows:

Indians in Bolivia were systematically excluded from participation in national life until the Bolivian National Revolution (1952-1964). Until 1952, the culture of most of the Bolivian people remained embedded in the sixteenth century, perpetuated by an illiteracy rate of more than 60 percent. Indian were so despised by the Bolivian elite that the worst epithet one could hurl at his neighbor was "indio" (Indian). Before the agrarian reform of 1953, which has redistributed more than one-third of all of Bolivia's agricultural lands to Indian peasants, men were bound to the soil as "pongos" (serfs). Before 1952, ads in the La Paz newspapers noted how many men were to be transferred with the land being sold, and it was customary for Indians entering the presence of their masters to kneel until receiving permission to rise (Knudson, 1979:26).

The instrument enhancing social prejudice towards the
Indian was the press. Knudson (1979) notes that the "Big Three" Bolivian tin magnates dominated the journalistic arena of La Paz: Carlos Víctor Aramayo owned "La Razón," Mauricio Hochschild controlled "Ultima Hora," and Simón I. Patino owned one-third of "El Diario." Newspapers owned by the oligarchy widened the gulf between the dual societies of the divided nation—the educated elite and middle sector of the cities, and the illiterate masses of the countryside.

Knudson mentions the Kelm (1972) study in which newspaper portrayal of the Indian demonstrates that Bolivian whites frequently used such words as brutos, bárbaros, salvajes, bravos, or irracionales (brutes, barbarians, savages, wild or fierce ones, and irrational beings), implying that the Indians had to be domesticated or tamed. "La Calle" (1936-1946), the newspaper of the MNR, which defended the Indian, was an exception in the journalistic arena of La Paz (Knudson, 1979:28-31).

Albó, in his study entitled "Languages and Radio in Bolivia" (1981) notes that because Bolivian radio, as well as radio in many Latin American countries, belong to the Hispano-Criollo (Spanish-creole) class, the messages and values being broadcast go from the center to the rural periphery in such a way as to incorporate the native into the consumption society.
With rural radio, however, Bolivia is creating a meaningful alternative allowing space in programming schedules for programs in Quechua and Aymara. The broadcasting of programs in these languages usually occurs during one to four hours in the early morning or in the afternoon.

Albó points out that, in contrast to research findings in industrial societies, the peasant audience as well as the urban-migrant in the worker neighborhoods in Bolivia has low recall of information from radio programs either in Spanish or in native languages. Low recall occurs because programs use a communication style different from which rural listeners use. Programs made by native producers are thus recalled better than other programs. Moreover, the high cost of batteries causes rural audiences to be more selective (Albó, 1981:31-40).

The use of native languages by radio broadcasting is growing. Albó argues that the reasons for this phenomenon are related to constant rural migration to the city. The presence of native languages in urban radio is commonly accepted today. But years ago, native languages and music were curtailed on the air as a result of social bias.

According to Grebe et al. (1986), Bolivian radio stations working exclusively or partially in native languages
can be classified into three groups:

1. Aymara Radio
2. Quechua Radio
3. Guarani Radio

Aymara radio stations are located mainly in La Paz (Radio San Gabriel, and a few others). These radios work under commercial structures as well as under educative auspices such as those of the ERBOL (Educación Radiofónica de Bolivia). Quechua radio stations are located in the Valley region of Bolivia and include Radio San Rafael in Cochabamba and Radio ACLO in Sucre. Guarani radio stations are new in the eastern region (Radio Santa Cruz in Santa Cruz, and Radio Juan XXIII in San Ignacio de Velazco) (Grebe et al., 1986:18).

Native-languages radio also can be divided into three forms: stations broadcasting totally in native languages, stations broadcasting bilingually, and stations using a few hours—early morning or late night—for native-language broadcasting.

Albó, Grebe et al., and Luft agree that native radio in Bolivia has played an important role in the cultural defense of rural populations as well as of popular sectors in the urban areas. This presence of native radio in the urban context contributes to the process of social integration
around the traditional and rural values because gradually the "autóctono" (native) is being recognized as the cultural form of the society as a whole.

Radio Broadcasting and Bolivian Education

Education in Bolivia is one of the country's most extreme social problem. In 1987, researchers of Bolivian illiteracy estimated that 2.3 million of 6.5 million Bolivians were illiterate. Of that, 1.3 million were totally illiterate, and 1 million were functional illiterates (Iriarte, 1989:477).

Although Iriarte notes that there is no precise data about Bolivian illiteracy because of poor data from inaccessible regions, he believes that the worst conditions of illiteracy prevail in the rural areas.

Of 10 Bolivian illiterates, 7 are in the rural areas. From each 10 illiterates who live in the city, 7 of them are women. Of 10 Bolivian illiterates living in the rural area, 8 are women. In the urban area, the illiteracy is 13 percent and illiteracy in the rural area is 47 percent, almost three time (Iriarte, 1989:480).

Reasons for such high rates of illiteracy, according to Iriarte, are related to factors such as economic and political dependency, unequal distribution of wealth among social classes, and inefficacy of several literacy campaigns which have emphasized a process of castellanización (teaching
Spanish), while ignoring the Bolivian cultural and language differences (Iriarte, 1989:482).

Experience using radio for Bolivian education

Bolivia has used Colombia's ACPO radio-school system, Radio Sutatenza, as a model from which to develop its radio strategies for education. Differences of contexts and specific social priorities, however, have determined the diverse approaches of the Bolivian radio-school experiences. The pioneer case of radio schools in Bolivia was launched in Oruro in 1967 by Radioemisoras Bolivia (INDICEP, 1971). According to INDICEP (Instituto de Investigación Cultural para Educación Popular), this radio-school experience initially adopted the model of Radio Sutatenza and thus, stressed functional literacy. The experience of Radioemisoras Bolivia--REB and CECTAR--later became the first case among Bolivian educational organizations to introduce Freire's psychosocial education approach, which attempted to exchange the human-capital approach (functional or neutral education) for a consciousness-raising approach in which radio-education was immersed in a process of cultural transformation (INDICEP, 1971).

INDICEP has been involved with Radioemisoras Bolivia since its formation in 1969, which marked the first major attempt to develop a radical alternative pedagogy for the
Bolivian campesino. Its theory of "cultural dynamism" stresses that all popular education must spring from the values of the Indian people and must maintain these values. Therefore, any solution to the problem of underdevelopment could only be found by way of an education developed in the midst of the campesino world (Luft, 1983:25).

INDICEP was repressed during the political and military upheaval of the following years and today has different social priorities.

Another documented use of educational radio is the case of "EL Campesino Educador" (The Peasant educator), as reported by Gerace (1973). This experience was developed in the eastern part of Bolivia—Escuelas Radiófónicas Montero, Santa Cruz. It applied a Popular-Promotion strategy that was later extended to similar experiments by Quechua-speaking Indians in Cochabamba. Promoción Popular (Popular Promotion) involved popular organizations such as trade unions, cooperatives, rural schools, and adult education groups (O'Sullivan and Kaplún, 1978:36-38; Gerace, 1973:130-138). Involvement was encouraged under the following strategies:

1. Regular radio announcements, posters, personal meetings, all suggesting the idea of study groups in the communities to deal with some of the local problems;
2. Regular radio programs for discussion of local problems and suggesting appropriate solutions;
3. Transmission on the radio of letters, visits and recorded interviews with people involved in grassroots participation;
4. Daily visits to rural communities by promoters to meet with the people, collect letters, make interviews;
5. All the collected material was then used for generating new programs on the radio.

Results after several months of the strategy showed:

1. The peasants study their own reality, and arrive at a series of problems without the direction of outside agents, though at times the help of the rural teachers is useful in this process;
2. The peasants proceed to study alternative solutions, and thus make a first effort to avoid the paternalistic and directed approach so common in rural development;
3. New leaders are becoming evident in some communities, and the resulting crisis in some cases has led to a change of leaders;
4. A co-operative spirit is born, and the peasant start solving some of their own problems (potable water, roads, sanitation);
5. Horizontal communication is established, people begin to see that others share the same problems and that the solution must come from the people. The peasants also begin to see that they can effective and see the need for local organizations (O’Sullivan and Kaplún 1978:36-37).

The Peasant Educator experience, as O'Sullivan, Kaplún, and Gerace note, is no longer operating, as a result of political and economic forces.

Finally, the prevailing, and thus most relevant case of radio schools and radio for education in Bolivia is ERBOL (Bolivian Radiophonic Education). This institution was created in 1967 by the Asociación de Escuelas Radiofónicas de Bolivia (Bolivian Association of Radio Schools), which
unified a group of six church-sponsored radio stations working in literacy programs--Radio Fides (La Paz), Radio San Gabriel (Peñas, La Paz), Radio Loyola (Sucre), Radio Pío XII (miner center of Siglo XX), Radio San Rafael (Cochabamba), and Radio Bolivia (Oruro). Presently, ERBOL has 17 members in seven of the nine Bolivian departments and represents the largest radio-education network in Bolivia.

ERBOL's initial approach towards the education of the urban and rural poor was based on functional literacy. In the 1970s, however, the new perception of Latin American poverty and dependency expressed by the Catholic church with the documents of Medellín and Puebla shifted that pattern towards a perspective of popular and integral education as well as to that of participatory communication. In the 1980s, ERBOL, influenced by the international debate about a New World Information Order (NWIO), entered into a self-analysis that ultimately resulted in a re-assignment of functions for its Executive Secretary. A radical change within ERBOL was to change the administrative and funds-distributor role of its Executive Secretary to a most effective practice. Coordination and personnel training, and collaboration in the production of materials were the new ERBOL priorities (ERBOL, 1986; ERBOL, 1987; CEE, 1983).

Because ERBOL is associated with the Bolivian Catholic
church, its global operation follows the doctrinal objectives of the CEB, or Conferencia Episcopal Boliviana, (Bolivian Episcopal Conference) although it maintains internal administrative autonomy by way of its Executive Secretary.

According to ERBOL's documents, its guiding principles are as follows:

1. Bolivian Radiophonic Education operates on Christian principles;
2. ERBOL serves the orientation and thought of the church, explicitly for Latin America in the documents of Medellin, Puebla, and for Bolivia in the Conferencia Episcopal' (CEB) documents;
3. The Gospel is the main inspiration for its educative work and it is also the clarity for its ideological principles;
4. ERBOL seeks the liberation building of a new kind of relations among Bolivians, nature and God;
5. ERBOL strives to reach the human hopes, looking to overcome whichever form of slavery and or exploitation;
6. From a critical consciousness of reality, the members of the Association promote and co-participate in the process of change toward a just, participative and fraternal society (ERBOL, 1986:2).

The objectives of ERBOL state:

1. To contribute to the change of the social, economic, political, and cultural structures to get a just, fraternal, and participative society.
2. To provide help to the popular organizations for their self participation in decision-taking in order to lead their own interests (ERBOL, 1986:2).

According to ERBOL's 20th anniversary reports (1987), there were 14 ERBOL institutional members working in seven of nine Bolivian departments; ERBOL represented 43 percent of all the kilowatt power of Bolivian radios; of the 10 Bolivian
radio stations with 10 kw of power, six of them were ERBOL members; and at that moment, ERBOL was working with 2,465 Bolivian communities or community groups and supporting 808 grassroots organization (see Appendix B). ERBOL works in nine areas: information, evangelization, history and cultural values, agricultural technology and crafts, health and sanitation, organization, leadership and unionism, cooperativism and economy, adult education; and literacy.

ERBOL's projects are supported mainly by two foreign donors: the Central de Ayuda al Desarrollo, MISEREOR, from West Germany, and the Organización Católica para el Cofinanciamiento de Programas de Desarrollo, CEBEMO, from the Netherlands. The financing of each ERBOL member, however, depends upon independent contributions from several international donor agencies (ERBOL, 1986:3).

ERBOL structure and communicational approach

ERBOL (Radiophonic Education of Bolivia) utilizes three communication methods: first, the production of radiophonic materials; second, on-site activities; and third, the production of printed materials. Since 1983, however, ERBOL's Executive Secretary has been testing a fourth method of exchanging information among its members. What began as a system of interchange of recorded tapes has evolved into the Centro de Comunicación Popular, CCP (Center of Popular
Communication). This center, which serves as an alternative source of information through which community news are shared at local and national levels, also helps to coordinate the work of the Executive Secretary with the members of ERBOL. The CCP uses a high-frequency radio-communication system that links ERBOL's members twice a day by spreading radio reports and wire press service (ERBOL, 1987:70-71).

ERBOL considers the CCP a communication alternative serving Bolivian social movements. It has linked social groups such as peasants, miners, and women in several political and cultural demonstrations (ERBOL, 1987).

Communication in the Bolivian Eastern Context

The Bolivian Amazon

The Bolivian Amazon region is located in the North of the country, and it covers the entire department of Pando, the province Vaca Diez of the department of Beni, and part of the Iturralde province of the La Paz department (Appendix C).

The Bolivian Amazon has 129,076 square kilometers, which represents approximately 12 percent of the national territory. In 1985, it had a population of 116,000 (1.7 percent of the total national population), with a density of
0.9 inhabitants per square kilometer (the lowest in Bolivia). From that total, the rural population of the Bolivian Amazon was estimated at 65,000 (56 percent) and the urban population at 51,000 (44 percent) (Ormachea and Fernández, 1989a).

The Bolivian Amazon has only three main urban centers—Riberalta, Guayaramerín, and Cobija. There are 90.5 percent of the urban population of the region concentrated in Riberalta and Guayaramerín.

The ecological conditions of the region are shaped by the presence of 17 rivers with 7,800 navigable kilometers. These rivers join in the Vaca Diez province of the department of Beni to form the Madera river, which is the largest tributary of the Amazon river. The rivers Madre de Dios, Mamoré, and Orthon are the principal means of Amazonic transportation. The regions characterized by its forests, at altitudes of between 150 and 300 meters above sea level. The weather of the region is humid and warm, with a median annual temperature of 27 C. There are clearly-distinguished dry and rainy seasons—dry during Winter—, and a median annual rainfall of 1,672 mm (Ormachea and Fernández, 1989a; CIDOB, 1979).

**Socio-economic conditions of the Bolivian Amazon**

The Bolivian Amazon traditionally has been a region of human and natural exploitation. For more than a century, the
economic life of the region has been sustained by two natural products--raw rubber (Hevea brasiliensis) and the Brazil-nut (Bertholletia excelsa) (Boom, 1989). Although contributions from both constitute a minor part of the country's GNP, they are the economic products around which the social and political life of the region are shaped. Other important products of the region are wood, gold, and cattle (Ormachea, 1987).

Exploitation of the resources of the Amazon region, which began when the Spaniards invaded the land of Moxos (Beni) in the XVII century while searching for the so-called El Dorado, or Paititi (The Empire of Gold) has remained colonial and semifeudal in form. The discovery of raw materials for the international market--such as quina, natural rubber, Brazil-nut, wood, gold and leather from wild animals--has strengthened the power of the pre-agrarian-reform domains. According to Ormachea (1987), although the Law of Agarian Reform (1953) reverted wild-rubber and Brazil-nut trees to public domain, the pre-reform landowners estradas (plots of land with 150 rubber trees) were not affected (Ormachea, 1987).

Traditional employment methods for harvesting rubber and Brazil-nuts continue in the region. These methods have traditionally resulted in the forced migration, exploitation,
and decimation of the indigenous Amazonian population. The most common labor system is called enganche, or enpatronamiento (contract), a method by which a worker sells his labor to a patron (landowner). The worker receives money in advance to help move himself and his family to the place of work barraca (barrack). During work, he and his family obtain articles (mainly food) at the pulpería (landowner store) on credit, which at the end of the period of the contract the worker needs to pay with the salary that he has received from his production. If the payment exceeds the debt, he has a saldo positivo (positive liquidation), but if he has negativo saldo (negative liquidation), he is forced to keep working for the barraca until he cancels the debt. In many cases, the worker is always in debt to the patron and this debt ties him to the property (Ormachea, 1987; Díaz-Bordenave, 1980).

In the Amazon, the enganche is only one of a number of economic arrangements. The production of "free-peasant communities" is a recent social phenomena. The existence of so-called free-peasant agricultural units have resulted from two factors: first, the international rubber crisis, which brought about the dissolution of several rubber enterprises--mainly that of Casa Suárez monopoly; and second, the national Agrarian Reform. These processes drove peasants and
barracks workers to take control of the land, either by occupation or purchase. Despite being owners of land, however, the peasant families still work under exploitative conditions because their products (rubber, Brazil-nut, rice, etc.) are collected by river merchants or other intermediaries (marreteros) who underpay them (Ormachea and Fernández, 1989a).

In the last century, the Amazonian peasant organization has been minimal. The peasant-union uprising in 1970 is considered one of the most significant peasant movements in the region. In that year, workers of the monopolist enterprise of Empresa Hecker, propelled by the socialistic characteristics of the Torres government, began to unionize. This process was curtailed, however, with the military coup of 1971. A similar situation occurred in 1980 (Ormachea and Fernández, 1989b).

The rubber workers (siringueros), as well as the Brazilian-nut harvesters (zafreros de castaña), although working under contract conditions, benefited from no labor-protection law. Although some labor regulations such as social security involve this sector, they have almost never been applied. Maybe the most solid means of peasant organization and labor protection is the system of peasant cooperatives, which have been initiated in the last few
years. For instance, the Cooperativa Agrícola Integral "Campesino," which was founded in 1980, today represents an economic alternative in the region (Ormachea and Fernández, 1989b).

Regional Mass Communication

Bolivia borders five countries. Its radio border-stations are concentrated along the Brazilian border, however, their presence has been reduced and variable. In the Bolivian Amazon, there are eight radio stations, which are located mainly in the urban centers of Riberalta, Guayaramerín, and Cobija. These radio stations have similar characteristics, such as their small size technically and administratively, their emphasis on commercial work, and their seemingly permanent economic and technical shortages.

According to Caballero (1986) and by this research, in the Bolivian Amazon there are at least nine operating radio stations: in Riberalta, Beni--radio Avaroa, Riberalta, Horizontes, and San Miguel; in Guayaramerín, Beni--radios Paititi, Mamoré, and Galaxia; and in Cobija, Pando--radios Cobija and Frontera. Therefore, it is estimated that each radio station in the Bolivian Amazon serves 12,781 people. This distribution, however, does not consider variables such as the uneven distribution of the urban and rural
populations, the quality of reception of radio signals, or
the presence of international radio waves in the region.

The role of radio in the region also needs to consider
certain regional communication conditions such as the limited
availability of alternative channels which impacts in the
massive rural dis-information. Because of the dispersed
population, lack of roads, and uncertainty of river travel,
in many cases the only sources of news are landowners
(patrones), merchants or intermediaries (marreteros) who
acting as incidental news carriers tend to provide incomplete
information about urban and national events.

Second, the absence of other media such as national
newspapers (available only in a few urban regional centers),
and the recent introduction of private TV channels in the
urban centers of Riberalta, and Cobija—with almost full re-
broadcast of international TV networks—produces the rural
heavy reliance on radio. However, radio in many cases has
become a channel for the message of landlords, who use radio
to inform potential workers about job opportunities.

Finally, in the region, powerful commercial radio
stations from within and outside Bolivian borders are a
growing presence. For instance, radios Horizontes, Santa
Ana, and Movima from Bolivia, radio Madre de Dios from Perú,
and radio Educadora from Brazil are easily received in rural
areas. Their presence is feared by local leaders because of their possible disruptive impact in terms of languages and commercial structure (Radio San Miguel, 1989).

Among the radios in the Bolivian Amazon, Radio San Miguel (RSM) in Riberalta, Beni, is the only one that is educationally oriented and technically and administratively sophisticated.

Radio San Miguel

Radio San Miguel (RSM) was founded on August 29, 1968 by the Missionaries of Maryknoll working in the Apostolic Vicariate of Pando (Vicariato Apostólico de Pando). According to Casimiro Brezinsky M.M., the first radio technician of Radio San Miguel, the radio's origin is linked to the Maryknoll missionaries' previous experience in using the mass media for evangelizing. According to Brezinsky, the Maryknolls began over the broadcasting in Bolivian radio in 1955, with the foundation of "Radio San Gabriel" in Peñas, a rural community of La Paz. This experience led to foundation of a second radio station in Cochabamba--"Radio San Rafael"--in 1960 finally to that of "Radio San Miguel" in 1968, in Riberalta, Beni (Casimiro Brezinsky, interview, January 26, 1990, Riberalta, see Appendix H).

Brezinsky (1990) explains that, at the end of the 1960s,
there was no radio in the Bolivian Amazonic region; and therefore the Maryknoll missionaries saw a commitment to bringing the Gospel, messages of social promotion, and news to the dispersed population of the region as mandatory. Pioneers of this experience were Father Donald Steed (RSM's first director), Sister Rosemary Kane, Sister Carla Reichart, Casimiro Brezinsky M. M., and some Bolivian collaborators.

The official step included the following:

The official permission for the operating of CP 114 Radio San Miguel was issued in August 29, 1968 by the Dirección General de Radiocomunicaciones de Bolivia (Bolivian General Direction of Radio-communications). Its approval through Supreme Resolution No. 145,765 was issued in July 11, 1968. This legal permission gave the radio concession to the Maryknoll Mission stating that the main purposes of this radio were educational rather than commercial programming. The radio began operating with 250 watt power and under 4,805 Kc/s of frequency. Later on November 4, 1975, Radio San Miguel changed ownership from the Maryknoll missionaries to the Apostolic Vicariate of Pando (CIDOB, 1979:8-9).

Radio San Miguel lacked social-transformation objectives until the period of 1976-1979, during which the Apostolic Vicariate of Pando--under the direction of Bishop. Thomas McBride M. M.--entered into a process of renewal and internal evaluation. This process resulted in a global strategy called the Vicariate Plan. This five-year plan issued on June of 1977 considered communication as a church responsibility and assumed broadcasting under a vision
of "pastoral integral" (integral evangelization). According to the recommendations of the Vicariate Plan of August 1978, Radio San Miguel commenced a re-structuring process entitled Integral Communication Project (Proyecto de Comunicación Integral). Documents recommending a new direction for the RSM were the one-year Initial Plan, and the Diagnostic of Structure and Output of Radio San Miguel. Radio objectives and strategies evaluated were the following:

1. General objectives toward the community

   a) To promote the integral development of the region, prioritizing the needy and rural areas;
   b) To stimulate the sense of Comunidad Eclesial de Base (Ecclesiastical Base Communities), building solidarity linkages through the peasant organizations with a broad sense of participation and common responsibility;
   c) To fight the injustice experienced by those isolated from political, economic, cultural, and social benefits;
   d) To promote community intercommunication, in which the circulation of news, production of print materials, exchange of ideas and experiences favor common activities;
   e) To help find solutions to immediate rural problems such as:
      - working relations;
      - improving the use of land and the commercialization of products;
      - guiding the population in health, politics, family and community organization, education, etc.

2. Objectives within the radio station

   f) To insert the radio in the region's community by both promoting wider participation of peasants, urban-workers and marginal sectors
in the radio activities, and keeping radio personnel in contact with the peasant environment (visit, rural information, and promoting community activities);

g) To assume the liberator role of the radio, with an ideological orientation based on the social doctrine of the church;

h) To develop in the personnel and radio collaborators a "mystique" of service, in order to defend the rights of oppressed sectors of society helping them to improve awareness about their problems by searching for ways to solve them through active and participative action;

i) To provide to the radio station the structural and operative materials to enhance its activity in the community.

3. Objectives toward the Vicariate

j) To cooperate in the creation and diffusion of Vicariate plans;

k) To promote coordinated action to support the Vicariate activities at all the levels in which the Pastoral Agents operate;

l) To support each Vicariate activity in its bases in order to strengthen and help its continuity (Avejera, 1979:81-83).

This project would have culminated in radical changes within the radio: It began a process of des-urbanización (de-urbanization) and incorporating the rural area as its new priority. It reopened with a new administrative staff. And it began its policy of coordination with other community organizations. For instance, the collaboration between RSM and EMEIR in the production of educative materials and integrative activities became more effective.

Major changes in the Bolivian political arena--namely the military coup of July, 1980--interrupted the radio's
advances, however. This change resulted in not only the persecution of radio workers, but also in the temporary seizure of the station which began under military control, to broadcast under the name of Pacific Radio Stations (Interview with Héctor Salas, Riberalta, Beni, January 25, 1990).

The installation of the democratic process in October 1982 favored RSM, which recuperated to form a close relationship with local organizations such as EMEIR, the Cooperativa Agrícola Integral "Campesino", and Pando's Vicariate. RSM enhanced its contact with the rural population by adopting a system of radio-canoe visits, and in the last few years it has introduced a system of indigenous reporters (reporteros populares). Currently, RSM is attempting campesinación (becoming closer to the peasantry). This stage began in 1986, when the Pando's Bishop, Bernardo Shirhoff, invited a member of EMEIR, Héctor Salas Takaná, to assume the direction of RSM (ERBOL, 1987:23-24; Héctor Salas, Riberalta, interview January 25, 1990).

Radio San Miguel's strategy of communication

Radio San Miguel has already made explicit its 1990s communication objectives and strategies:

1. General communication objective

   To express through radio activities the importance of "communication" within the peasants, sirengueros.
zafreros and similar worker groups in order to reach a worthy, humanitarian and solidary living.

2. Specific objectives

- To search for a real popular participation without dismissing the incorporation of several social sectors;
- To attain the full identification of the radio activities with the educational and organizational processes;
- To encourage the cultural, musical and artistic expression of the peasant communities;
- To keep an active coordination with organizations which are working for popular communication in order to share mutual experiences of their activities.

3. Radio's means of communication

- Direct contact (on-site programming, visits, retreats, workshops, regional and community meetings, contact with grassroots activities);
- Print materials (flyers, bulletins, newspapers, cartels, peasant almanacs, letters);
- Radio broadcasting strategies (radio community reporters, incorporation of grassroots collaborators, and production of specific radio programs).

4. Method of communication

The radio's method is the "reflexión motivadora" (critical awareness of reality) to bring about a process of individual and collective change. It is expected to go from a passive consciousness to a critical consciousness which will drive to action. In summary, this method moves along the following process: observing reality-judging reality-acting to change the negative aspects of reality (Radio San Miguel, 1989:7-9).

Radio San Miguel institutional network

Radio San Miguel has developed a close relationship with national, and local institutions. At the national level, it
is associated with ERBOL, and UNITAS (Unión Nacional de Instituciones Para el Trabajo de Acción Social); at the local level, it is associated with EMEIR, and with the Instituto de Pastoral Rural (Rural Evangelization Institute), the Pastoral Juvenil Vocacional (Juvenile Vocational Evangelization), the Cooperativa Agrícola Integral "Campesino" (Agricultural Integral Cooperative "The Peasant"), and the Apostolic Vicariate of Pando. RSM also has regional and local contacts with the major peasant organizations.

RSM is economically supported by both the Central de Ayuda al Desarrollo), MISEREOR (from West Germany) and local contributions of Pando's Vicariate. The local contribution to RSM's budget reduced because RSM's educative and service character--there is no advertisement or payment for public announcements.

Recent technical descriptions of RSM indicate that it works with 1 kw of power (90 meters, short wave of 3,310 MHZ) and reaches, in open broadcasting, around 75,500 inhabitants, with a specific target audience of 45,000 (ERBOL, 1986:4-5).

Radio San Miguel and Mobile Teams of Integral Rural Education: A River Communication Strategy

The association of RSM with EMEIR is characterized by its so-called participatory rural approaches to communication and
education.

The Mobile Teams of Integral Rural Education is a non-formal education project, designed as an answer both to the scarcity of educational facilities in the Bolivian Amazon and to the regional peasant exploitation. The Mobile Teams of Integral Rural Education had a pilot stage in 1972 and officially began work on July 17, 1973. The maryknoll Missionary Father Juan Moynighan was its founder and main promoter. This project, because of its confidence in the capacity of the rural or urban young, depended, however, on the response of an initial team of young volunteers. Before becoming involved in the process of rural education, the first group participated in a two-week training program in Filadelfia, a rural community located in the province of Manuripi, of Pando (EMEIR's pilot stage). This initial training not only was based on theoretical instruction (literacy, health care, elementary mathematics, basic accounting, agriculture, and community development) but also was designed to involve the volunteers in intense contact with the rural community life in such a way as to share its daily life and to develop small community assignments.

The pilot workshop brought together a team of instructors--Rómulo Lozano, Jaime Virreyra, an American agronomist, and the Maryknoll Priest Juan Moynighan--.
first team of volunteers--Héctor Salas Takaná, Jorge Martínez, Cándido Avellaneda, Juan Usi, Roberto Melena, and Silvio Arauz, and the community of Filadelfia (EMEIR group interview, Riberalta, January 5, 1990, see Appendix H).

The initial three years of EMEIR can be defined as its experimental stage. During this period, the Mobil Team's activities were oriented to building community networks by developing a series of community visits and on-site workshops. Héctor Salas Takaná, founder and Guayara's team member, explains the approach taken:

The initial years of the experience were strongly supported by a philosophy of group and collective working. If the purpose was to offer an alternative rural education, the process also needed to involve changes within the facilitator of this process. The former experiences and knowledge among the team members were diverse and also limited; therefore it was necessary to develop a strategy of team-collective working rather than create distances among the members. The team work strategy was a method and an example, because it was oriented to create support among the team members and also to inspire confidence among the peasants who were able to realize that limited formal instruction was not a limit to becoming an agent of community transformation. There is a median of nine years of formal schooling among all team members (Interview to Héctor Salas, Riberalta, January 4, 1990, see Appendix H).

The organization grew from serving twelve communities to forty-five, and from the original six members to twenty-four. Regions served included: Cobija, Guayara's area--Mamoré river--, and Riberalta's area--river Madre de Dios and Beni
In 1977, EMEIR went through two important events in its development. First, it presented its first three-year project which stated its principles and objectives. EMEIR's approach to education was defined as a process of "nonformal education" (educación asistemática) which claimed to challenge the institutional approach of the traditional school. EMEIR's educative concept--an alternative, rural based, critical and liberating education--was in tune with the Catholic Church Letter of Education issued in the same year by the Bolivian Episcopal Conference. EMEIR's global objectives were stated as follows:

To contribute to the critical expression of the peasantry, who conscious of their necessities of communication and organization constitute the central axis of change; To encourage a critical attitude in peasants which will enable them to find the best way to overcome their reality of exploitation. To reach these objectives, its main areas of attention were: education (peasant literacy), organization (leadership), and community development (health, women promotion, moral and civic education) (EMEIR internal documents).

Second, in May, 1977, the founder of the project, Father Juan Moynighan M. M., turned control of EMEIR over to the teams and began a process of institutionalization of EMEIR. Under guidance from a co-directive administration, EMEIR enlarged its activities to include areas such as the production of materials--radio programs, and print materials--
which were produced in coordination with RSM and the Vicariate's resources. The production of print materials began with the instructive comic book "Friolito" and later led to the production of several EMEIR-RSM's educational booklets (see Appendix G).

These small media were produced with the purpose of encouraging literacy, discussion of social problems, and support activities initiated in the communities.

Other activities included the creation of small economic projects in the rural communities; the promotion and organization of regional meetings to integrate peasant communities; the support and organization of mother's clubs to encourage women to organize; and the technological and social alternatives "rubber lamination project" (Proyecto de Goma Laminada); and health promoters program.

**EMEIR's strategy of communication**

The process of building up communication relationships, confidence, and lay bases of cooperation within each community resulted from a human-relations strategy developed after several contacts with the peasant communities. EMEIR's strategy began with an initial visit to each household. Because most of the peasant houses were dispersed in the jungle, the team took three or four days for this contact, and through sharing the daily activities in each household, team
members could observe common family and community problems. After the visit stage, the community was invited to a general meeting during which the team explained the purpose of its presence and identified through dynamic techniques or open discussions the main local problems. This resulted in a community plan which defined activities and the period of performance of the team in the community. Planned activities involved not only adults, but also children. The most recurrent topics to work through community sessions and practical activities were related to literacy, health care, nutrition, vegetable gardening and organization of cooperatives (EMEIR group interview, Riberalta, January 5, 1990, see Appendix H).

According to Rodolfo Loras, team members in charge of production of educative materials, this process was constantly evolving:

The contact with the communities was not easy: it was full of distrust. The political biases imposed on the people by religious groups, landowners and others affected the contact with them—“they said that we were communists.” The permanent abuses to which the rural peasantry is exposed impact on his/her communication. Before teaching or initiating a community activity team members experienced the daily work of the community, cleaning the plot (chaco), cleaning the houses (pahuros), cropping, sowing, carrying the water or firewood, etc. These were the ways to get close and to learn. The team visit was not a visit to contemplate. It was a process of contact, because the technique of fully participating in community has helped diagnose the
problems of the community and encouraging community
dialogue about their problems (EMEIR group interview,
Riberalta, January 5, 1990, see Appendix H).

The use of teaching materials was conditioned by the
context and availability of resources. Flipcharts
(papelógrafos) and chalk blackboards, or drawing on soil, were
the graphic channels for group information. Also, local
resources such as seeds, sticks or leaves were used for
teaching mathematical concepts (EMEIR group interview,
Riberalta, January 5, 1990, see Appendix H).

Daily evaluation followed each activity, as well as
evaluation of the individual performances and attitudes
toward the community. Edgar Paz Lobo, co-director of EMEIR,
explained that the nightly team evaluations were a process of
hard revision of the activities developed by the team, and
that this encouraged self-correction and self-training
because it promoted individual and group preparation.

Evaluation strategies also emphasized the permanent
support. For example, if activities required classroom
teaching, team members located in the audience were observing
and taking note of possible process failures, which were later
shared to promote self-correction. Team member support was
also present during the presentation of topics in front the
community (EMEIR group interview, Riberalta, January 5, 1990,
see Appendix H).
The use of the radio to support EMEIR activities began in 1977. This result from perception of the mutual objectives of two groups. Both organizations got involved in the Vicariate's Project of Integral Communication—which involved RSM directly and EMEIR tangentially. Another link was the presence of the Father Juan Moynihan, who was involved in both organizations—head of the RSM Coordinator Group under the Vicariate's Integral Communication Project, and founder-director and permanent advisor of EMEIR.

**EMEIR's institutional network**

EMEIR's headquarters is located in Riberalta, Beni. Because of its location and activities, EMEIR is in contact with other local and national organizations and participates in the formation of regional organizations.

EMEIR has participated in the formation of the "Agricultural Cooperative Peasant" ([Cooperativa Agrícola Integral "Campesino"](#)), which was founded on January 6, 1980 in Riberalta. This cooperative is the result of several EMEIR attempts to create alternative economic organizations for the peasantry. This cooperative has two headquarters—Riberalta and Porvenir—which provide economic services to the peasant. Both operate with small community units—*grupos económicos*—which are working in forty-five communities (360 peasant members) collecting indigenous products directly and
eliminating intermediaries (Ormachea and Fernández, 1989a).

EMEIR has also developed relations with the region's major peasant unions--Federación Sindical Unica de Trabajadores Campesinos de la Provincia Vaca Diez (FSUTCPVD), and Federación Sindical unica de Trabajadores Campesinos de Guayaramerín (FSUTCG). Because many peasant problems are related to tenancy or land reform, EMEIR has relations with the Asistencia Legal Para Campesinos, ALCA, (Legal Assistance for Peasants) which works in La Paz.

EMEIR also maintains national relations with the Comisión Episcopal de Educación, CEE, (Episcopal Commission of Education); and the institutional network Unión Nacional de Instituciones Para el Trabajo de Acción Social, UNITAS (National Union of Institutions for the Social Action).

Since its inception EMEIR has had several economic cooperators because of short-term financing--the Oxford Committee for Famine Relief (OXFAM) from the U.K., and the Catholic Organization to Support Development Programs (CEBEMO) from The Netherlands. The second kind of materials supporter is The Netherlands Service of Technical and Social Cooperation (SNV). This international agency contributes in the development of EMEIR' specific areas lending the assistance of two Dutch technical cooperators: Christine Verheijden (agro-forester) and Vincent Driest (book-keeper).
CHAPTER IV. METHODOLOGY

The case study is the research method adopted by this study. The research approach that will be explained in this chapter was developed to accomplish the two specific objectives developed in Chapter I. This chapter includes a description of the case study method, its advantages and disadvantages, and its applicability to the study of radio as a means of popular communication. The chapter also discusses procedures for instrumentation, data collection, and data analysis.

The Case Study Method

A case study is an empirical inquiry investigating a contemporary phenomenon within its real-life context in cases in which boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used (Yin, 1984:23).

The following definition by Yin explains case study methodology and distinguishes it from other research strategies:

An experiment deliberately divorces a phenomenon from its context, so that attention can be focused on a few variables (typically, the context is controlled by the laboratory environment). A history, by comparison, does deal with the entangled situation between phenomenon and context, but usually with noncontemporary events.
Finally, surveys can try to deal with phenomenon and context, but their ability to investigate the context is extremely limited. The survey designer, for instance, constantly struggles to limit the number of variables to be analyzed (and hence the number of questions that can be asked), to fall safely within the number of respondents that can be surveyed (Yin, 1984:23).

The advantages of the case study method are related to the multiple sources of information used to obtain broad and detailed information about the topic. This ability to deal with a full variety of evidence--documents, artifacts, interviews, and observations--are an advantage of this method (Yin, 1984). The case study is also particularly beneficial for the researcher because it can be used as an exploratory mechanism by which clues and ideas for further research can be found.

In contrast, the disadvantages of case studies have to do mainly with what Yin (1984) has identified as traditional prejudices. The first criticism concerns lack of rigor, which permits equivocal evidence or biased views to influence the direction of the findings and conclusions. A second concern about case studies is that they provide very little basis for scientific generalization. Wimmer and Dominick have argued in this vein:

If the main goal of the researcher is to make statistically based normative statements about the frequency of occurrence of a phenomenon in a defined population, some other method may be more appropriate.
This is not to say that the results of all case studies are idiosyncratic and unique. In fact, if generalizing theoretic propositions is the main goal, the case study method is perfectly suited for this task (Wimmer and Dominick, 1987:157).

It has also been alleged that case studies are limited to qualitative evidence. Yin explains, however, that case studies can include and can even be limited to quantitative evidence. Besides, he remarks, case studies should not be confused with the burgeoning "qualitative research." The essence of qualitative research is two-fold: 1) the use of close-up, detailed observations of the natural world by the investigator, and 2) the attempt to avoid prior commitment to any theoretical model. But this type of research does not always produce case studies, nor are case studies always limited to these two conditions. Instead, case studies can always be entirely based—as just suggested—on quantitative evidence. In addition, case studies need not always include direct, detailed observations as a source of evidence (Yin, 1984:24-25).

Strategies of Case Study Research

The type of research question helps determine the appropriate study design. Yin states that, in general, "what" questions either may be exploratory (in which case any of the
strategies—experiment, survey, archive analysis, history, or case study—could be used) or concern prevalence (in which surveys or the analysis of archival records would be favored). Similarly, the questions "who" and "where," or their derivatives "how many" and "how much," are likely to favor survey strategies or the analysis of archival records, as in economic research. In contrast, "how" and "why" questions are more explanatory and likely to lead to case studies, histories, and experiments as preferred research strategies. The domain of "how" and "why" questions consists of the necessary operational links to be traced over time, rather than of mere frequencies or incidences (Yin, 1984:17-19).

The case study relies on many of the same techniques as the historical approaches does, but the former adds two sources of evidence not usually included in the historian's repertoire: direct observation and systematic interview (Yin, 1984:19).

Selection of the unit of analysis is another important aspect of a case study. The "case" may be an individual, several individuals, an event, or an entity. When the unit of analysis has been clarified, time boundaries are needed to define the beginning and end of the case to determine the limitation of the data collection and analysis (Yin, 1984:30).

Collection of case study data can employ many sources,
including documents (letters, memos, minutes, agendas, historical records, and so on), interviews (open-ended or focused), participant observation, and studies of physical artifacts. Wimmer and Dominick explain that using multiple sources of data permits triangulation of the phenomena under study, but more importantly helps the case study researcher improve the reliability and validity of the study (Wimmer and Dominick, 1987:158-159).

Data analysis is the last stage of the case study design. Yin suggests three analytic strategies: pattern-matching, explanation building, and time series analysis. According to the pattern-matching strategy, an empirically based pattern is compared with a predicted pattern or with several alternative predicted patterns. According to the second strategy, or explanation building, the researcher tries to construct an explanation of the case by making statements about the cause or causes of the phenomena under study; and according to the third analytical strategy, or time series analysis, the investigator tries to compare a series of data points to some theoretic or rival trend predicted before the research (Wimmer and Dominick, 1987:159-160).

Bernard (1988), referring to pattern-matching for qualitative material, explains that in fact all analysis is the search for patterns in data and for ideas that help to
explain the existence of those patterns, a process which
starts even before the researcher goes to the field and which
continues throughout the research effort. Bernard argues that
"data do not speak for themselves; the researcher has to
develop his/her ideas (his or her analysis) about what is
going on, and state those ideas clearly illustrating them in
the way to communicate these ideas to others" (1988:319-325).

Case Study Design for Studying Bolivian Radio

The case study strategy developed for this research took
into consideration two main factors:

1. The methodological applicability of case study's
techniques to the topic--the river-canoe communication and
education experience developed by RSM and EMEIR in the
Bolivian Amazon. The unit of analysis for this study was
participatory approaches operating at: 1) the institutional
level, 2) the organizational level, and 3) the community
level of both RSM and EMEIR; and

2. The characteristics of the topic itself. The
participatory experiences of organizations oriented to the
rural poor may result from national policies, local efforts,
or the concerns of persons or groups playing the role of
catalyst of action. In this study, a holistic approach such
as the case study was necessary because to unfold the social
dialectic of these mobilization efforts, the entire socio-economic environment needed to be considered.

**Relationship of RSM, EMEIR, and social forces approach**

The analysis of media needs to take place in relation to the social forces surrounding, influencing and shaping the function of media in society. According to McQuail (1987), there are three levels which set the context for making media culture. The most important external factor influencing media operations is the media institution, which concentrates norms, values, rules, and institutional expectations about media functions in society. The institution not only can provide boundaries around its sphere of jurisdiction, but also can control or regulate relations with supra-national agencies and with the wider society and the community, especially in terms of the degree of acceptable influence (from outside), the definition of purpose, and the freedom to act.

Second is the specific setting in which media production takes place is the media organization. At this level, a self-contained management systems direct the media function. The last factor explaining the relationship of the media with society is the mass communicator. The mass communicator is regulated directly by the organization, and distantly by the institution. These concepts of institution, organization, and communicator are related to each other in something
approaching hierarchical order.

The extent of the levels just mentioned have been adjusted for this study, as follows:

A. RSM, EMEIR's institutional level
B. RSM, EMEIR's organizational level
C. RSM, EMEIR's community level

These three levels were defined as follows:

A. RSM, EMEIR's institutional level considers the supra-organizational actors who set institutional expectations explicit through principles, norms, values, rules, etc. to guide their communication-education operations.

In this case, three criteria were used to classify RSM and, EMEIR's institutional actors: 1) institutional network--the formal linkage with national groups concerning the same area or domain (i.e., RSM: ERBOL and UNITAS, EMEIR: UNITAS); 2) institutional matrix--formal or informal linkages with national political-doctrinal bodies (i.e., RSM: CEE; EMEIR: CEE) and 3) donor agencies--formal linkage, temporary or permanent, with specific agencies for the purpose of economic or material support of two organizations (i.e., RSM: MISEREOR, EMEIR: CEBEMO, and OXFAM UK.).

B. RSM, EMEIR's organizational level includes the internal management system--principles, objectives, norms, and administrative relations--to guide the organization.
Because categories of actors within an organization accomplish particular functions and organizational tasks, three levels of actors were included: direction (i.e., the RSM's administrative owner of RSM's director); administration (secretaries, and support personnel do not related directly to the production of radio programs); and communicator (i.e., RSM: radio producers, and field team promoters; EMEIR: mobile team promoters); and

C. RSM, EMEIR's community level includes the social environment of individuals--open audience--groups, or any other local organizations able to guide the operations of the communication-education organization.

Because both RSM and EMEIR define the main target of their activities as the rural community, this target was divided into four community actors:

1) local residents, the open population surrounding the two organizations which includes mainly the rural residents, and complementarily RSM's urban listeners.

2) local leaders, the individuals with recognized influential role over the community. Because influential individuals can draw a large variety of actors three categories were considered as relevant:

   a. informal leaders, this group included individuals such as teachers, religious leaders, professionals,
midwives, and local notables (persons having influence over others due to their status);
b. association heads, this group included the presence of appointed or elected individuals in charge of community associations such as cooperatives, farmer unions, political parties, ethnic, fraternal or community action associations.
c. local office-holders, this group included persons occupying roles endowed with authority that is delegated from the state in spite of local members.

3) government personnel, this group included persons who are posted in the area, such as district commissioners, tax collection officials, agricultural extension officers, lower court judges, or administrative clerks.

The category of others opened as sub-category within some specific social levels tried to provide flexibility to the described categories in such a way to include possible actors which could emerge during the analysis although these were not defined in the tree-level actors explained.

The research design

I. Sources of evidence

A. Personal interview:

1. Institutional level: institutional network, institutional matrix, and donor agencies;
2. Organizational level: direction, administration, and communicators of RSM and the EMEIR.

3. Community level: the local residents from the rural and urban areas--Central Warnes, San Lorenzo de Pampas, Agua Dulce, Candelaria del Madre de Dios, and key informants in the urban Riberalta (Appendix F).

B. Archival analysis: collections of letters, internal reports, and other print materials.

C. Direct observation: Direct observation as a source of evidence has two dimensions: a visit to RSM and EMEIR's main offices; field observation and interviews in rural communities.

The case study design has followed the structure of the following model describing the interrelations among the elements of the social forces.

![Figure 1. Relationship of media institution, organization, and communicator under the social setting](image-url)
II. Spatial and time-line constraints

Time constraints of this study are categorized as follows: Interviewing and collection of data in La Paz from December 27, 1989 to January 2, 1990 and from February 1, 1990 to February 5, 1990; field work--a visit to RSM and EMEIR and a trip to the rural communities--from January 3, 1990 to January 31, 1990.

III. Pattern matching strategy

The pattern matching strategy used and the core questions addressed are as follows:

A. Origin:

The process by which the participatory-communication and-education approach has been initiated (Where did the initiative for participation come from?):

1. Who was the initiator/catalyst of the participatory communication and education approach developed by RSM and EMEIR?
2. How did the participatory-communication and-education approach developed by RSM and EMEIR get started?

B. Organizing:

The process by which the participatory-communication and-education approach was structured to accomplish its implementation (How did the initiative for participation take
on an informal or formal structure?):

1. Who got involved in the process of determining
   the structure, objectives, and strategies of the
   participatory-communication and-education
   approach developed by RSM and EMEIR?

2. How was the participatory-communication and-
   education approach structured?

C. Planning:

The process by which the participatory-communication
and-education approach led to the design of further
activities and allocated resources towards specific results
(How did the initiative allocated expected tasks,
availability of resources, and perceived benefits?):

1. Who was involved in the process to determine
   where the participatory-communication and-
   education approach on-going activities should
   be directed, and what form they should take
   according to its nature and capacity?

2. How did the participatory-communication and-
   education approach determine where its effort
   should be directed and what form they should
   take?

D. Producing:

The process by which the participatory-communication
and-education approach allocated human or material resources to the creation, elaboration, or distribution of material outputs (How did the initiative for participation deal with the process of elaborating material outputs, e.g. radio-programs or print materials?):

1. Who got involved in the process of creation, elaboration, and distribution of material outputs through the participatory-communication and-education approach?

2. How was the process of creation, elaboration, and distribution of material outputs developed by the participatory-communication and-education approach?

E. Sustaining:

The process by which the participatory-communication and-education approach will guarantee its continuing operation (How did the participatory initiative perceive and create favorable conditions maintaining its permanence?):

1. Who will be involved in the future development of the participatory-communication and-education approach?

2. How will the development of the participatory-communication and-education approach solve the problems of continuity?
IV. Participatory communication model

A three-sided communication model will be introduced to measure the characteristics of the participatory communication. This model was built from the proposals of horizontal and alternative communication (see pages 34-37). The model--introduced in Chapter V of this study--proposes a sixteen integrated levels of participatory communication qualities which describe tentative forms of participatory involvement in the communication process at the community level.
CHAPTER V. FINDINGS AND DISCUSSION

This chapter reports the results of a case study of participatory communication. Both the findings and discussion of the participatory approaches of communication-education developed by two rural based organizations--Radio San Miguel (RSM) and the Mobile Teams of Integral Rural Education (EMEIR)--that have developed a river-radio communication-education system in the Bolivian Amazon are presented in separate parts. The first of these, based on a series of interviews with persons instrumental in creating and operating the communication experience, aims to explain how this participatory approach in mass media came into existence and how it has developed within its socio-political environment. Of particular interest are questions of origin, organizing, planning, producing, and sustaining of the participatory approach. In the second part, the extent of participatory involvement is measured in terms of access, dialogue, and participation in the process.

The findings adopted a pattern matching structure helping to identify major dimensions of the case study. The findings are presented in specific pattern matching tables and in network representations.
Finding's Framework for the Study of Participatory Communication

The research design employed three sources of evidence--interviews, archival analysis, and direct observation. Because the aspects of participation include both the nature of the participatory action and the environment in which the action occurs, a socio-structural network model was developed which to describe the nature of the participatory approach--what, who, and how; the stages of involvement in the participatory action--origin, organizing, planning, producing, and sustaining; and the extent of involvement in the communication experience--access, dialogue, and participation. These are interrelated and articulated within concrete socio-structural local and national environments (Figures 2 and 3).

Data collection and analysis were organized mainly according to a pattern matching model of involvement in the five stages just described. Interviews with key informants began with a list of sources, which was enlarged as new actors and insights emerged. The direct interview was used extensively because of several undocumented dimensions of the participatory experience under study. Interviews followed a non-structured format and employed open-ended questions, which permitted flexibility.
Figure 2. Graphic Model of Media Social Forces (Who) by Dimensions of Development (What) and Qualities of Participatory Communication Involvement (How)
Figure 3. Socio-structural Network to Represent the Interaction Between the Community Participatory Medium Approach and Its Local and National Environment (Adapted from Cohen & Uphoff, 1977)
Pattern matching to explain origin and development of the participatory approach

The pattern used to describe the origin and development of the project studied, who were involved, and how they were involved at each stage of the project is as follows:

1. Pattern matching (Participatory-approach flow):

<table>
<thead>
<tr>
<th>WHAT</th>
<th>QUESTION POSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Origin</td>
<td>WHO HOW</td>
</tr>
<tr>
<td>Organizing</td>
<td>WHO HOW</td>
</tr>
<tr>
<td>Planning</td>
<td>WHO HOW</td>
</tr>
<tr>
<td>Producing</td>
<td>WHO HOW</td>
</tr>
<tr>
<td>Sustaining</td>
<td>WHO HOW</td>
</tr>
</tbody>
</table>

Actors were divided into three groups, as follows:

2. Scope of social actors:

WHO

Institutional level

- Institutional network
- Institutional matrix
- Donor agencies

Organizational level

- Direction
- Administration
- Communicator

Community level

- Local residents
- Local leader:
  - a. Informal leader
  - b. Association heads
  - c. Local office-holders
- Government personnel
- Others

Characteristics of participatory communication (pattern model)

A three-sided participatory communication model was developed to measure the characteristics of participatory
communication. The model's structure is as follows:

![Participatory Model of Communication](image)

**Figure 4.** Participatory Model of Communication, adapted from Berrigan (1979); Jouët (1977); Beltrán (1980).

The criteria used to classify communication into one of these three groups for the purpose of analyzing involvement qualities in the communication experience by the community actors or rural audiences, are outlined below:

**Participatory communication model:**

<table>
<thead>
<tr>
<th>HOW</th>
<th>(1) Individual access to communication materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>(2) Access to alternative-educational programs</td>
</tr>
<tr>
<td></td>
<td>(3) Opportunities to be in contact with the medium</td>
</tr>
<tr>
<td>Dialogue</td>
<td>(4) Interaction between producers and receivers of messages</td>
</tr>
<tr>
<td></td>
<td>(5) Direct participation by the audience during the transmission of programs</td>
</tr>
<tr>
<td></td>
<td>(6) Public comment and criticism</td>
</tr>
<tr>
<td></td>
<td>(7) Means of keeping in touch among administrators and producers within the medium</td>
</tr>
</tbody>
</table>
(8) Involvement of the public in the production of programs and in obtaining professional help
(9) Involvement in formulating plans and future programs
(10) Involvement in decision making, management, and media policy
(11) Contribution of funds or manpower
(12) Involvement in evaluation of plans and results
(13) Ensuring that the process of participation will continue
(14) Sustaining the process by forming local organizations
(15) Documenting and making available the experience for other groups
(16) Acceptance of plans

Findings about Launching and Development of RSM and EMEIR'S Participatory Communication and Education Approach

Origin

1. Who was the initiator/catalyst of the participatory communication and education approach developed by RSM and EMEIR?

The general pattern matching matrix (Figure 5) describing the stages of involvement in the development of the participatory communication and education approach by the three-levels of RSM and EMEIR's social actors shows that the process of origin of the participatory approach involved
<table>
<thead>
<tr>
<th>LEVEL</th>
<th>ORIGIN</th>
<th>ORGANIZING</th>
<th>PLANNING</th>
<th>PRODUCING</th>
<th>SUSTAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTITUTION</td>
<td>INSTITUTIONAL NETWORK</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>INSTITUTIONAL MATRIX</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>DONOR AGENCIES</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ORG.</td>
<td>DIRECTION</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>ADMINISTRATION</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>COMUNICATOR</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>COMMUNITY</td>
<td>LOCAL RESIDENTS</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>a. INFORMAL LEADER</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>b. ASSOCIAT. HEADS</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>c. LOCAL OFF-HOLD.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>GOVERNMENT PERSONN.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>OTHERS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Figure 5. General Pattern Matching Matrix: Origin and Development of the RSM's Participatory Communication and Education Approach by Institutional, Organizational, and Community RSM and EMEIR's Social Actors Involvement
<table>
<thead>
<tr>
<th>Mobile Teams of Rural Integral Education</th>
<th></th>
<th>Radio San Miguel</th>
<th>INVOlVEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTITUTIONAL LEVEL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INSTITUTION, NETWORK</td>
<td>ERBOL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>UNITAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>INSTITUT, MATRIX</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CEB (Episcopal Bolivian Conference) CEE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORGANIZATIONAL LEVEL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OWNER</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DIRECTOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADMINISTRAT.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>COMMUNICATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RADIO PRODUCERS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FIELD TEAM PROMOTERS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OTHERS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMMUNITY LEVEL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOCAL RESIDENTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOCAL LEADER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>INFORMAL LEADER</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASSOCIATION HEADS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LOCAL OFFICE HOLDERS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GOVERNMENT PERSONNEL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OTHERS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 6. Involvement of the RSG and EMEIR’s Institutional, Organizational, and Community Levels in the ORIGIN of the Participatory Communication and Education Approach
three social-actor levels: institutional, organizational, and community.

Figure 6 displays the RSM and EMEIR's institutional, organizational, and community structure identifying the specific actors involved in the origin stage of the participatory communication and education approach as follows:

1) from the RSM and EMEIR's institutional level, the Bolivian Episcopal Conference (CEB), which is represented by its Episcopal Commission of Education (CEE);
2) from the RSM and EMEIR's organizational level, the RSM's owner, or the head of the Apostolic Vicariate of Pando (Bishop Thomas McBride and his successor, Bishop Bernardo Shirhoff), the RSM director (Héctor Salas Takaná), and the EMEIR mobile team promoters; and
3) from the RSM and EMEIR's community level, the informal leader, Father Juan Moynihan.

2. How did the participatory communication and education approach developed by RSM and EMEIR get started?

Sources interviewed agreed that the origin of the communication and education experience played by RSM of Riberalta and by the EMEIR, since 1986, is mainly related to previous processes happening within the Apostolic Vicariate of Pando beginning in 1972. The main actor identified as promoter of changes to meet the needs of education and
communication of the Bolivian Amazonian population was the informal leader, Father Juan Moynihan, M. M. (Maryknoll Missionary).

This priest, sensitized by the regional poverty, the scarce and ineffective educational services, and the state of exploitation of the rural worker in the Bolivian Amazon (specifically, within the Apostolic Vicariate of Pando) decided to launch an alternative nonformal education project serving the indigenous population of the region. His alternative included not only a change in the content of education and a locally-based perspective promoting rural conscientization but also a system of canoe-education.

Canoe-education to the dispersed rural communities by permanent mobile teams employed a method called *método asistémático* (nonformal education). This method was based on principles such as those to be found in the Freirean conscientization process, on Christian principles extracted from the "Bolivian Bishops Letter for Education" issued in the 1970s, and on community work experienced by the EMEIR teams. When Father Juan Moynihan initiated his program in 1972, he counted on the collaboration of a La Salle Brother, Jaime Calderón, who was then Executive Secretary of the Episcopal Commission of Education (CEE). The CEE's involvement in the origin of the EMEIR project was a result of Brother Calderón's personal interest in the initiation of
the project. The CEE also served as a channel for contacting international donors for economic support.

The canoe-education experience of EMEIR, which began officially in July, 1973, is recognized as the indirect origin of the river-canoe communication and education approach initiated later by both RSM and EMEIR.

The reasons for this close relation between RSM and EMEIR, however, are associated with a set of factors influencing the Apostolic Vicariate of Pando at the end of the 1970s. First was the presence of Father Juan Moynighan whose charismatic personality propelled a revival of educative and communicative concepts within the Vicariate.

Second, supported by its Bishop, Father Thomas McBride, the Apostolic Vicariate of Pando entered upon a process of renewal and evaluation from 1976 to 1979 that resulted in the decision to adopt a new strategy called the Vicariate's Plan (1977). Among the goals and strategies of this plan was a strong recognition of the importance of communication in bringing about the evangelization and social promotion of the region. The organization directly affected by this attitude was the RSM, which in August 1978, began implementing a Vicariate strategy known as the "Project of Integral Communication." Father Moynighan, as an operative coordinator, supervised this implementation.

Third, in 1979, the Project of Integral Communication
published a diagnostic of RSM and set forth new objectives to promote the integral development of the region; to encourage popular participation in the medium; make the RSM an instrument of coordination for regional peasant organizations; and to fight against the injustice experienced by those isolated from political, economic, and socio-cultural benefits.

Fourth, because Father Moynighan had responsibilities within both RSM and EMEIR, relations between the two organizations were formalized on November, 1977, with the production of the first EMEIR radio program in RSM--"The Voice of My Community" (La Voz de Mi Comunidad).

Fifth, during the period 1977 to 1980, defining the radio's role as one of community service was difficult. Between RSM and EMEIR, philosophies and objectives differed. For instance, the involvement of one EMEIR delegate in the production of radio programs with a rural content was considered an "act of bad taste." This was so because the RSM staff was constituted of a team of school teachers, who according to the EMEIR interviewed, had an urban-centered concept of education and communication. Another type of problem RSM confronted was political: there was opposition from groups linked to the landowners' interests and the military coup in July, 1980, which not only curtailed radio plans but led to a seizure of the medium, political
persecution of RSM and EMEIR's members, and the imprisoning of Father Juan Moynighan and his separation from the Vicariate. The re-establishment of democracy in 1982 permitted RSM to reopen and continue its original mission. The re-establishment of RSM, however, brought differing philosophies to the surface again, leading to a crisis that was solved by the Pando's Bishop, Bernardo Shirhoff. He replaced many of the radio's personnel and invited EMEIR's founder, Héctor Salas Takaná, to direct the RSM in November, 1986.

The direct involvement of EMEIR in the operations of RSM since 1986 has permitted 1) the mutual exchange of information; 2) the use of radio to support EMEIR activities in rural areas and 3) the adoption of its methodology by the "Field Teams" of RSM; and 4) the acceptance of the goals and objectives of an integral communication project promoting rural education and critical expression.

Organizing

1. Who was involved in the process of determining the structure, objectives, and strategies of the participatory communication and education approach developed by RSM and EMEIR?

Figure 7 displays RSM and EMEIR's institutional, organizational, and community structure identifying the involvement of specific actors at the organizing stage of the participatory approach. Those involved were

1) from the RSM and EMEIR's institutional level, the
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Figure 7. Involvement of the RSH and EMIR's Institutional, Organizational, and Community Levels in the ORGANIZING of the Participatory Communication and Education Approach
institutional network of RSM (ERBOL) and the international donor agency from RSM (MISEREOR);

2) from the RSM and EMEIR's organizational level, the RSM's owner (the Apostolic Vicariate of Pando), the RSM director (Héctor Salas Takaná), the RSM's radio-producers, and the RSM's field team promoters at the medium communicator level, and the EMEIR's directors, it administration, and mobile team promoters; and

3) from the RSM and EMEIR's community level, local residents and a local leader.

2. How was the participatory communication and education approach structured?

The decision of the Pando's Bishop, Bernardo Shirhoff, to invite one of the EMEIR's founders to join RSM's administrative staff in November, 1986 opened the opportunity for the organizations to improve their relations through sharing experiences and methodologies in the creation of a new project using the mass media as a participatory instrument.

According to Héctor Salas Takaná, RSM's director, the factors related to the Bishop's decision to incorporate an EMEIR member into RSM, resulted from certain considerations about EMEIR. For instance, at that moment, EMEIR was the only regional organization with strong popular contact; it was one of the most knowledgeable organizations about the
social problems of the Amazonian population; and it had a canoe-education system with strong geographic linkages.

Most importantly, EMEIR's methodology--"to see, to judge, and to act (ver, juzgar y actuar)--had been molded from rural field experience, and shaped under the guidance of Father Juan Moynihan and was the most likely to accomplish the 1979 Project of Integral Communication objectives.

Although after 1977, the extent of EMEIR participation in radio operations was reduced to the production of some radio programs in RSM, EMEIR considered its presence in RSM as fundamentally a triumph for the rural sector because a rural-based operation had finally been recognized as valid for rural workers.

Salas Takaná implemented programs and projects consistent with the EMEIR tradition, and the Bishop Bernardo Shirhoff supported Salas Takaná by providing guidelines to RSM's new project. He recommended that 1) the project develop an ideological orientation considering the social context; 2) the medium should promote changes to benefit the Amazonian rural population; and 3) the medium principle to reflect the facts, rather than being influenced by its technification or internal bureaucracy. The hoped to create within the medium the evangelical attitude of "radio as community," which necessitated a coherence between the communicator's practice and life, and the message that he/she
communicated to the external community.

According to Salas Takaná, these conditions shifted the radio toward a new direction--that of "becoming a peasant medium" (campesinación). Another RSM goal was to make the radio a rural regional medium rather than primarily an urban one. The urban RSM style was competing with other commercial radios and was thus also obliged to copy national or international radio models.

Group techniques and educative games were incorporated within RSM to facilitate the communication and evaluation processes. That these changes, however, were considered as unprofessional and threatening to the expertise of some RSM workers created a new crisis in the medium. Salas Takaná, supported by the Vicariate, replaced those remaining from the urban school-teacher tradition in February, 1987. This allowed him to incorporate additional EMEIR members into RSM's directive staff and to employ four former EMEIR members to collaborate in the new project.

Changes in the radio were implemented in several steps. First, because EMEIR's method had been incorporated in RSM, team discussion and analysis guided the introduction of changes in production, content, and strategies of community contact. According to Salas Takaná, the internal strength of RSM was based on both its team-work structure and the general peasant spirit. Media workers' creativity was encouraged,
Second, changes in RSM programming and production were intended to facilitate peasant participation. For instance, the constitution of the "field team" (Equipo de Campo) in RSM was the station's main approach to making contact with rural communities. The tool developed to implement the field team approach was the canoe-visit to the rural communities. The four field teams of radio promoters were trained under EMEIR's methodology and these teams coordinated schedules with EMEIR headquarters. Their approach to rural communities--like that of the EMEIR teams--was to become involved by taking part in the daily labor and routine of the rural workers. The teams would stay about a week in each community. Through this direct involvement, they collected information for the purpose of: 1) communicating through radio programs the problems, news, and cultural events from the communities. These rural messages promoted the identity of the rural communities and motivated their organization and contact; 2) analyzing in local meetings and group sessions approachable topics; and 3) promoting inter-community exchanges of persons able to help solve specific community problems. For instance, the creation of the "Inter-institutional Team" among RSM, EMEIR, the Rural Evangelical Institute, the Agricultural Cooperative "Peasant," and the peasant's unions working in the region was an inter-
organizational initiative to coordinate services, to promote better use of scarce material resources, and to avoid duplication of activities in the region.

Third, to increase peasant involvement in radio production and programming, RSM developed a strategy of "popular reporters" (reporteros y educadores populares). This group of radio collaborators represents an informal community communication network with about 120 community representatives. Radio San Miguel implemented a series of community workshops to train the voluntary popular reporters in the basic concepts of radio reporting and of the region's social reality. According to Ricardo Guarena, current head of the RSM's field team, the experience of the popular reporters began through the letters of several peasants who expressed their interest in collaborating with RSM as local channels of information or because they were curious to know how the radio operated. Guarena argues that early experiences with the peasant communicators, or popular reporters, were also incorporated in RSM in 1975 by Father Juan Moynihan, who named the reporters "community animators" (animadores de comunidad). Later, with the involvement of ERBOL, they adopted the concept of "popular reporters" as proposed by ALER (Latin American Association of Radiophonic Education). Radio San Miguel has already organized six training workshops for popular reporters in the regions of
Guayará, Cobija, the areas of the rivers Beni and Mamoré, and the region of roads. The requirements for popular reporters are basic literacy—ability to read and write—and an age from 15 to 40. Women reporters are encouraged in order to integrate this sector into the radio's activities.

In charge of implementing the mobile teams for radio were EMEIR members Héctor Salas Takaná as RSM's administrative director, Carlos Sejas—in charge of RSM's Field Team, Rodolfo Loras—in charge of the radio production team (press, radio announcers, recording, audio-material, and Center of Popular Communication—CCP), and Jorge Martínez—in charge of the production of print materials supporting the topics of the integral communication project. Among radio reporters and production personnel were the former EMEIR members Ricardo Forero, Ricardo Yanamo, Pedro Tanaka, and José Vargas.

Among institutional and individual actors involved in the process of supporting the new structure of RSM was ERBOL, one of the RSM's institutional networks. Its involvement was related to its contribution in terms of both radio production training and supplying radio materials. The radio instructor of ERBOL, Ernesto Miranda, contributed technical advice and was personally involved in the process of discovering participative strategies for radio. Bolivian Radiophonic Education was also involved through its daily contact with
its CCP system, Center of Popular Communication, which networks 17 radio and educational organizations in Bolivia and supplies national information broadcast on the RSM program "Integrating Bolivia" (Integrando Bolivia).

Radio San Miguel economic donor agency--MISEREOR, of the Center for Development Help from West Germany--was involved mainly related to the economic arena. Evaluations from RSM, however, were presented periodically to the agency, and MISEREOR's representative visits to RSM were influential in verifying how funds were used, as well as in suggesting new strategies of operation to RSM. For instance, the last time this representative visited, in 1989, she expressed clearly MISEREOR's interest in supporting and encouraging RSM's rural approach.

Planning

1. Who was involved in the process of determining where the participatory communication and education approach ongoing activities should be directed, and what form did these activities should take?

Figure 8 displays RSM and EMEIR's institutional, organizational, and community structure detailing the involvement of specific actors in the planning process of the participatory approach. Those involved concentrated at the organizational level were

1) from the RSM and EMEIR's organizational level, the RSM's owner (the Apostolic Vicariate of Pando);
2) the director of RSM;
Figure 8. Involvement of the RSM and EMEIR's Institutional, Organizational, and Community Levels in the PLANNING of the Participatory Communication and Education Approach.
3) the radio's administrative personnel; and
4) the mobile promoter teams of EMEIR and RSM.

2. How did the participatory communication and education approach determine where its efforts should be directed and what form they should take?

The activities developed by the RSM participatory communication and education approach are designed completely within the medium. Every semester, each of the radio departments (direction, field team, production, and administration) participates in the medium-evaluation process, by which each department reports its activities and suggests a plan to be discussed later by all radio members.

The process of semester evaluation and general planning of activities take the workshop format, in which techniques of group dynamics and games for analysis and discussion among RSM members enhance group and individual analysis. The structure of the evaluation workshops has been adapted from EMEIR evaluation system, and it consists of a meeting in which formal sessions and informal activities are combined to enhance a "familiar" style of discussions. According to Salas Takaná, the strengths of the RSM's evaluations and the planning of activities lie in a personal treatment of the workers' attitudes and responsibilities.

Salas Takaná explains that among the central changes introduced in RSM was a horizontal system of relations, meaning that evaluation occurs through discussion and
dialogue. That practice was feared by workers previously because it had been used to threaten, to fire, and to criticize worker activities. Thus, Salas Takaná stated that RSM's goal was to consider the personal side of the worker and the value of the labor of each member.

Although the Pando Bishops promoting the changes in the RSM line could easily have directly influenced the planning activities of RSM, they preferred to delegate their involvement. This situation has changed recently with the presence of a new bishop in the Pando Vicariate, who has begun observing RSM evaluations.

According to reports of the last RSM evaluations in December, 1988 and August, 1989, the participation of Bishop Luis Morgan Casey (the current Pando Bishop) is considered an important sign of support by the Vicariate and an attempt to fuse the activities of RSM with Catholic principles.

RSM's plans can be modified to coordinate with those of other actors and events such as those of EMEIR, or peasants schedules, etc.

According to RSM's field promoters, one criteria on of whether a community should be included in their schedule of visits is whether doing so would support activities already initiated by EMEIR and thus enhance the continuity and organization of activities in that community. For instance, if an EMEIR "economic group" (grupos económico) exists in a
certain community, that community chances of being selected improve.

The RSM's planning activities also must consider the presence of institutional actors, i.e., RSM's economic donors. RSM sustainability is determined by the periodic elaboration of projects submitted to its donor agency—MISEREOR. The approval of these projects and the granting of economic support, however, depend both on observations of RSM's evaluation reports and projects, and on the recommendations from one of the agency's monitors, who visits the radio periodically.

Although the relations between RSM and its donor agency are mostly through reports, RSM staff believe they have better relations with this and other donors because ERBOL's headquarters no longer plays an intermediary role between donor and recipient.

According to Salas Takaná, contact between the medium and the donor agency encourages the radio's administrative autonomy. But because the Pando's Vicariate is legal owner of RSM, and because the Pando's Bishop is legally signer of the RSM's projects, RSM has as funds administrator the Apostolic Vicariate of Pando, which determines the control of funds for the medium.

The administrative capacity of RSM, a factor influencing the scope of the station's activities, has been paid careful
attention by the current Bishop of Pando, who is interested in matching the medium social objectives with its economic efficacy.

Producing

1. Who became involved in the process of creation, elaboration, and distribution of material outputs within the participatory communication and education approach?

Figure 9 displays RSM and EMEIR's institutional, organizational, and community structure and identifies the involvement of specific actors in the producing stage of the participatory approach, which are as follows:

1) from the RSM and EMEIR's institutional level, the only actor involved in production of materials is ERBOL, one of the institutional networks of RSM;

2) from the RSM and EMEIR's organizational level, the administrative owner of RSM—the Apostolic Vicariate of Pando and RSM's director and administrators from the RSM and EMEIR's communicator category, RSM's radio producers and field team promoters, the EMEIR's mobile team promoters, and others; and

3) from RSM and EMEIR's community level, the local residents, informal leaders, and association heads.

2. How was the process of creation, elaboration, and distribution of material outputs developed by the participatory communication and education approach?

The structure of production of RSM since it adopted EMEIR's methodology and strategies to pursue indigenous
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Figure 9. Involvement of the RSM and EMIR's Institutional, Organizational, and Community Levels in the PRODUCING of the Participatory Communication and Education Approach
transformation has resulted in many changes in content, radio-programs structure, and time spans. There are two main material outputs from RSM: the RSM radio programs, and the RSM printed materials.

The production of radio programs is under the permanent control of Salas Takaná and Ricardo Guarena--RSM's field team head, who are convinced that during the last few years the peasant presence in the radio has improved on several levels of radio production. For instance, in the programs aimed at peasants, peasant voices are included.

Because the peasants have began to believe the radio slogans that the medium belongs to them and is at their service, the rural audiences consider the radio station not only a place to visit, or a place through which to send and receive messages, but also a central instrument of the peasant movement in the region. According to RSM field team workers, because RSM is accomplishing its rural role, the peasantry has actively defended the radio on several occasions. Once was in May, 1988, when a religious authority influenced by regional power holders denounced the RSM as a non-educative and pro-communist medium.

According to Salas Takaná, because of the radio's strategy of radio field promoters, the idea of RSM as a medium for spreading information has moved toward the radio concerned and involved in the rural setting. Ricardo
Guarena, also cites RSM's field promoters fundamental methodology of operations--to see, to judge and to act (ver, juzgar y actuar)--as a source of strength. The four teams of two members each are made up of young promoters who, preferentially, come from the same rural regions. The teams have been trained in methods of popular education and on basic topics about agriculture, agrarian law, cooperativism, and peasant organization. The relations they develop begin and end with a process of communication. Guarena explains that the work of the promoters is to visit the rural communities, live and share the daily life of the peasantry, and together begin the educative process of "conscientization." Because the promoters experience rural life first hand, they discover social and economic problems and can then bring them to the radio for the whole peasant audience. Or they can encourage the peasants to find community solutions to their problems.

Salas Takaná claims that the contribution of the field teams and their approach to bringing the distant voice of the peasant to the radio has made them "the feet, or foundation, of the radio."

The material collected from the rural communities travel to the radio by either the field team promoters or the "popular reporters" (reporteros populares). The material collected by the RSM field teams consists of interviews,
indigenous regional music, or reports based on their own observations. The materials sent by the popular reporters include letters discussing local events or rural problems. Because the popular reporters' materials rarely have a simple route to the station and instead can travel via various merchant boats, landowner boats, foot-travelers, etc., several cases have been reported in which letters and urgent messages were lost before arriving at RSM.

The RSM's radio production staff is in charge of the process of transforming all the collected materials into radiophonic messages. For instance, the daily programs "The Voice of My Community" (La Voz de Mi Comunidad), "Union" (Sindicato), "Peasant Magazine" (Revista Campesino), or the Saturday programs "The Land is Ours" (La Tierra es Nuestra), or "Cooperativist Peasant" (El Campesino Cooperativista) deal with the rural issues reported to the radio. As a result of production policy changes, RSM programs with rural content are broadcast in the periods of higher peasant audience (early morning or noon).

To reach the majority of peasants, the radio schedule of RSM has been undergoing modification since 1986. Respondents observed that, before 1986, the radio broadcast only six hours. After 1986, however broadcasting extended to twelve hours; and lately it has expanded to sixteen. RSM begins morning radio broadcasting at 5:00, closes it at 2:00 p.m.,
and reopen afternoon broadcasting from 4:00 to 11:00 p.m (Appendix F).

The RSM's director explains that the radio programming schedule was changed in part to complement the times when the peasants reported that could receive radio signals.

The main radio staff of RSM works in Riberalta and is in charge of the daily production of programs such as the RSM news "The Voice of the North" (La Voz del Norte) and "Radio-magazine San Miguel" (Radio Revista San Miguel). The main sources of information for these programs are the local institutions, the local political organizations, the local people's organizations (union or cooperative), and Riberalta's workers neighborhoods. RSM's local radio producers are also in charge of the production of Saturday's open or auditorium programs "San Miguel and the Children" (San Miguel y los Niños) and "The Saturday Show" (El Show de los Sábados). In both of these programs the urban and rural audiences of Riberalta are invited to participate in musical or artistic performances.

The Vicariate of Pando's participation in the production of RSM programs depends mainly on the radio programs produced by the Institute of Rural Evangelization (Instituto de Pastoral Rural). These programs are produced by young volunteers, with some religious guidance from the Vicariate, and with the technical support of RSM's staff. These
programs are "We are the Youngest" (Somos Jóvenes), "Dialogue without Frontiers" (Diálogo Sin Fronteras), "Young Peasants on the March" (Jóvenes Campesinos en Marcha), and "Messengers of Peace" (Mensajeros de la Paz). All of them have an evangelical content. The Bishop of Pando, Luis Morgan Casey, is involved in radio programming through the broadcasting of Sunday's Mass from the Riberalta cathedral and through short occasional radio talks.

The RSM's popular reporters have recently been involved in the production of radio programs as a part of a training program. During the 15-day training, the reporters took part in the production of programs such as "Peasant Magazine" or "The Voice of My Community." This process of the popular reporters' direct involvement of the popular reporters in radio production, according to RSM's director, is an instrument to encourage the confidence of the rural population in the medium not only because the rural reporters design and broadcast their own messages--demystifying radio professionalism, but also because the community audience get excited to listen one of their members talking on the radio.

Collaboration in RSM radio program production also includes the involvement of local organizations. For instance, the program "Rural Teaching" (Magisterio Rural) is produced entirely by rural teachers' organizations from Pando and the Province of Vaca Diez.
The involvement of the institutional matrix--ERBOL--in the process of production is related mainly to delivering radio materials. It has two forms: the daily news broadcasting service through the Popular Communication Center (CCP), and supplying of radio educative programs. The news material submitted through the CCP is used fully used by RSM's news department in producing its noon program "Integrando Bolivia" (Integrando Bolivia). The radio programs that ERBOL supplies come from international radio services such as the Latin American Association of Radiophonic Education (ALER), or the Chasquihuasi Center of Communications (Santiago, Chile), which produces a news program entitled "Third World" (Tercer Mundo).

The second material output of RSM consists of the production of print materials. This activity is the result of the organization of RSM's "Workshop for the Production of Popular Materials," which in cooperation with EMEIR supervises the preparation of educative pamphlets and other materials to support their activities. The workshop has an offset printer and a photocopy machine.

The production of radio programs and printed material by RSM, according to RSM workers, follows the strategy of using real context issues in an easy-to-read, to listen, and to understand format.
**Sustaining**

1. Who will be involved in the future development of the participatory communication and education approach?

   Figure 10 displays the RSM and EMEIR's institutional, organizational, and community structure identifying specific actors involved in the sustaining of the participatory approach. They include involvement in only two levels:

   1) from the RSM and EMEIR's institutional level, the actor involved in the process of sustaining the participatory communication and education approach is the RSM's donor agency--MISEREOR; and

   2) from the RSM and EMEIR's organizational level, the owner of the medium--the Apostolic Vicariate of Pando.

2. How will the development of the participatory communication and education approach solve the problems of continuity?

   The role of maintaining the development of the communication and education approach played by RSM depends mainly on the economic viability of the medium. Administrative workers agree that although factors such as medium community involvement and the program's internal strategies seem to be solid, long-term survival of RSM is not guaranteed. The economic level of support for the radio is determined by RSM's donor agency and by the economic strength and the generosity of Pando's Vicariate.

   The death of Bishop Bernardo Shirhoff (1987) and
Figure 10. Involvement of the RSM and EMEIR's Institutional, Organizational, and Community Levels in the SUSTAINING of the Participatory Communication and Education Approach
the arrival on June 1988 of the Pando's new Bishop, Luis Morgan Casey, is considered by members of both RSM and EMEIR as a point of crisis in the future of both organizations. Because Morgan Casey was new in the region, he began observing the activities of organizations belonging to the Vicariate or working under its tutelage. This personal evaluation process resulted in a series of critiques and recommendations having an important impact on EMEIR and RSM.

Because Morgan Casey believed that the relation between the Vicariate and EMEIR was mainly financial and that the Vicariate served as conduit for funds from donors rather than as a source of doctrine or evangelical purpose, he recommended that EMEIR become independent in its activities. On February, 1989, EMEIR decided to proceed with separation through requesting the official governmental recognition of its organizational autonomy—Personería Jurídica.

The official announcement of the separation of the Vicariate of Pando from EMEIR was made by Morgan Casey on August 1, 1989. Although EMEIR's crisis was seen by some as an important step in the development of this organization—as a new sign of maturity—it has evidently affected the relations between EMEIR and RSM.

The administration of RSM by Morgan Casey has continued to support the "campesinación" of the radio, but has placed more emphasis on searching for ways to become economically
self-sustaining. RSM's current project, supported by MISEREOR, has been extended from 1990 to 1992, but there is no guarantee of support beyond that time. But peasant ability to support the station is limited by the acute poverty of the region.

Even with current founding, the ability of RSM to serve rural communities is limited. RSM's 1990 plan identified 123 communities, but RSM can afford to visit only 14 of these. The only way to maintain continuity in their community service, therefore, is by coordinating organizations within or outside of the same rural areas.

The sustainability of EMEIR will depend in part on its ability to create and act on its economic diversification plan, which focuses on alternative agricultural production and attempts not only to diversify the peasants economy, but also to maintain its own educative work.

Findings about the Radio Participatory Approach

The pattern model used to analyze the characteristics of the participatory-radio approach is a three-sided structure constructed of access, dialogue, and participation, within 16 sub-dimensions. The model was weighted at the community level of social actors because 1) this level represents the target environment for RSM; and 2) there was great interest in studying the influence of the community on RSM. Findings
### Figure 11. Participatory Communication Model—Access, Dialogue, and Participation—by Relation of Involvement of the RSM Community Level Actors

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<tr>
<th>COMMUNITY LEVEL</th>
<th>LOCAL RESIDENTS</th>
<th>INFORMAL LEADERS</th>
<th>ASSOCIATION HEADS</th>
<th>LOCAL OFFICE HOLDERS</th>
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- ✓: Involvement indicated
- □: Involvement not indicated
in this part will be developed according to the 16 sub-categories under access, dialogue, and participation, which are developed on pages 124-125.

Access

1. Individual access to communication materials

The participatory communication pattern model (Figure 11), which describes the scope of involvement in the participatory communication approach by community-level actors shows that all the community actors--local residents, informal leaders, association heads, local office-holders, and government personnel--have some access to RSM radio.

Access is limited, however both by distance from the radio signal and by a lack of operating radio receivers.

As a result of the process of "campesinación" and "regionalización," the participatory communication and education approach developed by RSM and EMEIR since 1986 has focused on all cultural groups of the Bolivian Amazon. Factors such as the technical capabilities of the medium associated with the socio-political characteristics of the region interfered and barred the rural population access to communication materials.

According to Carlos Uzquiano--a technician at RSM--the medium has a transmitter of 1kw (1000 watts) of power in 90 meters. This is a relatively weak signal, much too weak to reach distant places during the day. In contrast, night
broadcasting can reach places like Manaos in Brazil clearly. The solution for this technical limitation, according to Uzquiano, will depend upon whether the station receives permission from the National Directorate of Telecommunication to operate in 60 meters.

A rural respondent--Carmen Sánchez--in Candelaria, a community in the River Madre de Dios supported this observation, explaining that although she wants to listen to RSM all day, the radio can only be received clearly from very early morning to seven a.m. and then again after six p.m.

Another limit on access is the number of working radio sets. According to rural respondents, most of the radio receivers for sale in the urban market (in Riberalta, Cobija or Guayará) do not have short wave. Therefore, purchasers from rural areas would not be able to receive RSM signals. The cost and availability of batteries is another factor restricting access to radio. Rural workers say that they purchase their batteries from merchant-travelers who sell the batteries for twice as much as they cost in Riberalta.

Mechanical radio breakdowns and a lack of knowledge about how to use the radio are both limitations. Elena de Puro--a peasant worker in the region of Warnes--explains, "I listen to radio when I can. We have a radio, but I do not know what is going on with it. I cannot receive Radio San Miguel; our radio is a radio-recorder which belongs to my
son. But he is working in the Brazilian-nut harvest, and only he knows how to use that radio-recorder. I want to buy a radio—a simple one—for me. Without radio, I do not know what is happening in the town or whether my family is okay or not."

Access of the RSM field team promoters is also restricted to specific working regions. According to Ricardo Guarena, head of RSM's Field Team, because of the exploitative barraca system of production, the landowners administering the harvesting of wild rubber or Brazilian-nut to all intents and purposes control the lives and affairs of the workers on their land. Thus, to work with peasants in the barracks regions is impossible, and contact with these workers is restricted for strangers, and especially for RSM and EMEIR promoters. In fact, landowners have threatened RSM and EMEIR field promoters. This situation reduces the access of RSM and EMEIR to "free-peasant communities."

2. Access to alternative-educational programs

The second level of access in the participatory communication pattern model (Figure 11) refers to the provision of alternative educational programs for the community by RSM and EMEIR. Results show that the following actors have access to alternative-educational materials: local residents, informal leaders, association heads, local office-holders, and government personnel.
According to Félix Rada--RSM's news producer--it is the responsibility of the radio producers working in the community to design their programs with educative content and creative structure. These programs contrast sharply with what was available before, in such areas as sources used, topics covered, and voices and music that they include. The programs represent a message proscribed before RSM. Rada explains that because RSM has handled news with social content, peasants have been brought into close contact with the radio, which has also generated an image of respect from power holders. RSM news is designed to generate criticism, and the radio wants to offer materials to make people think, he concludes.

Salas Takaná explains that access to alternative programs means more community involvement in the creation of messages. And RSM has attempted to change the "professional" attitude of a radio producer who works by contract. RSM has changed the responsibilities of the director of the medium to that of facilitator of democratization.

The production of these alternative-educational programs and materials by RSM seems to have had an impact on the rural areas. For instance, Ricardo Tibi, a peasant of the community of Candelaria in the region of the river Madre de Dios, explains that through the radio his community has been encouraged to organize a peasant union and that the
information RSM provides keeps it up to date on the union movement at the national level. A rural primary school teacher, in Candelaria, Carmen Sánchez argues that the services that RSM and EMEIR provide to rural workers contribute to her teaching functions by doing a job that she and others like her are unable to accomplish—t...
Among the most common reasons for rural workers to visit the radio station were 1) to pass a message (this popular service is free of charge); 2) to celebrate its anniversary—each August 29; 3) to get to know the people who work there, and to see how the station operates; 4) to participate in the practical training workshops for popular reporters; 5) to discuss a local matter; 6) to participate in its musical or cultural festivals; and, 7) to complain about what was broadcast.

According to RSM's personnel, in the last few years, the presence of peasants—individual or commissions—at the station have increased because they found in the radio a means to denounce abuses—political, family, land or employment. There are few restrictions on sending messages—all the messages are free of charge—and restrictions apply only when messages represent a risk for the medium. Such messages require permission from RSM's director or from Pando's Bishop.

According to RSM's records, from one hundred to one-hundred-fifty messages are broadcast daily by radio. Messages related to personal matters such as travel, sickness, and meetings are the most common. No commercial announcements are accepted.

RSM's producers agree that one important means of improving the relations between rural communities and the
radio, as well as among the communities themselves, is through the broadcasting of local soccer (fútbol) games. The same is true of "The Saturday Show" (El Show de los Sábados) and regional festivals from the same communities. A particular contribution of these activities, according to RSM's director, is the development of local musical groups that are always eager to take part in RSM activities, perform regional songs, and show great expertise in performing on indigenous instruments.

Informal leaders--mainly religious representatives from the Pando's Vicariate, are in permanent and close contact with RSM. They produce radio programs or create print materials. Association heads, such as union leaders, representatives of the Agricultural Cooperative "Peasant" are in continuing contact with RSM. With representatives from unions such as the Rural Teacher's Union of Pando and of the Vaca Diez Province, they produce the occasional program "The Rural Teacher" (El Magisterio Rural). The main peasant unions of the region not only use the radio to broadcast their main meetings, but also ask for additional services and use its auditorium for their meetings.

Local office-holders of the regions also have contact with RSM, not only as sources of information, but also to appear on the program "Political Prism" (Prisma Político) broadcast every Sunday.
Government personnel mainly are sources of information for RSM although this depends on the particular government.

**Dialogue**

4. Interaction between producers and receivers of messages

The fourth level in the participatory communication pattern model (Figure 11), and the first of its category—dialogue—describes the characteristics of the interactions between producers and receivers of the RSM messages. Figure 11 shows that the community actors who have interaction with the RSM producers are local residents, informal leaders, association heads, local office-holders, and government personnel.

Although RSM exercises an open-door policy, real contact between radio producers and the RSM audience seems to depend upon the characteristics of the social actor interacting with the medium and upon factors such as geographic distance of the community actor from the radio station or teams. Interactive contact seems to favor mainly to the rural residents, RSM's field team target audience, however.

The pattern of interaction is often initiated by RSM or EMEIR field teams, which first approach the rural communities by observing and participating in their daily life. When conditions warrant, dynamic techniques such as educational games and group analysis techniques such as brainstorming are used to enhance problem identification, context analysis, and
the promotion of collective action.

Peasant respondents stated that they considered the field team promoters members of their communities because they observed that the promoters were willing to share the daily tasks, food, and shelter. They felt comfortable talking with the promoters about regional stories, agricultural practices, folk medicine, and playing their native instruments. At the end of each community visit, the promoters organized a session of community evaluation to precede music and a cultural meeting.

According to Irineo Vaca and José Barbas, promoters of RSM's field teams, the process of meeting a community--after one or more days of household-by-household contact--becomes an instrument of self-training. Because the field promoters consider themselves neither experts nor professionals regarding peasant topics, they admit that they learn much about peasant problems from the discussion and practical sessions in the communities. They explain that this process of interactive learning does not happen through occasional contact between promoters and rural people, but happens after a long process of staying, observing, and learning. Information learned in one community is often useful in the next one.

Interaction does occur between radio producers and other community actors, however, because the context of the
interactions taking place---between the radio station and the urban setting---the pattern becomes more service oriented. For instance, some informal leaders---religious representatives from the Apostolic Vicariate of Pando---have close relations with RSM personnel because they produce religious radio programs or create print materials mainly for urban religious activities. These leaders, however, in contrast to those dealing with the rural interactive process, demonstrate a degree self-sufficiency in handling their voluntary responsibilities and also have some autonomy in the medium because they represent the authority of Vicariate of Pando.

The local association heads, in close interaction with RSM, are representatives of peasant cooperatives, or peasant headquarters', with an office in Riberalta. Although these representatives are not in charge of the production of radio programs, they interact with RSM in two ways---as organizational support and as sources of information. They often use the radio to communicate messages to their rural associates, and they have been important supporters of RSM and EMEIR in situations potentially affecting these institutions.

Local office-holders such as the local mayor, regional political prefect, or military authorities, and government personnel such as representatives from the Agricultural
Ministry or the Regional Corporation of Development, CORDEPANDO, despite the fact that they can use the services of RSM, are considered generally sources of local official information. The fundamental relation between RSM and these local authorities, according to RSM's news personnel, has been reduced to journalistic contacts. Because RSM deals mostly with information representing rural-and urban-popular interests, there is often a negative reaction to news from authorities which representing the interests of regional power holders. Criticisms of RSM has on several occasions led to local official sources of information being closed to RSM staff.

5. Direct participation by the audience during the transmission of programs

The fifth category of the participatory communication model (Figure 11), the second element in the characteristics of dialogue, refers to direct participation by the audience during the transmission of programs.

Figure 11 indicates that the only community actor participating directly in the transmission of the radio programs of RSM are local residents.

Because RSM considers the rural population its target audience and because the station is located in an urban center, there are some limitations of the ability of rural residents to participate directly in the transmission of programs.
There are, however, some experiences by which the rural audience can participate directly in radio broadcasts 1) the transmission of rural events from certain close communities—or a short wave connection. The transmission of rural communities' anniversaries, which generally are associated with other important events such as baptisms, and cultural and sporting events strengthens communities and also attracts the attention of other communities. According to René Sibiola, RSM's radio-producer, RSM is willing to attend community activities, depending on the weather and the ability to move radio equipment and a small electric generator to communities (usually during the dry season); 2) the organization of activities through which the rural population can visit the radio station. The most common RSM activities prompting rural audiences to visit the radio station are occasional music festivals or handicrafts displays; 3) the involvement of cultural representatives in specific open-auditorium programs such as "The Saturday Show," or "San Miguel and the Children." These weekly programs are open to rural participation but have mainly urban involvement; 4) training sessions for popular reporters in which the rural workers have direct control over the elaboration of materials and the transmission of rural programs, e.g., "Peasant Magazine," and "The Voice of My Community." The training workshops of RSM,
although new, have already resulted in six rural workshops and three training visits to the station; 5) direct visits to the radio station or calling of the station by urban residents. According to Salas Takaná, although RSM's urban audience does not represent the target audience of the medium, RSM has realized in the last few years the importance of working with certain urban sectors. This is consequence of the radio's ability to be heard all day by the urban audiences of Riberalta, in contrast to its limited listenership in the rural areas. Salas Takaná explains that this incorporation of the urban audience should be seen as necessary because one of the radio's tasks is to sensitize the urban audience in the region to the peasant reality.

6. Public comment and criticism

The sixth category of the participatory communication model (Figure 11), and the third element within the category of dialogue, is related to the extent to which audience members comment or criticize radio programming.

Figure 11 shows that there is exercise of the audience right to comment and to criticize programming, by the following actors: local residents, informal leaders, local office-holders, and government personnel.

RSM exercises an open-door policy--explicit through its principles of democratic relations within and outside the medium--permitting almost anyone to request services or to
express opinions. There is agreement among RSM personnel that of the audience sectors most often sending comments, greetings, or suggestions for activities is the peasantry. The facilitator for the collection of these diverse opinions is RSM's field team, which carries the rural opinions to the radio or collects feedback about RSM activities. Critics from the peasant sector, on the other hand, generally come from rural merchants or intermediaries. These individuals criticize information about retail and market prices, which are reported daily on the program "Peasant Magazine."

Rural teachers are another group often criticizing RSM activities. According to RSM and EMEIR's field promoters, teachers feel threatened by the systems and concepts of education under which the promoters operate, and they are easily persuaded by local office holders to judge RSM's and EMEIR's activities ideologically dangerous. These teachers, however, often complain directly to government officials rather than to RSM.

A third group often critical of RSM is a mix of local office holders and government personnel. These individuals call radio-producers or make appointments in official offices to "have a talk." According to Félix Rada of RSM's news teams, they are reacting against the activities of RSM because they perceive them as threatening to the interests of the town or to the image of certain institutions
or individuals. Sometimes they refuse to provide information to RSM.

Although several methods have been described for comment and criticism of radio activities, RSM does not have programs in which the audience can publicly comment, analyze, or criticize the station's activities.

7. Means of keeping in touch among administrators, and producers within the medium

The seventh category of the participatory communication model (Figure 11), and the fourth within the category of dialogue, is related to the extent to which the radio station itself enhances participatory relations among those who are part of the medium's organizational structure.

Figure 11 shows that outside of station personnel no additional actors are involved in this process. Thus, only the "other" box is checked. This category within the community actors level represents RSM as an organization. It involves all the internal policies and activities of the station.

The internal structure of operations, according to Salas Takaná, reflects RSM's horizontal approach. One characteristic of this horizontal approach is the nonauthoritarian character of the station's decisions. For instance, the introduction of group techniques to improve internal relations—educative games and group dynamics—have been designed to create and environment conducive to
evaluation, analysis, and interaction among station personnel. Salas Takaná says that to begin dialogue with the peasant, similar relations need to be built within the medium.

There is agreement among RSM's administrative workers that their opinions are being considered in the implementation of certain changes in the medium. The work environment for many of them is familiar and positive. Some perceive, however, that radio workers tend to use the horizontalism and nonauthoritarian approach as a means of escaping responsibility.

According to René Sibiola, RSM producer, at the last semester evaluation of RSM in August, 1989, a proposal by radio workers to make programming more creative led to adopt a three-month period radio programming to permit more flexible production.

8. Involvement of the public in the production of programs and in obtaining professional help

The eighth element of the participatory communication model (Figure 11), and the first in the category of participation, is related to the effective involvement of the public in producing programs and in obtaining professional help.

Figure 11 shows that community actors who can effectively produce programs and receive professional assistance in doing so are the following: local residents,
informal leaders, and association heads.

The peasant workers producing programs and receiving assistance from RSM's producers are the voluntary "popular reporters." RSM has introduced a system of training for popular reporters, and it organizes workshops in several communities to support the preparation of these volunteers. The workshops have enabled many peasant collaborators to become producers of local radio materials in their communities and, in the second phase of training to receive a 15-day practical experience in the same radio station. These visitors also receive training sessions and are involved in the production of radio programs with a rural content.

Another group of community actors participating in the production of radio programs were informal leaders--members of The Institute of Rural Evangelization (Instituto de Pastoral Rural), which produces daily and bi-weekly programs such as "We are Young" (Somos Jóvenes), and "Messengers of Peace" (Mensajeros de la Paz), and "Young Peasants on the March" (Jóvenes Campesinos en Marcha). The production content of these programs is controlled completely by teams of collaborators and animators associated with the Vicariate. Technical advice and production is provided by RSM radio operators. Another community group producing RSM programs and receiving professional help are the association heads, whose daily programs include "Rural Teacher" (Magisterio
Rural), which is produced, with RSM's help, by representatives from the main regional organizations of rural teachers—(Magisterio Rural de Vaca Diez—Magisterio Rural de Pando).

Although it was verified that RSM supports production activities, assistance is limited.

9. Involvement in formulating plans and future programs

The ninth element of the participatory communication model (Figure 11), and the second in the category of participation, is related to the extent to which community actors are involved in formulating plans and future programs for RSM.

Figure 11 shows that the only community actor involved in the process of formulating plans and future programs is the medium itself—represented by the category "others."

Although RSM plans and radio programs are related to community objectives, local residents are not involved directly in their formulation. Because RSM operations have adopted semester evaluations in which all medium workers meet to discuss results and to propose plans for the following six-month operations, these internal processes result in a self-directed strategy. Audience participation in the formulation of RSM's activities plan occurs indirectly when RSM field teams are assigned to promote community activities. In such cases, rural residents take part in planning the
local activities to be accomplished in their community. At the end of the RSM team visit, strategies of community evaluation focus on the local context.

Final approval for RSM activity plans comes from its administrative owner—the Vicariate of Pando—which can suggest new directions or modify current activities.

10. Involvement in decision making, management, and media policy

The tenth category of the participatory communication model (Figure 11), and the third element in the category of participation, is related to the extent to which community actors participate in decision making, management, and design of medium policy.

Figure 11 shows that the only community actor involved in the processes of decision making, management, and design of medium policies is the medium itself—represented under the category "others."

The RSM divides its decision-making and management duties among four main branches: 1) administrative-direction (Vicariate, and the RSM director); 2) production team (press, CCP, programming, and radio producers); 3) field teams (peasant programming, coordination with popular organizations, radio materials, and field team promoters); and 4) technical team (print materials workshop, accounting, legal representatives, etc.).

Responsibilities within the medium are somewhat
decentralized. The main RSM units--the production and field teams--are independent to develop their daily activities.

According to Salas Takaná, RSM has moved forward towards its ideal--to make of the medium a "community-medium" (comunidad radial). This means focusing on the human side rather than the technical side of radio. The station tries to heighten the collective consciousness among its workers so that they do not need a director to generate ideas.

The horizontal administration of RSM seeks to increase the channels through which criticism, discussion, and voting tend to distribute decision making among the radio's workers. According to the RSM news team, it is a fact that every-day decisions are made by the news team itself. Sources and topics to include in its twice daily core news program--"The Voice of the North," which is broadcast at noon and at evening--are decided within this unit, according to events of which the teams keep track or consider important. This unit, however, notes that autonomous decision making does reduce contact with the RSM director.

The personnel least involved in the decision making process within RSM come from the technical team. This is so because these individuals function are considered as support to medium operations and are not involved in the communication processes itself. Carlos Uzquiano, chief of the RSM technical unit, says that his suggestions refer
mainly to radio mechanical issues—supplies, spare parts, etc. Some RSM administrative staff say that although they feel worker relations within RSM have improved, the absence of technical personnel from the station's evaluations is a weak point.

11. Contribution of funds or manpower

The eleventh element in the participatory communication model (Figure 11), and the fourth in the category of participation, represents audience involvement in the medium by way of contributing financially or through manpower.

Figure 11 shows that the two community actors donating some form of material support to the medium are local residents and others (i.e., medium itself). Because RSM economically sustains its operations by both the contributions of an external community actor and the local contributions of the Vicariate of Pando, it does not include another form of economical support. The RSM experience of popular reporters (reporteros populares), however, is a form by which community representatives voluntarily contribute to the medium. This manpower contribution from the radio's target audience resulted from a RSM initiative beginning in 1985 and structured as an alternative system for training peasant communicators.

Ricardo Guarena explains, "...the collaboration of the popular reporters is voluntary. We just request some kind of
certification that the popular reporter has been democratically elected by his/her community. It is considered important that the reporter be supported by his/her community, because in this way it is expected that the community can contribute materially in some form to the community reporter. RSM can afford just a small stipend for these representatives when they are training at the radio station."

Complementary forms of manpower support to RSM can also include the voluntary involvement of representatives from the Apostolic Vicariate--mainly members from the Institute of Rural Evangelization (Instituto de Pastoral Rural), who are in charge of producing religious programs in RSM.

12. Involvement in the evaluation of plans and results

The twelfth element in the model (Figure 11) of participatory communication, and the fifth in the category of participation, is related to the extent to which the medium's audience participates in the evaluation of plans and results.

Figure 11 indicates that the only community actor involved in RSM's evaluation of plans and results is radio station staff--represented by the category "others."

Although RSM encourages rural involvement in the evaluation of plans and activities developed in the communities visited by its field teams, it does not include target-audience members in the medium's semester evaluations.
13. Ensuring that the process of participation will continue

The thirteenth element in the participatory communication model (Figure 11), and the sixth in the category of participation, refers to the extent to which community actors become involved in ensuring the continuing activities of the station.

Figure 11 indicates that the only people from the community involved in ensuring the continuity of RSM's activities are those from the radio station--represented by the category "others."

According to RSM administrative personnel, continuity of operations is uncertain, both because of RSM's economic dependency on external contributors and because of the campesinación process. Because radio campesinación is a long-term process, immediate results from its activities and methodologies cannot be expected. This fact could result in a cutoff of support. It is true, however, that rural residents have shown an interest in becoming involved in RSM activities and have begun to take part in defining their local needs and tasks. These activities represent progress because peasant involvement possibilities were originally unknown.

Despite their lack of participation in the process, peasants interviewed support the station. Alfredo Rolín, rural resident in the community of Agua Dulce in the Madre de
Dios River, says "I hope that the radio workers will not tire of doing what they are doing. They need to try to move ahead, because through the radio we have came to know things that we did not understand before. The radio provides us information that we can analyze and we can apply in our peasant meetings. Radio needs to continue cooperating with us."

14. Sustaining the process by forming local organizations

The fourteenth element in the participatory communication model (Figure 11), and the seventh in the category of participation, is related to the extent to which community-level actors are involved in forming local organizations to sustain the station and the community process.

Figure 11 indicates that the only community actor who participates in forming local organizations sustaining RSM and the community process are the local residents.

Because one of RSM's objectives regarding the peasant audience is to enhance the organization of rural workers, the medium, in cooperation with EMEIR, has become involved in organization-building and direct support of several grassroots entities: 1) community economic groups. EMEIR has introduced an alternative system of local peasant cooperatives to commercialize natural products; 2) union peasants at the community level; 3) regional peasant union
organizations such as peasant federations in the department of Pando, and in the Vaca Diez province of Beni (Federación Sindical Unica de Trabajadores Campesinos de la Provincia Vaca Diez, and Federación Sindical Unica de Trabajadores Campesinos de Pando); 4) community mothers' clubs; 5) legal incorporation of new Amazonic communities or the enabling of proper recognition of tenure of land by rural workers; and 6) community music groups.

According to EMEIR field promoters, RSM and EMEIR have a regional record in the selection and training of peasant leaders who have later become regional and national peasant representatives.

According to Griselda de Iguanera, member of the Mothers' Club of Agua Dulce, a community on the Madre de Dios river, the formation of the mother's club resulted from suggestions of EMEIR's promoters. These promoters have also encouraged the building of "family orchards" (huertas familiares) to diversify the diet of rural families. Iguanera feels, however, that the activities of EMEIR and RSM are more oriented to male peasants because the meetings they organize generally are held at night, and women do not walk at night in the forest. Women are therefore excluded from important activities of these organizations.

The mother's clubs in the Amazonic region, according to some rural residents, also are used by other agents such as
evangelical missions to distribute food to the rural areas, thereby off-setting the process of self-reliance initiated by the non-formal education of organizations.

15. Documenting and making available the experience for other groups

The fifteenth element in the participatory communication model (Figure 11), and the eighth in the category of participation, is related to the extent to which the medium in itself--represented by the category "other"--implements actions to document and make available its experiences.

RSM's effort to document its experience is limited to internal reports not intended for external diffusion. Although RSM has among its objectives and strategies the production of print materials to support its field activities, this occurs only infrequently. The reduction in the production of print materials by RSM is associated with such factors as cost and lack of ink and paper. RSM is involved, however, in documenting recording audio materials, which are mainly interviews obtained by field team promoters and deal with topics such as indigenous histories and traditional medicine. This material is expected to be used as a basis for a new series of radio programs.

16. Acceptance of plans

The sixteenth element in the participatory communication model (Figure 11), and the last in the category of participation, is related to the extent to which the audience
accepts the medium's plans.

Figure 11 indicates that the community actors who accept and are satisfied with RSM's plans are local residents, informal leaders, association heads, local office-holders, and government personnel.

Although it can be argued that there are levels at which the target audience of RSM does not experience effective involvement in the medium's process of communication and education, these levels are considered by the medium as representing the rural target audience.

Despite the absence of direct community participation in the station's processes of the activity planning, evaluation, and management, RSM has achieved a high rate of acceptance. According to Ricardo Guarena, the main barriers to achieving the objectives of RSM are factors such as regional landowners who do not want the peasants to organize, local political heads and power holders who consider RSM a dangerous medium, and certain religious organizations who teach the peasant that organization is a sin. In spite of these constraints, RSM has experienced real acceptance by the rural areas, he concludes.

According to Salas Takaná, there are many things that RSM still needs to accomplish, but that the medium is gradually becoming accepted can be seen through the increasing peasant presence in the medium. "The peasant is
well received in the radio, and he can notice that the RSM microphone is an instrument to express his voice," Salas Takaná states. Therefore, peasants participate more frequently and also are willing to actively defend their medium, as has happened during the political dictatorial regimes, in which every community has sent its letter of support and solidarity."
CHAPTER VI. CONCLUSIONS AND RECOMMENDATIONS

The radio is something good, because in spite of our poverty, we still have the radio...and because I see the things that radio is doing for us, I could suggest something... Radio, do not forget us peasants, because we will never forget you...(Máxima Sánchez, community of Candelaria, January 20, 1990)

The general purpose of this study was to examine the nature and development of participatory approaches in the mass media. Our interest was concentrated in observing 1) the process of communication and education played by Radio San Miguel (RSM), which in cooperation with another community organization, the Mobile Teams of Rural Integral Education (EMEIR), developed a unique form of communication and education in the Bolivian Amazon through a series of radio-canoe visits; and 2) the application and development of participatory strategies in mass communication by considering the presence, involvement, and decision-making of various individuals in a communication system.

The setting for this observation is a real context in which socio-structural conditions and scarce availability of channels of information have made radio the most important, if not the only, mass communication means. In this region, radio has provided a transformative channel to tackle an existing communication system based on a negation of equal access, free dialogue, and constructive participation.
The findings discussed concerned two objectives of the study: 1) how the participatory approach in mass media came into existence and how it developed within its socio-political environment; and 2) what the characteristics of participatory communication in this radio system were.

Before drawing general conclusions about this case study, we note that it is impossible to expect results and interpretations from this exploratory study to be conclusive. Real-life events, the nature of the topic, and the methodological design of assessing an on-going phenomenon do not permit finality.

Because a main goal of this research was to increase understanding of a contemporary and still-evolving phenomenon, that goal will be accomplished if the study contributes to the generation of propositions about the nature and characteristics of participatory approaches in the field of mass media. The final aim of this research will be fulfilled if the findings can suggest new dimensions to guide future researchers interested in alternative approaches to communication. These alternative approaches, as suggested by Bertolt Brecht in the early days of radio, will put the people--the eternal listeners--in a position ahead of the producers--the almighty senders--or even ahead of the professional standards for radio production.
Radio has shown that it can appropriately promote social change. This power, together with the involvement of the people, suggests that there are still exciting dimensions of media use that have not been fully explored.

Conclusions about the Origin and Development of the Participatory Communication and Education Approach

It was predicted that a study of the radio's social actors/forces could lead to a description of the pattern of their involvement in the stages of development of RSM's participatory communication and education approach. In contrast, it was found that the nature of the participatory medium actions observed did not necessarily fit this pattern.

In fact, it was expected that the actors involved in the origin and development of the participatory communication and education approach would be easily classifiable by both a specific social-actor level--institutional, organizational, and community; and by their involvement in the stages of development of the participatory action--origin, organizing, planning, producing, and sustaining. According to the nature of the participatory experience implemented for RSM, however, factors such as time of an actor's appearance, overlapping of some actors in different levels, and conditions of contact and cohesive activity among certain levels rather than others
could not be described by the two-sided pattern matching--
"who" and "what"--but necessitated consideration of the "how"
dimension. This resulted in the first conclusion of the
study: that in spite of the utility of drawing up indexes to
measure participation in a medium, such as the social actors'
profile, the value of these constructions is limited.
Indexes measuring participation need to be flexible enough to
capture the life-cycle of the participatory action in a
community medium.

Second, in both community organizations--RSM and EMEIR--
the origin of participatory approaches in communication and
education did not emerge accidentally but resulted from an
association of social, economic, and political factors moving
concerned community actors to undertake actions not
necessarily defined by them as participatory.

The genesis of the rural communication and education
approach in the Bolivian Amazon was the efforts of an
informal community leader, Father Juan Moynighan. The rural
activities initiated by Moynighan were related to specific
contextual factors such as his personal motivation to improve
the peasant's socio-economic conditions, his decision to
initiate an alternative (nonformal) education project--EMEIR
--in 1973, which led to the original system of canoe-visits,
and the influence on his strategy of contemporary ideas of
critical-consciousness raising education for the poor, as expressed in the doctrinal documents of the Catholic church and in the humanist ideas of Paulo Freire. The EMEIR initiation was supported locally, mainly by a rural group of collaborators--EMEIR's founding team. The process used by EMEIR led to the discovery of the organization's own methodology and strategy of rural work. The maturity of EMEIR's promoters and the social base of the organization led to several opportunities such as those of self-direction in 1977 and the expansion of mass media experiences via the participatory communication and education approach, in radio, in 1986.

The coalition of EMEIR and RSM set the base for initiation of radio's transformation to a medium with concrete rural and regional priorities and for development of the participatory communication and education experience by using the canoe-communication system with RSM's mobile teams as the main channel of contact with the region's rural communities.

Third, although general pattern matching (Figure 1) shows low levels of community involvement in almost all the stages of development of the participatory communication and education approach of RSM, this absence could be accounted for in part by the fact that there is overlap between
organizational and community actors. The radio's organizational actors—the directors and communicators—although playing decision-making roles within the medium's organizational structure, also represent the trained group of rural informal community leaders who had been involved since their grassroots EMEIR experience.

The evidence supporting this conclusion includes the non-professional characteristics of these organizational actors, their nonhierarchical operations, their long term involvement in the region, and their humanistic training.

Fourth, the origin and development of participatory action within RSM can be described as an eminently grassroots, bottom-up experience because it not only utilized a rural-based strategy but also exhibited reduced external institutional involvement in defining its objectives, strategies, and the activity planning.

Institutional actors prefer to see RSM activities as autonomous except for economic support by donor agencies.

From the findings, it can be concluded that the network of RSM's social actors consists mainly of its own rural community staff and is not heavily influenced by its institutional networks—ERBOL, UNITAS—or by its institutional matrix—the Episcopal Commission of Education, or CEE. The policy of autonomy of members or associates
expressed by these institutional matrices leads us to conclude that the radio's activities, in spite of doctrinal support by institutional sponsors, incorporate a great deal of latitude in terms of a radio staff's deciding their own policies. Moreover, evidence supporting this conclusion indicates that participatory strategies tend to be more consistent pursuing their objectives and developing their strategies when their scope of operation is the group situation. This led us to conclude that participatory policies tend to build their dynamics and channels in a bottom-setting networking individuals or organizations with equal-status rather than coming from or going to up levels controlled by higher-status individuals.

Fifth, the coordination of activities among community organizations such as EMEIR and RSM to diversify, integrate, and provide continuity to the social objectives of assisting the rural population represents a viable alternative for overcoming barriers imposed by internal and external community forces.

RSM's approach, carried out by its field teams, has provided the medium with the opportunity to initiate rural activities and also to enhance activities initiated by similar community organizations, thus contributing to an overall sustainment of rural activities. The findings of
this study indicate that the strategy of creating community networks among organizations does build channels through which organizations can work together, thus guaranteeing the continuation of their activities and resulting in peasant empowerment.

The strategy of coordination, however, may risk distorting the involvement of local residents in the communication-education-organization activities. These risks are the possible use of the rural bases for political party influence; peasant reliance on community leaders' decisions; possible duplication of operations; and in spite of the attempt to provide continuity to the activities in the rural areas, the organizations still face limited resources, such as transportation, which restricts the frequency of rural visits and the monitoring of rural activities.

Sixth, previous rural radio communication strategies and instructional radio experiences have suggested the importance of radio in the transferring of information to rural audiences. The approach of RSM, in contrast to the transference-of-information approach, has demonstrated that radio content can rely on sources and information coming from the same rural setting. This suggests the value of future communication strategies based on both a close relationship between media communicators and their rural audience, and the
mutual exchange of cultural experiences and knowledge by communicators and audience.

The system of canoe-visits carried out by RSM's Field Teams emphasizes the following: 1) radio messages directed to the rural population can be reinforced by the visits of the radio promoters or can be complemented by print material in areas where the population is literate; 2) direct peasant contribution to rural information eliminates the medium's dependence on external sources of information. Rural events, indigenous music, and regional problems become central to the medium's information system; 3) the opportunity for radio workers to be in direct contact with rural people breaks the barriers imposed by distance and anonymous relationships between audience and communicators.

The rural communication strategy of RSM is not reduced to informative activities but develops the promoters' involvement in several rural daily-life activities. In turn, the promoters' understanding of the rural reality improves and peasant confidence in the medium rises. Sharing the daily peasant experiences, such as difficulties in transportation, difficulties of access to rural communities, and ill treatment by landowners and rural merchants, as well as observation of problems related to land and agricultural production or lack of services, becomes part of the
background experience that promoters are willing to use as radio program material.

Seventh, RSM's introduction of popular reporters—voluntary community members—and their involvement in the production of rural radio programs represents an effective strategy enhancing rural audience involvement in radio activities. These volunteer community members demonstrate that one does not need to be a professional to appear on radio. The involvement of the popular reporters in radio production also extends the scope of radio operations to local settings. The RSM participatory communication approach has used four main forms to make contact and to introduce the rural audience to media programming: direct visits by RSM field-team promoters to rural communities; popular reporters' contact with the station; direct visits of the peasantry to the radio station; and the coordinated production of programs between RSM and the community leaders.

Eighth, communities in which access is relatively easy because of peasant ownership of land participate in radio. Those peasants working for landlords, however, are often not able to listen to or be visited by mobile teams. This significantly impedes RSM's goal to increase peasant activity. Another factor limiting work with the peasant population is promoters' difficulty in physically contacting
remote communities in the region.

Ninth, the economic sustenance of RSM is dependent on international donors and support from the Apostolic Vicariate of Pando. Although RSM's rural project has been supported thus far by its donors and the bishops, there is a risk that they might not continue their support at some future time. It is expected that the process of consciousness-raising, in which the activities of RSM are emphasized, will in the long term produce local solutions to the station's dependency on donor funds.

Tenth, the socio-structural system—the local environment—of both RSM and EMEIR is a factor directly influencing the development of alternative forms of rural communication and education. Previous experiences in communication for rural development have emphasized the necessity of introducing certain changes in the form and content of messages so that the social conditions of the rural poor are considered. The experience of EMEIR and RSM shows that the communication and education processes developed in rural communities are based on the peasant's discovering the social and political forces influencing and interacting in the rural setting. This socio-structural analysis, as part of the process of communication and education, constitutes the EMEIR and RSM alternative
proposal. These findings lead to the conclusion that the rural processes of communication and education with rural development purposes cannot necessarily center their strategies on adapting messages for a particular audience. Rather, there needs to be a holistic consideration of the contextual forces in the rural setting. The benefits of peasant self-discovery and growth through involvement in the communication process must also be considered.

Eleventh, in Latin America, one of the most important actors concerned in the use of media promoting social changes in impoverished areas is the Catholic church. Mainstream experiences using radio for education have originated in Church-sponsored radio stations. Moreover, these experiences in most cases have been related to the presence of a significant leader--actor/catalyst--who lent the medium philosophy, strategies, and objectives.

Several cases of radio for education, however, have reported that the lack of such a transformative leader has hindered the medium process, resulted in a loss of medium objectives, and generally ended in the frustration for both audience and communicators.

According to the findings of RSM, although the radio transformation process began with the presence of transformative leadership in the person of Father Juan
Moynihan, the removal of the station's charismatic leader did not interrupt the process of education and communication initiated by him. There could be several reasons why the loss of the leader did not interfere with the project's activities. Three reasons are: 1) the nonauthoritarian, or nonhierarchical structure of operations; 2) confidence in the transformative capacities of rural people as promoters of their own education and communication; and 3) a holistic approach to the region's socio-political context.

Conclusions Related to the Characteristics of Participatory Communication in Radio

The participatory communication model used in this thesis could not include all the possible characteristics of participatory approaches to communication. This research, however, supported the theoretical viability of the three-sided model--access, dialogue, and participation--as key components of a systematic process of horizontal communication and as helpful element in structuring and analyzing participatory communication.

Although the three model elements--access, dialogue, and participation--were systematically studied, findings suggest that there is no one set of steps automatically leading to increases in participation. Characteristics of the actors
included in radio, characteristics of the target audience, variables related to forms of contact between radio and its audience, the decision of actors to be involved or not in the process, radio station policies, and socio-structural constraints can lead to several possible participatory outcomes.

First, several cases of participatory strategies concerning people's involvement have suggested that there is a connection between who engages in the decision making about the participatory project and its implementation, and the levels of the actors involvement. In the case of RSM, it was found that, despite the fact that the decision-making processes--management and media policy planning--are controlled by the station's directors and administrators (Figure 11), there are several means in which the audience is incorporated into local levels of the radio's decision making. For instance, community forms of participation such as meetings and discussions, voting, labor commitment in local activities, or integration of rural members into the informal information network of RSM--as popular reporters--are forms by which the medium's target audience takes part in local decision-making.

These forms of involvement lead to conclude that grassroots decision making can represent an effective way of
distributing the project's power because local actors have contextual experience to contribute to the analysis and problem-solving decision-making activities and thus add to the base of the communication and education process. Local planning, management, and evaluation of activities as outcomes and strategies of the communication and education process improve peasant self-reliance to develop coordinated or autonomous community assignments.

Moreover, the peasant's direct role in decision making of a rural medium may not always be an essential outcome of the participatory radio process. This is so because the people's consciousness-raising process, although initiated by participatory communication and education strategies, might have other priorities and avenues for the empowerment process.

Second, most studies referring to communication efforts for development have suggested that attention needs to be devoted to ensuring feedback, which is the possibility of receiving information from the recipients of messages as a means of measuring the efficacy of plans and strategies and of proceeding toward formulation or correction.

On the other hand, according to the critical tradition of communication, feedback is characterized as a positive key feature of dialogue when it operates in a balanced and
multidirectional way and allows each and every person involved in communication sends and receives it, in comparable proportions (Beltrán, 1980:34).

As a case of the participatory approach to communication, RSM shows that dialogue as a feature of interactive feedback has been implemented in a multidirectional approach mainly channeling interactions between media communicators and community actors, and interactive opportunities within the organization itself.

The finding of this research indicate that the conditions of medium interaction (within and outside), because of the horizontal philosophy of the medium (its nonauthoritarian character), have led to the adoption of channels by which dialogue opportunities (equality among actors) improve relations between the radio and its target audience, and also among the medium workers.

Strategies used to increase dialogue—human-centered relations, nonauthoritarian decisions, intense personal involvement, and use of group communication channels such as group games, group analysis, and group enjoyment leads us to conclude that all these communication forms can enhance contact and can be made instruments of community radio favoring the tasks of participatory research, evaluation, and decision making.
Third, the extent to which people participate will largely depend on the commitment of radio station personnel, the perception of the real context in which their actions operate, the strategies that they use to increase contact with local residents, and—most importantly—their political or ideological beliefs about the importance of participation expressed by their respond to the people's awareness raising process. Moreover, real participation can be limited or distorted by a government that is not truly committed to a sharing of power. The consequences of these factors indicated may result in the people's discontent.

In conclusion, radio can be used to increase people's participation and overcome the static or top-down roles that this medium can play in society. Socio-structural conditions of the so-called developing countries might be favorable settings to introduce creative ways to use the media according to other priorities such as the change of structures based in reduced access, nondialogue, and non-equal conditions of participation, in this sense developing societies might have the opportunity to lead a re-humanization of media. The fact that media participation faces many limitations, one of them being severe uncertainty, leads us to conclude that conditions for participation need to be created rather than recommended by blue-print
designers. Participation is intrinsically related with people's organization which is the guarantee not only to create the grassroots ground to a bottom-up development, but also to avoid intrusive and paternalistic development programs targeted in the rural population. The communication role within this process is determinant to create the climate of dialogue to join all the social actors toward similar transformative objectives--the creation of societies based on access, dialogue and participation.

Recommendations

The analysis presented in this thesis is preliminary in nature. Additional research about several complementary dimensions related to the RSM experience, as well as that related to and some related to participatory approaches in radio, are recommended. For instance, research is recommended to approach the rural versus urban impacts of RSM's participatory action; additional audience sectors such as indigenous Amazonic tribes and peasant psychological attitudes toward the radio message should be considered. Also, more study of rural radio production systems, including dimensions such as studio techniques, message content, and use of radio formats within a participatory framework could provide additional meaningful information.
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To my parents and my friend--Karen, Beyen-Lu--for their valuable lesson of communication--"human communication can be built through permanent faith and confidence in spite of distance or apparent differences;" and

To the peasants of the Bolivian Amazon, people who does not appear in books, or is not object of cathedra or academical seminars, however is people able to teach us more than we expect about we consider our field of experience. Thank you.
APPENDIX A. BOLIVIA RADIO BROADCASTING SYSTEM
Total Number of Bolivian Radio Stations Registered in the General Directorate of Telecommunications Until July, 1986. Distribution of Radio Stations by Bolivia’s Nine Departments

<table>
<thead>
<tr>
<th>Department</th>
<th>Cities</th>
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<tbody>
<tr>
<td>Chuquisaca</td>
<td>Ciudad Capital, La Plata, Loyola, Nuevo Mundo</td>
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<td></td>
<td>Resto del Departamento</td>
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<tr>
<td></td>
<td>Camargo (Camargo), Charcas (Montagnado), Padilla (Padilla), Libertad (Entre Rios)</td>
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<td>SANTA CRUZ</td>
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<td>Ciudad Capital</td>
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<td></td>
<td>Grigotá, Centenario, Amboró, Santa Cruz, Oriental, First, La Luz, Willy Berdeek, El Espectador, Marina, Mundial</td>
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<td>Resto del Departamento</td>
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<td></td>
<td>Juan XXIII (San Ignacio), Sararencía (Camiri), Oriente (Camiri), Yaguari (Vallegrande), Norte (Montero), Mensaje (Montero), Agricultura (Porachuelo), La Voz de la Frontera (Puerto Suárez), Chané (Mineros), Tamengo (Quijarro), Florida (Zamapata), Comarapa (Comarapa), Mairana (Mairana), Robore (Robore), Maria Auxiliadora (Montero), San José (San José de Chiquitos), Ichilo (Villa Germán Busch), Voz del Campo (Villa Germán Busch)</td>
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<td>Santo Tomás, Misiones, Oriente (Umica), Yaguari (Vallegrande), Naye (Montero), Mensaje (Montero), San Franciso (Santo), Ichilo (Villa Germán Busch), Voz del Campo (Villa Germán Busch)</td>
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<td>Independencia (Quillacollo), La Voz del Valle (Punata), Nuestro Señor de Burgos (Mizque)</td>
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<td>Resto del Departamento</td>
</tr>
<tr>
<td></td>
<td>Resto del Departamento</td>
</tr>
</tbody>
</table>

Source: Revista Boliviana de Comunicación 9

(*) No se pudo corrobora su ubicación exacta.
El Mundo (Socabaya)
Continental (Punata)
Armonía (Cihuata)
18 de Mayo (Capiñota)
24 de Noviembre (Arani)
San Miguel (Arani)
Libertad (Cigua)
Mejillones (Tarata)
Esperanza (Aiquile)
Sipe Sipe (Sipe Sipe)
IV Centenario *
Mineria (Capiñota)
Urkupilla (Quillacollo)
Tirapí (Tirapí)
Voz del Trópico (Villa Tunari)

POTOSÍ
- Ciudad Capital
Indias, Andes, Electra
Kollasuyo
Sumac Orco
Espectador
- Resto del Departamento
Villacota (Villacota)
Libertad (Villacota)
Juan XXIII (Lumín)
IV Centenario (Tupiza)
Litoral (Línea)
La Voz del Ferrocarril *
Nuevos Horizontes (Tupiza)
FÍo XII (Siglo XX)
Animas (Chocaya)
Lullaqa (Lulaqa)
Cumbre, La Voz del Sismito
(Tarma)
Chuchas (Siete Suyos)
La Voz Minera del Sud
(Telamayu)
La Voz del Minero (Siglo XX)
Voz del Pueblo (Lucía)
21 de Diciembre (Catalí)
Centinela (Tupiza)

ORURO
- Ciudad Capital
Bolivia
Oruro
Altos Andes
- Resto del Departamento
Basilión Topázar
América
El Condor

- Resto del Departamento
San José (San José)
Nacional de Huayna (Huayna)
Sajama *
Universo *
“Bahía” *
16 de Marzo (Poopo)

TARIJA
- Ciudad Capital
Los Andes
La Voz Nacional
- Resto del Departamento
Bermejo (Bermejo)
Chaco (Yacuiba)
Frontera (Yacuiba)
Tarija (San Lorenzo)
17 de Diciembre (Vilamontes)
Camargo (Camargo)

BENI
- Ciudad Capital
Trinidad
Beni
Ibare
Trópico
El Dorado
- Resto del Departamento
Santa Ana
(Santa Ana de Yacuma)
2 de Febrero (Rurrenabaque)
Ballivián (San Borja)
San Miguel (Riberalta)
Riberalta (Riberalta)
Avaroa (Riberalta)
Machupí (San Ramón)
Movima (Santa Ana de Yacuma)
Mamoni (Guayaramerín)
Pantí (Guayaramerín)
Moxos (San Borja)
Libertad (San Borja)
Reyes (Reyes)
Santa Rosa (Santa Rosa)
Galaxia (Guayaramerín)

PANDO
- Ciudad Capital
Frontera
Cobija
- Resto del Departamento

TOTAL
- Ciudades Capital 143
- Resto del Departamento 64
- Resto del Departamento 98
APPENDIX B. ERBOL BOLIVIA NETWORK
<table>
<thead>
<tr>
<th>NOMBRE AFILIADA</th>
<th>DEPENDENCIA</th>
<th>FECHA DE FUNDACION</th>
<th>LONGITUD DE ONDA</th>
<th>BANDA</th>
<th>FRECUENCIA</th>
<th>POTENCIA</th>
<th>POBLACION META</th>
<th>POBLACION EN AREA DE COBERTURA</th>
<th>AUDICENCIA ABIERTA</th>
<th>UBICACION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACLO</td>
<td>Compania de Jesus</td>
<td>25 de agosto de 1969</td>
<td>O Moda</td>
<td>48 m</td>
<td>665 kHz</td>
<td>10 kW</td>
<td>Campesinos</td>
<td>944 500 h</td>
<td>450 000 h</td>
<td>Las sedes de Santa Teresa y Santa Clara en los valles</td>
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<tr>
<td>CEAMCO</td>
<td>Obispado de Potosi</td>
<td>15 de mayo de 1970</td>
<td>O Moda</td>
<td>48 m</td>
<td>840 kHz</td>
<td>10 kW</td>
<td>Anda guacho, campesinos, vecinos y minería</td>
<td>168 400 h</td>
<td>29 000 h</td>
<td>Potosi Altiplano</td>
</tr>
<tr>
<td>FEDC, Asociaciones Potosina</td>
<td>Compania de Jesus</td>
<td>1964</td>
<td>O Moda</td>
<td>50 m</td>
<td>970 kHz</td>
<td>10 kW</td>
<td>Bambas campesinos de La Paz</td>
<td>952 000 h</td>
<td>310 000 h</td>
<td>La Paz</td>
</tr>
<tr>
<td>TBI-REPA</td>
<td>Compania de Jesus</td>
<td>25 de octubre de 1970</td>
<td>O Moda</td>
<td>48 m</td>
<td>8135 kHz</td>
<td>10 kW</td>
<td>Jesus, vecinos y campesinos de Santa Cruz</td>
<td>190 000 h</td>
<td>350 000 h</td>
<td>Santa Cruz de la Sierra</td>
</tr>
<tr>
<td>P.D. F.</td>
<td>Obispado de Potosi</td>
<td>25 de enero de 1970</td>
<td>O Moda</td>
<td>48 m</td>
<td>940 kHz</td>
<td>10 kW</td>
<td>Enseñar y enseñar y escuchar</td>
<td>113 000 h</td>
<td>60 000 h</td>
<td>San Ignacio de Yacuma, Tarija y Chuquisaca</td>
</tr>
<tr>
<td>ANAN XIXI</td>
<td>Parroquia de Chiñicas</td>
<td>25 de octubre de 1971</td>
<td>O Moda</td>
<td>60 m</td>
<td>1 983 kHz</td>
<td>10 kW</td>
<td>Campesinos</td>
<td>108 000 h</td>
<td>64 000 h</td>
<td>Potosí, Cusquisas, Yacuma, Chuquisaca</td>
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<tr>
<td>ESPECIALIZADA</td>
<td>Parroquia de Ayacucho</td>
<td>21 de octubre de 1970</td>
<td>O Moda</td>
<td>60 m</td>
<td>920 kHz</td>
<td>10 kW</td>
<td>Campesinos</td>
<td>108 000 h</td>
<td>64 000 h</td>
<td>Potosí, Cusquisas, Yacuma, Chuquisaca</td>
</tr>
<tr>
<td>M.O. de</td>
<td>Congregación de Obreras</td>
<td>1 de mayo de 1955</td>
<td>O Moda</td>
<td>45 m</td>
<td>1 552 kHz</td>
<td>10 kW</td>
<td>Personas</td>
<td>214 000 h</td>
<td>120 000 h</td>
<td>Santa Cruz de la Sierra</td>
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<tr>
<td>San GABRIEL</td>
<td>Arzobispo de La Paz</td>
<td>15 de marzo de 1971</td>
<td>O Moda</td>
<td>49 m</td>
<td>619 kHz</td>
<td>10 kW</td>
<td>Campesinos, mineros del altiplano</td>
<td>157 000 h</td>
<td>108 000 h</td>
<td>La Paz Altiplano</td>
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<td>PNP-REPA</td>
<td>Parroquia de Cuchambamba</td>
<td>9 de enero de 1992</td>
<td>O Moda</td>
<td>49 m</td>
<td>1 310 kHz</td>
<td>10 kW</td>
<td>Mineros agrícolas y campesinos</td>
<td>994 000 h</td>
<td>354 000 h</td>
<td>Cuchambamba, Yacuma, Chuquisaca</td>
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<tr>
<td>Jose IAUDON</td>
<td>Parroquia de San Juan</td>
<td>12 de febrero de 1971</td>
<td>O Moda</td>
<td>49 m</td>
<td>1 701 kHz</td>
<td>10 kW</td>
<td>Personas</td>
<td>224 000 h</td>
<td>125 000 h</td>
<td>Santa Cruz de la Sierra</td>
</tr>
<tr>
<td>Santa CLARA</td>
<td>Parroquia de San Juan</td>
<td>12 de febrero de 1971</td>
<td>O Moda</td>
<td>49 m</td>
<td>1 701 kHz</td>
<td>10 kW</td>
<td>Personas</td>
<td>224 000 h</td>
<td>125 000 h</td>
<td>Santa Cruz de la Sierra</td>
</tr>
<tr>
<td>PEDRO ARAGO</td>
<td>Parroquia de San Juan</td>
<td>16 de julio de 1972</td>
<td>O Moda</td>
<td>49 m</td>
<td>1 701 kHz</td>
<td>10 kW</td>
<td>Personas</td>
<td>95 000 h</td>
<td>50 000 h</td>
<td>Santa Cruz de la Sierra</td>
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<tr>
<td>Roderico Yacuna</td>
<td>Parroquia de San Juan</td>
<td>25 de octubre de 1970</td>
<td>O Moda</td>
<td>49 m</td>
<td>1 310 kHz</td>
<td>10 kW</td>
<td>Mineros agrícolas y campesinos</td>
<td>75 000 h</td>
<td>45 000 h</td>
<td>La Paz</td>
</tr>
</tbody>
</table>

TOTAL | 5 415 400 h | 2 269 300 h |

APPENDIX C. MAP OF BOLIVIA AMAZON
THE BOLIVIAN AMAZON

Surface: 129,000 Km²
Population: 116,000 Inhabitants
Rural Residents: 65,000 Inhabitants (56%)
Urban Residents: 51,000 Inhabitants (44%)
Density: 0.9 Inhabitants per Km².
APPENDIX D. MAP OF APOSTOLIC VICARIATE OF PANDO DESCRIBING RSM AND EMEIR OPERATION AREAS
RSH and EMEIR's River Communication and Education System
Community Network for RSH and EMEIR's Field Promoters Visit.
The Apostolic Vicariate of Pando has 7,800 Km of Navigable Rivers.
APPENDIX E. ORGANIZATIONAL STRUCTURE OF RSM
Source: Radio San Miguel's 1990 Project
APPENDIX F. CURRENT RADIO PROGRAMMING OF RSM
RADIO "SAN MIGUEL" C.P. 114
Riberalta - BENI - Bolivia

PROGRAMACION DE LUNES A VIERES

05:00 - 05:10  Apertura de emisión y oración
05:10 - 05:30  Buenos días Bolivia (MÚSICA REGIONAL Y NACIONAL)
05:30 - 06:45  Revista Composio (Salud popular, Reporteros, MTS
               cro-deportivo, precios de productos y artículos)
06:45 - 07:15  Amanecer rural (Lunes, Miércoles y viernes) Minutos
               de reflexión (Martes y jueves)
07:15 - 07:30  El Informe (NOTICIERO)
07:30 - 08:00  Al compás de la hora (ANIMACION AL TRABAJO)
08:00 - 08:30  Sonos Jóvenes (LUNES, MIÉRCOLES Y VIERNES) Imágs
               Nes (MIÉRCOLES Y JUEVES)
08:30 - 09:30  Diálogo sin fronteras
09:30 - 10:00  Un tal Jesús (SERIES)
10:00 - 10:30  Revista San Miguel
12:00 - 12:05  Oración
12:05 - 12:30  Noroeste deportivo
12:30 - 13:00  La voz del norte (INFORMATIVO)
13:00 - 14:00  Sobre mesa cordial, avisos y comunicados, gíngles,
               y cierre de emisión. (MULTIS REPRIS "PRISMA POLITI
               C")

TARDE

16:00 - 16:10  Apertura de emisión
16:10 - 16:30  Avisos y comunicados, gíngles, cuñas y música
16:30 - 17:30  Diálogo sin fronteras
17:30 - 18:00  La mujer en la comunidad
18:00 - 18:30  Mensajes comunitarios
19:00 - 19:30  Jóvenes profetas (LUNES) Mensajeros de La Paz
               - (MIÉRCOLES Y JUEVES) Jóvenes campesinos en marcha
               - (MIÉRCOLES Y SABADO) Magisterio Rural Vaca Díez.
               (VIERNES)
19:30 - 20:00  La voz de mi comunidad
20:00 - 20:30  La voz del norte (INFORMATIVO)
20:30 - 21:00  Síndicato
21:00 - 21:30  Cuentos populares
21:30 - 23:00  Música de comunidades, cantores locales, gíngles,
               avisos y comunicados y cierre de emisiones.

Riberalta, 23 de noviembre de 1.989
RADIO "SAN MIGUEL" C.P. 114
Riberalta - BENI - Bolivia

PROGRAMACION DEL DIA SABADO

06:00 - 06:10 Apertura, oración y sintónía
06:10 - 06:30 Buenos días bolivianos (MÚSICA REGIONAL Y NACIONAL)
06:30 - 07:00 La tierra es nuestra
07:00 - 07:10 El campesino cooperativista
07:10 - 08:00 Al comienzo de la hora
08:00 - 08:10 Música mexicana
08:10 - 09:30 Sábado especial
09:10 - 10:00 Avisos, comunicados, gíngles, cuñas, glosas y música
10:00 - 12:00 San Miguel y los niños
12:00 - 12:05 Oración
12:05 - 12:30 Tercer mundo
12:30 - 13:00 Da voz del norte (INFORMATIVO)
13:00 - 14:00 Sobre mesa cordial, avisos y comunicados, cierre de emisiones.

T A B E

16:00 - 16:10 Apertura de emisión
16:10 - 16:30 Música latinoamericana
16:30 - 17:00 Avisos y comunicados, gíngles, música de banda.
17:00 - 18:00 Revista deportiva
18:00 - 19:00 Mensajes comunitarios
19:00 - 19:30 Jóvenes campesinos en marcha
19:30 - 20:00 Abriendo caminos
20:00 - 20:30 La voz del norte (INFORMATIVO, RESUMEN Y ACTUALIDAD)
20:30 - 21:00 Show de los sábados y cierre de emisiones.

Riberalta, 23 de noviembre de 1989

**********************
FORMAR E INFORMAR ES NUESTRA META
Teléfono 545 - Casilla 102 - c. Rafael Peña 58
RADIO "SAN MIGUEL" C.P. 114
Riberalta — BENI — Bolivia

PROGRAMACION DEL DÍA DOMINGO

06:00 — 06:10  Apertura — oración y sintonía
06:10 — 06:30  Buenos días Bolivia y música religiosa
06:30 — 07:30  Transmisión de la Sta. Misa
07:30 — 08:00  Educación popular
08:00 — 08:30  Música mexicana
08:30 — 09:00  Variedades
09:00 — 09:30  Universidad (C.I.P.)
09:30 — 12:00  Enfoques juveniles
12:00 — 12:05  Oración
12:05 — 13:00  Prisma Político
13:00 — 14:00  Sobre mesa curial, avisos y comunicados, cierre de emisión.

T A R D E

16:00 — 16:10  Apertura de emisión
16:10 — 16:30  Música latinoamericana
16:30 — 17:00  Avisos y comunicados, gingles, música de banda
17:00 — 18:00  Mensajes comunitarios
19:00 — 19:30  Música instrumental y religiosa
19:30 — 20:30  Transmisión de la santa misa.
20:30 — 21:00  Buenas nuevas (DOS DOMINGOS-MEDIO Y FINAL DE MES)

Riberalta, 23 de noviembre de 1.939

***************
FORMAR E INFORMAR ES NUESTRA META
Telef. 545 — Casilla 102 — c. Rafael Peña 58
APPENDIX G. EXAMPLES OF POPULAR PRINT MATERIALS PRODUCED BY
RSM AND EMEIR'S WORKSHOP
En las regiones del norte boliviano, desde luego pocas personas con poder económico, fácilmente se apropiaron de comunidades campesinas con sus tierras. Mediante el sistema del "habilito" hacen trabajar a los campesinos esas tierras por algún tiempo, luego les abandona por otro tiempo; después vuelven, atribuyéndose deudos, para explotarles e vender deliberadamente esas tierras, sin ninguna clase de indemnización a los campesinos. Esas familias campesinas pertenecen de 3 a 4 generaciones. Han tenido suyo y orientación alguna para organizarse, defenderse y legalizar sus tierras y trabajo.

La tierra es nuestra, mientras vivamos la defenderemos...!
APPENDIX H. FIELD OBSERVATION
1. Personal Interviews

a. Institutional Level:

(1) Institutional Network

(a) RSM:

ERBOL (Bolivian Radiophonic Education)
Informant: Mr. José Luis Aliaga P.
(Head in charge of ERBOL's Training and Projects Unit)
Place: La Paz, Executive Secretary of ERBOL.
Date: February 5, 1990.
Informant: Mr. Eduardo Nogales (ERBOL's evaluator)
Place: La Paz, Executive Secretary of ERBOL.
Date: January 2, 1990.

(b) RSM and EMEIR:
UNITAS (National Union of Institutions for Popular Action Working
Informant: Mr. Diego Cuadros (UNITAS's documentalist and researcher)
Place: La Paz, UNITAS's headquarters.
Date: February 4, 1990.

(2) Institutional Matrix

(a) RSM and EMEIR:
CEB (Bolivian Episcopal Conference)
Informant: Mr. Eduardo Gonzales Saa
(National Secretary of the Episcopal Commission of Education, CEE)
Place: La Paz, Bolivian Episcopal Conference.
Date: January 2, 1990.
Informant: Father. Hugo Arah (Secretary of the Episcopal Commission of Communication Means)
Place: La Paz, Bolivian Episcopal Conference.
Date: January 2, 1990 and February 5, 1990.
(3) Institutional Donor Agencies

(a) RSM:
MISEREOR (Center for Development Help, West Germany)
This agency does not have local representative office in Bolivia.

(b) EMEIR:
CEBEMO (Catholic Organization for Co-financing Development Programs, The Netherlands)
This agency does not have local representative office in Bolivia.

OXFAM (Oxford Committee for Famine Relief, U.K.)
Informant: Mr. Juan Vargas (Bolivian OXFAM, U.K. representative)
Place: La Paz, Mr. Vargas' office.
Date: February 5, 1990

SNV (The Netherlands Service of Technical and Social Cooperation)
Informant: Ms. Kathia Ferrufino (Regional Representative of SNV)
Place: SNV's office, La Paz.
Date: February 3, 1990

(4) Organizational Level:

(a) RSM (Radio San Miguel)
Informant: Bishop. Luis Morgan Casey (Head of the Apostolic Vicariate of Pando)
Place: Vicariate of Pando, Riberalta, Beni.
Date: January 24, 1990.
Informant: Mr. Héctor Salas Takaná (Director of RSM)
Place: Radio San Miguel, Riberalta, Beni.
Date: January 25, 1990.
Informant: Mr. Ricardo Guarena Mamío (Head in charge of the RSM's Field Teams)
Place: Radio San Miguel, Riberalta, Beni.
Date: January 25, 1990.
Informant: Miss. Gloria Suárez Cordero,
(Secretary of RSM)
Place: Radio San Miguel, Riberalta, Beni.
Date: January 8, 1990.
Informant: Mr. Félix Rada Quetehuary (RSM's press team member)
Place: Radio San Miguel, Riberalta, Beni.
Date: January 8, 1990.
Informant: Mr. Carlos Uzquiano Otta,
(technician of RSM)
Place: Radio San Miguel, Riberalta, Beni.
Date: January 8, 1990.
Informant: Mr. Irineo Vaca Nishida (RSM's Field Team member)
Place: Radio San Miguel, Riberalta, Beni.
Date: January 24, 1990.
Informant: Mr. José Barbas Palomeque (RSM's Field Team member)
Place: Radio San Miguel, Riberalta, Beni.
Date: January 24, 1990.
Informant: Mr. René Sibiola Chao (RSM's radio-producer)
Place: Radio San Miguel, Riberalta, Beni.
Date: January 5, 1990

(b) EMEIR (Mobile Teams of Rural Integral Education)
Informant: Mr. Edgar Paz Lobo (Co-Director of EMEIR)
Place: Group interview in EMEIR's headquarters, Riberalta, Beni.
Date: January 5, 8, 1990.
Informant: Mr. Rodolfo Loras Tiburcio (Co-Director of EMEIR)
Place: Group interview in EMEIR's office, Riberalta, Beni.
Date: January 5, 8, 1990.
Informant: Mr. Leopoldo Vaca Nishida (Co-Director of EMEIR)
Place: Group interview in EMEIR's office.
Date: January 5, 8, 1990.
Informant: Mr. Héctor Salas Takaná (RSM's Director, EMEIR's founder)
Place: Group interview in EMEIR's office.
Date: January 5, 8, 1990.
Informant: Mr. Jorge Martínez (Head in charge of EMEIR's educative material production unit)
Place: EMEIR's office.
Date: January 27, 1990.
Informant: Mr. Carmelo Lenz Soleto (EMEIR's field team member--team rivers)
Place: Community San Lorenzo de Pampas, EMEIR's experimental farm.
Date: January 12, 1990.
Informant: Mr. Osman Aguilera (Co-director of EMEIR's experimental farm)
Place: Community San Lorenzo de Pampas, EMEIR's experimental farm.
Date: January 12, 1990.
Informant: Miss. Christine Verheijden (agro-forester EMEIR's international cooperator from the SNV)
Place: EMEIR's office, Riberalta, Beni.
Date: January 13, 1990.

(5) Community Level (RSM's rural audience)

Place: Central Warnes
Informant: Ms. Edith Canamari (rural nurse)
Informant: Mr. Leónidas Canamari (peasant responsible of the Warnes' Economic Group)
Informant: Ms. Elena de Puro (peasant)
Informant: Ms. Luciano Puro Cartagena (peasant)

Place: San Lorenzo de Pampas (EMEIR's Experimental Farm)
Visit: January 11-12, 1990.
Informant: Ms. Gladys Ramírez (peasant)
Informant: Mr. Angel Ordoñez (peasant)

Places: Communities Agua Dulce and Candelaria in the river Madre de Dios
Visit: January 16-23, 1990
Informant: Ms. Manuel Melgar Flores (peasant, community Agua Dulce)
Informant: Ms. Griselda Montenegro de Quete (peasant, community Agua Dulce)
Informant: Ms. Griselda de Iguanera (peasant, community Agua Dulce)
Informant: Mr. Nemesio Rolín Iguanera (peasant, community Agua Dulce)
Informant: Ms. Blanca Rolín Iguanera (peasant, community Agua Dulce)
Informant: Ms. Leonarda Landívar (peasant, community Agua Dulce)
Informant: Ms. Yoela Ayhuana de Mayta (peasant, community Agua Dulce)
Informant: Ms. Daniel Aguilar (peasant, community Agua Dulce)
Informant: Mr. Alfredo Rolín (peasant, community Agua Dulce)
Informant: Ms. Mirsa Sáenz de Malale (peasant, community Candelaria)
Informant: Ms. Máxima Sánchez (peasant, community Candelaria)
Informant: Ms. Victoria Irarica (peasant, community Candelaria)
Informant: Ms. Nieves Cartagena (peasant, community Candelaria)
Informant: Mr. José Irarica (peasant, community Candelaria)
Informant: Mr. Ricardo Tibi (peasant, community Candelaria)
Informant: Mr. Renato Malale (peasant, community Candelaria)
Informant: Ms. Cármen Sánchez (rural teacher, community Candelaria)
Informant: Mr. Carlos Ocoré (peasant, community Candelaria)

(6) Complementary Community Informants

Informant: Mr. Vicente Driest (economist, international cooperator to the Agricultural Cooperative "Peasant" Lda, from SNV)

Place: Agricultural Cooperative "peasant" Lda, Riberalta, Beni.
Date: January 14, 1990.
Informant: Father. Lorenzo Dugas (Priest of Cobija, Pando, Former Pro-Vicario of Pando)
Place: Vicariate of Pando, Riberalta, Beni.
Date: January 27, 1990.
Informant: Brother. Casimiro Brezinsky, technician founder of RSM
Place: Vicariate of Pando, Riberalta, Beni.
Date: January 26, 1990.
Informant: Father. Guillermo Coy (Priest of Riberalta)
Place: Vicariate of Pando, Riberalta, Beni.
Date: January 26, 1990.
Informant: Ms. Magdalena Sandoval de Gonzáles (School’s Director, and teacher in Riberalta, Beni)
Place: La Paz, Fe y Alegria’s office.
Date: February 2, 1990.