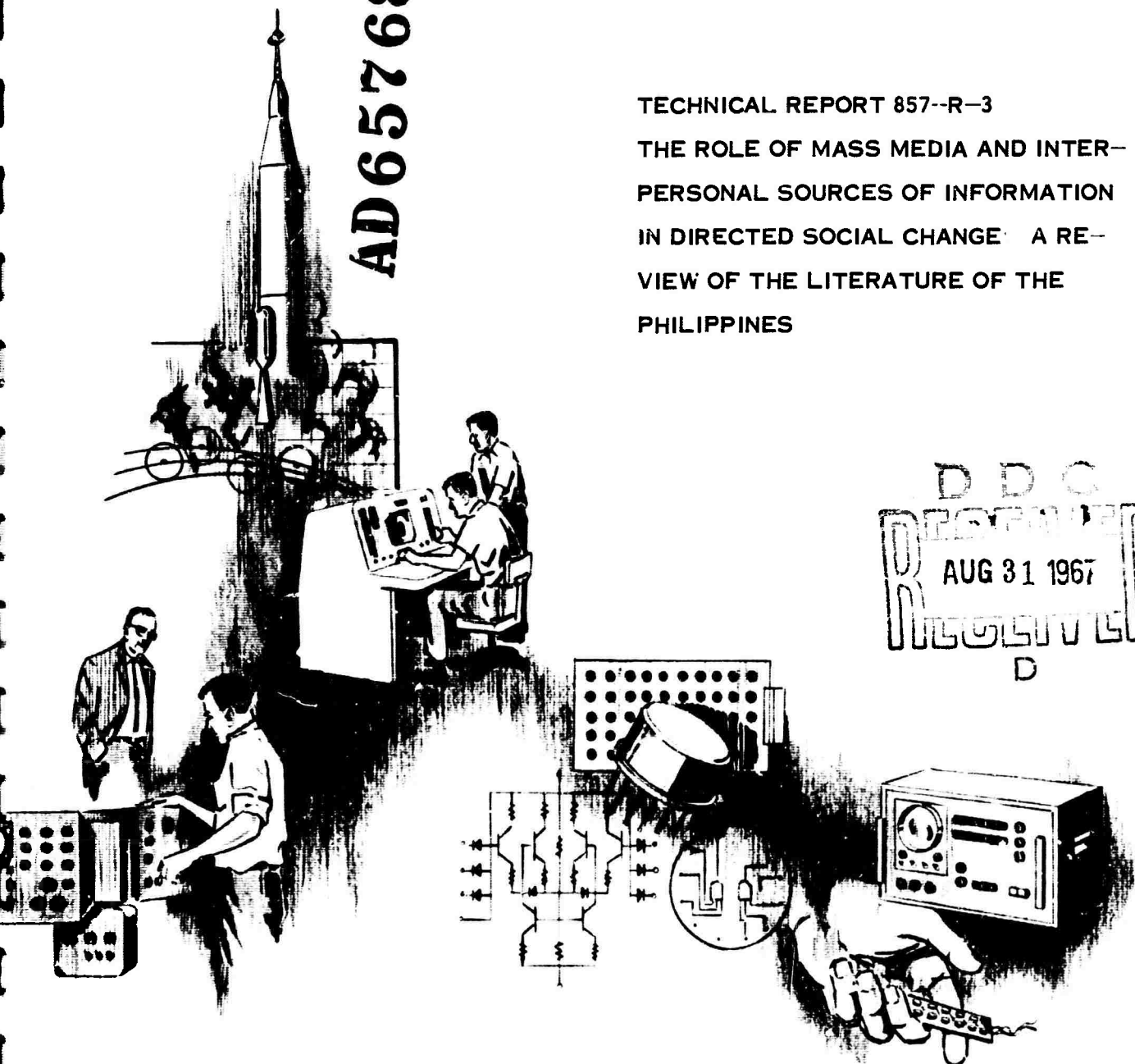


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TECHNICAL REPORT 857--R-3
THE ROLE OF MASS MEDIA AND INTER-
PERSONAL SOURCES OF INFORMATION
IN DIRECTED SOCIAL CHANGE: A RE-
VIEW OF THE LITERATURE OF THE
PHILIPPINES

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THE ROLE OF MASS MEDIA AND INTER-
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IN DIRECTED SOCIAL CHANGE: A RE-
VIEW OF THE LITERATURE ON THE
PHILIPPINES

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EXECUTIVE SUMMARY

This paper is concerned with the topic of directed social change in developing countries. For example, assume that a government wishes to raise agricultural production by having farmers adopt a new practice. In such a case it is necessary to know a great deal about factors affecting the probability that the practice will be adopted. One relevant question is, who are the innovators--persons most likely to first try (and later adopt) a new practice? Another is how does one go about getting the necessary information to the target audience? To answer this second question, it is good to know something about existing *communications channels* and to identify individuals who exert *opinion leadership* i.e., they can change the opinions of the target audience. Finally, it would be useful to know the extent to which mass media can be exploited to help spread the new practice or, to phrase the matter in sociological jargon, to "*diffuse the innovation.*"

Reports summarized in the paper deal with the topics discussed above. All represent recent work performed in the Philippines. Most of them appeared in limited circulation documents, being either mimeographed or published locally in the Philippines. For that reason, they are not likely to be accessible to most United States Social Scientists interested in such research. Practically all studies were concerned with rural residents residing in *barrios*, which are small hamlets dotting the rural countryside. Scant attention has been paid to residents of the growing population centers, people who are experiencing the transition from a rural, traditional mode of life to an urban, more modern style of living. Later reports in this series will attempt to correct this deficiency to some degree.

Throughout the report, at the close of each topic discussion, summaries are provided. Only the highlights will be covered here. First, it appears clear that successfully directing social change is difficult. This condition has caused some *change agents* (persons attempting to change the behavior of members of the target audience) to conclude that rural residents of developing countries are irrationally resistant to change. Research indicates that this is rarely the case, however. Some of the reasons that cause many innovation programs to fail are as follows: One, the innovation is not well suited to the physical environment in which the resident finds himself; e.g., the rice won't grow as well on

his farm as it did at the agricultural college. Two, the advantages of the new innovation have not been adequately demonstrated; e.g., a demonstration plot was not used, or, if it was, the rice didn't grow well on it. Three, in an attempt to get broad coverage in the rural countryside, comparatively inexperienced change agents are used; the result is that rural residents quickly detect naivety or lack of knowledge concerning something which is of crucial importance to them. Four, the risk the rural resident is being asked to take is great; if a subsistence farmer's crops fail one season, his family goes hungry.

A second group of findings involve the target audience. Rural residents receive information from interpersonal sources more often than from the mass media. Further, a personal relationship appears to be necessary before one is able to communicate effectively with the people. This does *not* mean that the change agent must become everyone's close friend, but it does mean that he has to have a personality acceptable to the target audience. Specifically, he should be warm, friendly, and considerate. In addition, he should spend sufficient time in the area to convince the people that he knows their problems and the situation.

The third major finding concerns innovators. People most likely to try something new are the more prosperous, the better educated and the young. There can be many reasons for this finding; but, it appears to be almost universal since the same thing has been found in the United States and elsewhere. All of this leads to the conclusion that in our attempts to understand rural, subsistence (or peasant) cultures, there has been an almost total disregard of an important group within the culture, namely those who are likely to be the local economic leaders in the future. Failure to understand these more ambitious people could produce disastrous consequences.

The final group of generalizations which can be drawn concern the mass media. The radio has the greatest exposure. Newspapers and magazines have much less, although those who read them tend to be people of influence and status. Further, the credibility attached to information presented by a mass medium varies as a function of the number of media to which one is exposed. If it is mostly a case of the radio having little competition, it (the radio) is perceived as a credible source of information. As competition becomes stronger between media, newspapers are seen as a more credible source of information. Later, magazines are seen as being most accurate. Extrapolating this trend further, one would expect better educated, urban residents to perceive books and technical publications as being

highly credible sources of information. Throughout all of the mass media, however, a problem arises because they serve a dual function. *They not only disseminate information but are sources of entertainment as well.* This entertainment function is important and should not be overlooked, even though it makes the problem of disseminating information more complex. In closing, it appears that little is known about the impact of films and television, although both would appear to be promising media.

From the above, it can be seen that a body of knowledge is emerging which will be useful to programs of directed social change. Most of it stems from studies of farming and health and sanitation matters. Further studies are needed on broader topics and on populations dwelling in the new urban areas.

INTRODUCTION

The phrase *social change* is normally used very subjectively, i.e., different authors mean different things when they use it. Usually, social change is conceived in terms of the point of view of the observer. That is, the presence or absence of change, its extent, pace and direction are viewed from the observer's frame of reference. Thus, when one attempts to assess or interpret social changes that have occurred or are occurring in a community or country, he normally judges them in terms of the values and attitudes to which he has been conditioned in his own society and culture.

Despite the fact that confusion is generated by having the observer view societies in this personalized context, there appears to be little doubt that change is effected by cross-cultural borrowing and inventions. While it may be said that a certain amount of change is ever present in any society, administrators and scientists alike are bothered by the fact that some innovations which are introduced in connection with programs of planned or directed change are not readily accepted or adopted by the people who they think need the change. It is this latter problem that concerns people dedicated to introducing and instigating social change in so-called underdeveloped areas of the world.

The Philippines is one country which has received attention from such "change agents," of both native and foreign breeds. Questions that perplex these change agents involve identifying factors which must be known and satisfied for a program of change to be effective. Many of the important variables in the process of change involve the people themselves, i.e., the people whose behavior one wishes to change. In general, the identification of the credible sources of information, the influential opinion leaders, and the innovators, has been shown to be basic in any program of community development. This report presents a review of research on these issues citing work performed in the Philippines.

Practically all the studies reviewed dealt with small rural communities called barrios. Often a small number were studied. A commonly employed technique was participant observation, in which the investigator emerges himself into the community and publishes results of his case study. In this technique the observer acts as a measuring instrument and cites examples to illustrate his points. Often, these observations are supplemented by statistical data gathered in inter-

views. Sometimes, it is not clear as to what methods were used to select interviewees. All of these practices tend to make the problem of drawing valid inferences and generalizations more difficult since the possibility of bias introduced by the observer exists.

A second restriction is that little attention has been paid to population centers called Poblacions. In all likelihood, the Poblacion is the area where the most rapid and noticeable social changes are occurring. Therefore, the reader should not conclude that this review gives an adequate picture of the changing Philippines. It merely represents an attempt to review work which has been done in the Philippines which is relevant to the topic areas listed above (e.g., opinion leadership, sources of information and innovativeness). All of these are crucial considerations to individuals interested in precipitating planned social change. The approach taken was to summarize, insofar as possible, and to identify questions where further research was needed.

Sources of Information

Attempts to identify key sources of information, especially in rural Philippines, were made by de Young and Hunt (1964), Feliciano (1964), Fermalino (1960), Bueno (1966), Singh (1966), and others. *Over ninety percent of rural respondents of de Young and Hunt (1964) pointed to specific persons as their best source of information, while only a small minority considered the mass media as their most important sources of information.* Among these persons who were prominently identified were the barrio lieutenant (now barrio captain) and neighbors. Local teachers, other barrio officials, *sari-sari* store keepers, school children, priests, government officials, the herbolario,* and visiting nurses were mentioned invariably as first choices for the best sources of information in the barrio. To a lesser extent, newspapers and weekly magazines, radio broadcasts, and movies were also identified as important sources of information.

Feliciano (1964), in a similar study, confirmed that the tiniente del barrio (barrio lieutenant), now kapitan del barrio (barrio captain), was the key person in the human communication network in the barrio. Other individuals who were approached for information by people in her sample were neighbors and friends,

* An "herb doctor" who treats wounds with various concoctions.

barrio council members, relatives, and extension workers. Fermalino (1964) also found barrio captains and professionals as the sources of information most available to all.

In more recent studies, however, extension workers, agricultural supply storeowners, agricultural sales agents and other farmers in the community have been included in the list of best sources of information for barrio people. The radio has also become a very popular source of information, followed by the newspapers, comics and magazines. Therefore, *the influence of mass media appears to be increasing.*

It appears in many cases that a personalized relationship is a necessary, if not sufficient, condition for a person to be viewed as an important source of information. Fermalino (1960), Quiton and de Guzman (n.d.),* Castillo (1964), and Hollnsteiner (1960) have emphasized members of the family, such as the wife, relatives, and *compadres* and *comares*, as instrumental sources of information regarding local events and new practices. Fermalino (1960) specifically has pinpointed barrio neighbors and Poblacion residents as common sources of information, while Collier (1961) discovered the barrio people's reliance on passers-by who have recently arrived from a larger town for the latest news, on the school teacher for authoritative news (because of her high education), and on the barrio captain for the most reliable news (because of his personal moral influence). While Collier (1961) says that the landlord may not always be a trustworthy source, the latter is considered by barrio people as an authoritative one because of his frequent and "good" contacts with news outlets in town.

In summary, it would appear that rural barrio residents depend more upon interpersonal sources of information than upon mass media. Although the influence of mass media appears to be increasing, this generalization appears valid. There also appear to be numerous interpersonal sources of information, most of which have a personalized relationship with the person seeking the information. What remains to be clarified are perceptions regarding the breadth of interpersonal information in the barrios, i.e., just how wide do people perceive a single person's knowledge, or how many topic areas does it cover.

Research indicates that there is a relationship between the type of information sought and the source for it. Certain persons are consulted only for specific subject matter areas which are their areas of speciality. Pal (1963), Covar (1960)

*Undated manuscript.

and Singh (1966) have uniformly found that farmers consult other farmers when it comes to information on agriculture or farm problems. Extension workers were not as much consulted by farmers in 1960 as six years later. While the landlord ranked third in Covar's study as one consulted on agricultural problems, Castillo (1964) found that farmers blamed their landlords for their inability to adopt new practices. This divergence of findings would appear to indicate that the personality of the landlord does make a difference.

Villanueva (et al., 1963) stated that the health experts and teachers are consulted only on health and education problems, respectively. Pal (1963), however, has found in his sample that the teacher is also consulted on matters pertaining to agriculture and government. The barrio captain and those who hold official positions are consulted by both local leaders and nonleaders on government affairs. Pal's sample placed the landlord in the same position as the teacher as a source of information pertaining to the government.

From the above it would appear that just who is considered as a good interpersonal source of information varies as a function of the type of information sought, the relationship between the supplier and the receiver of information, and the perceived general status of the information source. Therefore, one can expect that the breadth of influence a particular source has will vary considerably. The rules by which it varies are not at all clear; however, this would appear to be a fertile area for future research.

Opinion Leadership

The existence of opinion leaders in the barrio and their leadership are matters of common knowledge among the barrio people and are truisms which have been found repeatedly by Filipino researchers. Ideas communicated by any member of a primary group are accepted or rejected not only because of the quality of the ideas but also because of the person's perceived competence (Pal, 1963). In fact, this may sometimes be the primary or sole basis for opinion leadership. While no attempt has been made to measure accurately the influence a neighbor's opinion has on any resident in the barrio, it can be assumed that neighbors influence each other's decisions, be it in politics or in agriculture (Fermalino, 1960). Personal influence and opinion leadership, however, are sometimes so highly restricted that some individuals appear to have influence only over one other person (Castillo et al., 1963).

In agriculture, co-farmers who are neighbors, agricultural extension workers, landlords, and the farmer's wife carry a considerable amount of personal influence and opinion leadership over the farmer in his major decisions in adopting recommended farm practices (Feliciano, 1964; Covar, 1960; Quitar and de Guzman, n.d.). In politics and government, while the barrio captain is considered as the "locus of power and influence" in the barrio (Feliciano, 1964), he is seldom perceived as a recognized leader in partisan politics (Castillo et al., 1963). In fact, barrio residents prefer discussions with other family members as opposed to the barrio captain when they want to form an opinion about some news, political or otherwise, that they have gathered from interpersonal or mass media communication sources (Coller, 1961). The political go-between, though, is mentioned (Villaneuva et al., 1966) as the informal leader of sorts who is utilized by politicians in influencing barrio residents to get themselves elected. The barrio captain was not identified by the same researchers as among these political go-betweens. These informal "leaders" may be the "barrio philosopher," *filosofa*, the landlord or his overseer, *encargado*, the local physician, a veteran of the revolution of 1896, or "the gaunt old man living by the creek who has stories to tell the barrio children" (Villaneuva et al., 1966).

The position of the barrio captain as an opinion leader therefore appears uncertain in view of the findings presented above. This situation can probably be better understood if one recognizes that different communities were studied in each case. Generalizations regarding the lack of opinion leadership of the barrio captain in this subject matter of politics appear at first glance to be untenable. But, evidence indicates that the barrio captain may not be an important opinion leader. Even in getting things done, Hollnsteiner (1960) downplays the ability of the barrio captain, for the average barrio man

...gets things done on the personal level. He seldom works through constituted authority such as his barrio lieutenant (now captain) in the latter's official capacity except when he knows that the barrio lieutenant has some special ties with a person or official who might be able to help or when the situation requires the official sanction of that lieutenant for formality's sake. In the latter case, he will still supplement the formal means by working through the unofficial, personalized channels to ensure his aim.

In health, the opinion leaders are the "gatekeepers" who have had prestige and status in the community, such as ex-barrio captains, ex-teachers, ex-councilors, or ex-army officers who belong to the old families (Tiglao, 1964).

If past research in leadership patterns and adoption of innovation in the Philippines can be used as guidelines, *the credibility of opinion leaders appears to be based upon experience, high education, high economic status, official position, and personality traits* (Castillo, n.d.; Feliciano, 1964; Fujimoto, 1965; Villanueva *et al.*, 1963; Anderson, 1964; Fermalino, 1960; Singh, 1965). If certain individuals' opinions are believed because of their perceived competence in the form of knowing effective extension techniques, this is probably an effect of experience and high education. The credibility of the landlord may be due to a quality of authoritarianism more than anything else. The credibility of an official who holds a formal leadership position may be a function of his better access to primary sources of information, influential persons, and politicians in the Poblacion. Personalism as a factor in opinion leadership may be based on the farmer's reliance on family members, such as his wife, or a neighbor who is a more experienced farmer than he is.

All of the above conclusions are tentative and speculative; the reason for this is that available evidence can be interpreted in numerous ways. Obviously, there is a lack of specific knowledge in this area. For example, it is not at all certain what opinion leadership patterns exist for a variety of subject matter areas or for a wide range of Barrios. Also, practically nothing is known about opinion leadership in the Poblacion.

Innovativeness

Barriers to innovativeness fall into two categories: (1) human factors pertaining to the innovator or change agent on one hand and the target system on the other; (2) environmental factors, including the innovation itself, and other external factors. With regard to the first category Castillo (n.d.) and Covar (1960) studied characteristics of the typical innovator or the change agent: his youth (which no one can do anything about) and his performance. The youth of the change agent seems to present a threat to established prestige systems in the rural areas where old age is still respected very much. More importantly, however, a change agent who is mediocre and insincere, regardless of his age, is easily detected by the people whom he is trying to influence by his seeming in-

competence, i.e., promises and appointments which are not kept, services which are not rendered, etc. But, failures associated with innovation are not all the fault of the change agent.

The farmer himself, or any other target system, can be a barrier to change. Covar (1960) found that the older the farmer, the less the innovativeness. Another barrier mentioned by Castillo (n.d.) is low education on the part of the farmer, which prevents him from understanding properly the new practices being introduced. Because of this, he lacks knowledge of resources to tap and the ability to comprehend pertinent information on the new practice.

Barriers imposed by economic factors have been studied by Quiton and de Guzman (n.d.), who confirmed in their study that farmers who are slow to innovate are those who do not own the land they cultivate. They further discovered that farmers may not implement a practice (although they themselves may be convinced of it) because their landlord objects to it. Covar (1960) and Quiton and de Guzman (n.d.) also mentioned magico-religious practices and the sentimental attachment to tradition of farmers as factors that prevent them from innovating, i.e., adopting or trying a new practice. Aside from all of these points, the farmer may be reminded of his negative or unfavorable experiences in the past (Fujimoto, 1965), he may find out that adopting the new practices will mean more work (Pal, 1963), or he may fear the occurrence of undesirable consequences in the future (Quiton and de Guzman, n.d.), such as what Pal (1963) described as *gaba* (a curse). When considering the innovation itself, the farmer may see that it is technically inadequate and inappropriate and therefore unacceptable. The innovation may not be suitable or applicable to existing conditions as to be feasible and practical (Fujimoto, 1965; Castillo, n.d.; Quiton and de Guzman, n.d.; Sycip, 1960). The new practice may be costly and tedious to do, and it may not have any visible advantages at all if adopted. Some innovations are just not adopted because they have been proven to be ineffective as seen through demonstrations that failed (Covar, 1960; Castillo, n.d.).

An external environmental factor which may serve as a barrier to change and innovativeness is the lack of resources and facilities necessary to support the innovation (Quiton and de Guzman, n.d.). Covar (1960) also hypothesized that the greater the physical distance that separates a group from the source of diffusion, the slower the chances for acceptance or users. His hypothesis is supported by Tiglao's findings (1964).

In summary, there are many opportunities to fail when one attempts to change the behavior of rural residents. Further, even if one succeeds in getting people to try a new practice, there is no guarantee that the practice will be continued once the change agent leaves the scene. *The point to remember, however is that people such as farmers while being skeptical are seldom irrationally resistant to change (Byrnes, 1966).* The few cases when they are irrational generally are the result of folklore which a change agent can use to his advantage, if he is sufficiently ingenious. What is generally unappreciated is the size of the risk the farmer is being asked to take. In subsistence areas farmers whose crops fail are placed in desperate circumstances. Further, they have learned by experience that local soil conditions, the lack of adequate irrigation, rat infestation, and other factors can cause a strain of rice which blossoms beautifully at the college of agriculture to fail miserably on their farms.

Therefore, if one wishes to induce change, it is necessary to start with basic considerations, such as is the proposed innovation really a step forward? Other questions to be considered concern the adequacy of the change agent system and the reasonableness of the risk being asked of the target audience. Finally, one must consider if he has the resources to stick with the change program long enough for it to succeed. Generally, once an innovation succeeds in one town, change can be spread simply by transporting other rural residents to the area and letting them see things for themselves. Farmers quickly notice signs of prosperity and will ferret out the cause of them. In short, the basic problem is to accomplish a genuine success in a limited area.

Factors Facilitating the Adoption of Innovations

The literature produced by social researchers in the Philippines indicates that the adoption of innovations can be facilitated by attending to the following factors: (1) the innovation itself; (2) the farmer or target system; (3) the change agent or innovator; (4) the techniques used by the change agent or innovator; and (5) other external factors. Feliciano (1964) found that innovations that are more readily adopted are those which are compatible with the farmer's needs, goals, and aspirations, as well as his beliefs and attitudes. Changes which are inexpensive, easy to do, and clearly better than the old practices have a better chance of acceptance. Any innovation that will satisfy the farmer's aspirations for food, comfort, prestige, and social acceptance will have a good chance of being accepted. This holds for new practices that have never been led

before, so long as they are not so intricate as to require much skill on the part of the adopter to do it (Castillo, n.d., and Quiton and de Guzman, n.d.) or are not so costly as to involve extensive (from the adopter's viewpoint) financial or social obligations on the part of the adopter (Covar, 1960). Innovations that have demonstrated superiority over the old practice have more chances of being adopted, e.g., via use of demonstration plots.

The farmer, or target system, can facilitate the change process as well. Socio-economic factors such as age, education, income, present yield, orientation, aspirations, etc., of the farmer seem to define the person who can be innovative. A lot of field research has been directed toward identification of these factors by Castillo (n.d.), Covar (1960), and Quiton and de Guzman (n.d.). For instance, Covar (1960) found that younger farmers adopt new practices more readily than their older counterparts because they have little to unlearn concerning the old methods. He also isolated longer educational training of the farmer as a facilitator of change. Possibly this factor not only facilitates communication between farmers and change agents but may increase the extent to which the two can identify with each other as well.

Castillo (1964) and Quiton and de Guzman (n.d.) concentrated more on the economic orientation of the target system. Similar to findings summarized by Rogers (1962), they discovered that one who is doing better than the others (i.e., has a higher income and higher yield) and is motivated by material returns and profits can be expected to respond favorably to innovations. Sometimes, the farmer is induced to consider innovations by his desire to try something new, to learn new practices, and to satisfy basic needs and goals. Less often, a farmer will adopt a new practice just to please the change agent or extension worker.

Change agents who possess the following descriptive qualities have invariably been predicted by Feliciano (1964), Sycip (1960) and Castillo (1964) to have more and better chances of facilitating the adoption of innovations by their target systems: tolerant, understanding, very sincere, convincing and persistent, friendly and "nice." Possessing a good personality, he must be acceptable to the people he works with and able to get along with others. A change agent who accepts emotionally the barrio way of life by trying as much as possible to dress, act, feel, and live like the barrio people is apt to be well liked; and gaining the confidence of the people is a primary goal that he must hurdle to be effective.

But while the personality of the change agent is of considerable importance, it is doubly necessary that he must use effective extension techniques. Such techniques, as recommended by Ccvar (1960), Castillo (1964), Feliciano (1964), Sycip (1960), and Bustrillos (1961), are home visits wherein the change agent works through the farmer's wife; farmers' classes, wherein the farmers are called "student-farmers"; and demonstrations, wherein the new practice is explained in simple and understandable terms.

Other external factors contribute to innovativeness. For example, as mentioned earlier, the influence of his wife, neighbors, friends, relatives, landlord, and extension workers can put a lot of pressure on the adopter. Quiton and de Guzman (n.d.) particularly point to the possibility that "once a landlord is sold on a recommended farm practice, he may decide to implement it on his farms by suggesting its adoption to his tenants." Singling out the landlord, however, does not make the others (neighbors, friends, etc.) less important as influencing agents in the adoption of innovations. One other external factor which should not be overlooked is the availability of resources needed for the practice. Feliciano (1964) found that "Five out of ten of the respondents who adopted certain practices did so because they 'had all the materials needed' (i.e., the wood, seeds, feeds and sprays)."

Sycip (1960) also found that "exposure to educative procedures such as seminar attendance facilitated the acceptance of innovations." Her findings indicated that "among hog raisers who reported initial acceptance of hog immunization, the number of those with seminar attendance was two times higher than of those who had not accepted hog immunization. Likewise, among those who reported continued acceptance of the innovation, the number of those with seminar attendance was about two and one-half times those in the group that had not accepted the innovation." Whether or not attendance at the seminars was a cause of change or merely a symptom of receptiveness on the part of the attendees cannot be determined. In her study of health practices in a rural community, Tiglao (1964) concluded that the factors "which seemed to influence acceptance of health innovations" were (1) higher educational attainment, (2) higher occupational level, (3) more school children in the family, (4) more married children in the family, (5) larger size of the family, (6) proximity to the health center, (7) civic consciousness, and (8) membership in some reference groups.

In summary, the more prosperous the person, the more likely he is to try an innovation. Perhaps this is because the risk is proportionally less to him than to someone operating close to the subsistence level. Another explanation is that the more highly motivated people become more prosperous; they aspire for better educations and a desire to do things to improve their lot in life.

The Impact of Mass Media

The use of the radio in the Philippines, even in its rural areas, is increasing (Pal, 1960). Its influence is being felt, for as Fermalino (1960) found out, "40% of those who have listened to the radio consider this source 'always reliable.'" In urban areas this is not the case. Schramm (1961) found that in Manila, only 6% of his respondents named the radio as the most reliable source of information, as compared to 25% of his respondents in the smaller town of Argao, Cebu. De Young (1955) suggested that "the influence of radio is more widespread than ownership would indicate, since many listen who do not own sets. Since (in rural areas) houses are placed close together and the radio usually runs at full blast, there may even be the 'equivalent of a captive audience.'" While de Young's findings may be out of date now, it is interesting to note that in 1955 4.8% of the households in his sample owned radio sets; but only 3.2% of these sets were found to be in operating condition. Of these radio sets in good operating condition, 60% were electric radio sets. The situation now is different due to the increasing popularity of the battery operated transistorized radio sets, an effect which is augmented by the increasing number of communities throughout the Philippines that now benefit from electricity.

De Young and Hunt (1964) looked into radio program preference in their study and discovered that the preferred types of radio programs were (1) news in the dialect, (2) popular music, (3) news in English, (4) soap opera serials in the dialect, (5) classical music, (6) commentaries in the dialect, and (7) semi-classical music. The positive role of the radio as an effective media for introducing innovations was proven by Pal (1959) and his colleagues at Silliman University, which has its own community development program. An experiment was conducted where a radio broadcast was made (about agricultural practices) and listeners assembled to hear the broadcast and then discuss the topics covered in the broadcast.

The movies' role as a source of information is generally more subtle in its effect; and, as a result, they may have been underrated by researchers in the Philippines. Villanueva (1959) found that going to the movies was no longer a novelty. Collier's data (1961) indicated that the movies did not have much direct impact on rural community life, whose residents rarely attended movies. Because of the low attendance rate at movies among the rural people, de Young and Hunt (1964) thought movies were not a good medium for a direct approach to rural people. The movies, however, cover a wider audience in the Poblacion, and in provincial capitals, large towns and cities (de Young, 1955). Most of these studies came out with the result that a majority of the movie-goers surveyed preferred Tagalog or vernacular movies.

Books, newspapers and magazines are read by the more educated people in the Philippines (Schramm, 1961). Reading matters are easily secured and are not costly items, but "only those who know how to read and want to acquire knowledge spend a small amount of money or time to acquire reading matters" (Pal, 1963). The majority of the rural people do not use them. While the circulation of Philippine newspapers and magazines has increased considerably, it is spread so thinly, according to Pacis (1957) that "they have very little effective influence in most of the provinces and towns." Schramm's (1961) urban sample (Manila), however, rated the magazine as a more reliable source of information (Manila - 57%; Argao - 13%), while his rural sample (Argao) rated the newspaper as the "best," most reliable, media source of information (Manila - 15%; Argao - 53%). De Young and Hunt (1964) placed the circulation of daily newspapers at about half a million while that of magazines is little more than a million. The sale of books is negligible. Newspapers and weekly magazines were mentioned as the best information source by a number of subjects corresponding to the number who read such periodicals regularly.

Consistent with the above findings, Collier (1961) thought that the newspaper was not a direct source of information, at least in rural areas. In the barrios he studied no one read the newspaper regularly; the majority of the barrio residents never read a newspaper; and only the barrio captain, the major, landlord, and the teacher were likely to have the few newspapers found in the barrio. Therefore, the newspaper as a source of news, rather than entertainment or advice, was more accessible to persons higher up in the communication network, especially at the Poblacion or provincial level.

Weekly magazines in the vernacular are circulated more widely than English magazines in rural areas (de Young and Hunt, 1964). And these are read more by women than by men (Coller, 1961), considering the content of these magazines, which includes short stories, news summaries, comics, and pictures of movie stars. In general, magazine reading was more common among all households (de Young, 1955) and magazines were the most common printed media in farmers' homes (Bueno, 1966).

Comic books are becoming more popular as reading matter, and most of these are in the vernacular (de Young and Hunt, 1964). Other reading materials available in rural households are pamphlets distributed by government agencies or religious groups. However, pamphlets with instructions on how to do things in new ways were not as effective as expected, for the readers were only "interested in looking at the pictures, never applying what they have seen and read" (Covar, 1960). Political handbills and posters were considered "unreliable" by 24% of Fermalino's (1960) respondents. He found that a "majority of the barrio citizens do not swallow hook, line and sinker" information they gather from handbills and posters.

In summary, the impact of mass media upon rural residents does not appear to be great (if one is interested in attitudinal or behavioral change). The medium having the greatest exposure index is the radio; at the same time, however, it should be noted that radio appears to serve more of an entertainment as opposed to an information dissemination role. Printed media apparently have little impact on the bulk of the rural population, and only some impact on the more prosperous rural residents. In smaller towns, newspapers were read more often and were considered to be the most reliable source of information. In Manila, where magazines are more widely distributed, they are considered to be the most reliable medium. In rural areas, radio news broadcasts were seen as being reliable sources of information. In most cases, posters apparently have little impact and are often viewed as being suspect in regard to the validity of their message content.

Thus, it would seem that exposure is a necessary, but not sufficient, condition for judging a particular mass medium's messages as being credible. Also, the data suggest that the greater the number of mass media to which one is exposed, the greater the credibility attached to printed media such as newspapers and magazines. Radio then would appear to have an intermediate role in dissemination of information: it reaches audiences not exposed to other mass media and

could have considerable promise when used in conjunction with collateral printed material. The final point to be made concerns films. Since the nature of their impact is likely to be subtle, and since they appear to have considerable potential to influence attitudes by vividly illustrating emotional points, their potential promise appears great. However, since films play an entertainment role more than an information dissemination role, it is probably true that films show prevailing attitudes rather than serving as stimuli for change. In any event, systematic research on the role of films and television in disseminating information to Poblacion residents is clearly needed.

Mass Media vs. Interpersonal Sources of Information

The effectiveness of mass media as compared to interpersonal sources of information may be a stimulating opportunity for hypothesis-testing, particularly in the Philippines. For as past research efforts by Collier (1961), Fermalino (1960), de Young and Hunt (1964), and Einsiedel (n.d.) bear out, the impact of person-to-person and group interaction is one which facilitates better communication. Collier (1961), for instance, confirmed the villagers' dependence upon direct, face-to-face contact with their associates as a medium of significant communications. He observed exchanges of news between men in the afternoons and evenings by word of mouth. Fermalino (1960) also observed that news is very often heard and transmitted in the barrio through women chatting with their neighbors and female groups.

What makes the "personalized" news more interesting than reading the newspapers and magazines or listening to the radio is the "manner of telling it plus the particular slant or interpretation which the communicators impart to their accounts" (Collier, 1961). Fermalino (1960) found that the most available sources of information in the barrio are interpersonal sources such as the barrio captain and the professionals. The mass media follow after the interpersonal sources. De Young and Hunt (1964) strongly hinted that "if the radio, the press, and the movies have an extensive influence, it is by (the second step) diffusion of their messages through personal contact rather than by direct impact....The direct influence of mass communication has some effect, but, at best, it is an influence which is too sporadic to keep rural people in regular contact with the world outside the barrio."

This situation suggests the importance of persons as disseminators of information in programs of change. Pal (1963) insists that communication to the barrio people "must be put across through some persons" who will serve as the "channels of communication from the government officials to the barrio people." Hollnsteiner (1960) mentioned in her study of the dynamics of power in a municipality the important role that the intermediary in a kinship system plays as a vertical channel of communication between the elites and the masses. Dalisay (1966) believes that community development work for the whole country is challenged by the application of "assistance and guidance to low income farmers on a personalized basis." But, Sycip (1960) still feels uncomfortable with just the use of words alone, for she believes that to most of the barrio people, the dictum, "seeing is believing" should be a byword for community development workers in convincing their clients to adopt innovations. Thus, the use of direct contact media has grown in importance and is giving satisfying results to government agencies (Coller, 1961, and Tavera, n.d.).

*In short, there appears to be a need to integrate mass media and interpersonal sources of information into a carefully articulated program in order to maximize chances of producing large-scale adoption of practices associated with a higher level of development. One vehicle by which the two could be intermeshed is through the use of clubs or other groups where free discussion occurs as one person influences another. In order to be effective, however, it should be noted that interpersonal communication should be a two-way street. In all likelihood, the belief that one need only influence the opinion leaders, who will in turn influence the target audience, is an oversimplification.**

Significant changes in attitudes and behavior cannot be expected in a free society without thoughtful (often emotional) discussion. With the generally high level of education in the Philippines, a more apt view might be that both the opinion leader and the target audience influence each other. Perhaps the influence the opinion leader has is more easily seen and understood; but, if he is to remain an effective opinion leader, he, too, must respond to the perceived needs of the people whose opinion he influences. This probably is done more subtly and is more of a generalized attitudinal change than the specific action influence discussed above. As such, it may easily be overlooked in a single short

*The authors are indebted to Dr. Frances Byrnes for suggesting this point.

time span survey. A finding which tends to support this reasoning is the one that opinion leaders often have close personal relationships with those whose opinions they can influence.

REFERENCES

- Anderson, James N. (1964), "Land and Society in a Pangasinan Community" in Social Foundations of Community Development; Readings on the Philippines. Manila: R.M. Garcia Publishing House.
- Bueno, Pedro B. (1966), "The Role of Mass Media in the Adoption of 2, 4-D in Two Laguna Barrios." B.S.A. Thesis, Department of Agricultural Information and Communication, College of Agriculture, University of the Philippines, Los Banos, Laguna, May 1964. 23pp.
- Bustrillos, Nena R. (1961), Food Management Practices of Homemakers in Rural Areas. Quezon City: Community Development Research Council, University of the Philippines, 185 pp.
- Byrnes, Francis C. (1966), "Some Missing Variables in Diffusion Research and Innovation," in Philippine Sociological Review, Volume XLV, No. 4, Oct. 1966, pp 242-256.
- Cantero-Pastrano, Cecilia L. (n.d.), "A Report on a Visayan Fishing Barrio", Case study report, mimeographed reproduction, Community Development Center, College, Laguna, Philippines. This case study report was published later with the same title in Socorro D. Espiritu and Chester L. Hunt, (eds.), Social Foundations of Community Development: Readings on the Philippines, Manila, Philippines: R. M. Garcia Publishing House, 1964, pp. 30-41.
- Castillo, Gelia T., Felicidad V. Cordero and Manuel R. Tano (1962), A Scale to Measure Family Level of Living in Four Barrios of Los Banos, Laguna. Los Banos, Laguna: College of Agriculture, University of the Philippines, August.
- Castillo, Gelia T. (n.d.), Some Insights on the Human Factor in Overcoming Barriers to Adequate Food Supply, College of Agriculture, University of the Philippines, College, Los Banos, Laguna, Philippines. A paper presented at the symposium on Overcoming Barriers to Adequate Food Supply, sponsored by the Philippine Association of Nutritionists; Science Pavillion, National Science Development Board, Manila, Philippines, on March 5, 1964.
- Castillo, Gelia T. (n.d.), Toward Understanding the Filipino Farmer, College of Agriculture, University of the Philippines, College, Los Banos, Laguna, Philippines. A paper presented at a seminar held at the International Rice Research Institute, College, Los Banos, Laguna, on May 6, 1965.
- Coller, Richard W. (1960), Barrio Gacao: A Study of Village Ecology and the Schistosomiasis Problem. Quezon City: Community Development Research Council, University of the Philippines, 123 pp.

REFERENCES (Cont'd)

- _____ and J. C. Tavera (n.d.), Mass Communications in the Philippine Government; A survey sponsored by the International Cooperation Administration (now Agency for International Development), National Economic Development, and National Media Production Center, 70 pp. (Mimeograph)
- _____ (1961), Social Effects of Donated Radios on Barrio Life. Quezon City: Community Development Research Council, University of the Philippines, 94 pp.
- Covar, Prospero (1960), The Masagana/Margate System of Planting Rice: A Study of an Agricultural Innovation. Quezon City: Community Development Research Council, University of the Philippines, 150 pp.
- Dalisay, Amado (1966), "Greater Production and Income in the Rural Communities," in The Barangay Forum, Vol. I, No. 2, May 1966; Quezon City, Philippines.
- de Young, John E. (1955), A Study of Communications Problems on the Barrio Level. Quezon City: Social Science Research Center Project, University of the Philippines, 109 pp. (Mimeograph)
- _____ and Chester L. Hunt (1964), "Communication Channels and Functional Literacy in the Philippine Barrio," in Social Foundations of Community Development: Readings on the Philippines. Manila: R. M. Garcia Publishing House.
- Einsiedel, Luz. A. (1959), Success and Failure in Selected Community Development Projects in Batangas, Quezon City, Philippines: Community Development Research Council, University of the Philippines. (Mimeograph)
- Feliciano, Gloria D. (1964), The Human Variable in Farm Practice Adoption: Philippine Setting. College, Los Banos, Laguna: Department of Agricultural Information and Communication, College of Agriculture, University of the Philippines, February 2, 1964.
- Fermalino, Tito (1960), Political Activities of Barrio Citizens in Iloilo as They Affect Community Development. Quezon City: Community Development Research Council, University of the Philippines, 266 pp.
- Fujimoto, Isao (n.d.), "Some Considerations on a Cultural Majority: The Filipino Farmer and Agricultural Development," mimeographed copy, College, Los Banos, Laguna, Philippines.
- Hollnsteiner, Mary R. (1960), The Dynamics of Power in a Philippine Municipality Quezon City: Community Development Research Council, University of the Philippines.

REFERENCES (Cont'd)

- Montemayor, Jeremias (1966), "Recognition; The Soul of Self-Help," in Barangay Forum, Vol. I, No. 2, May 1966, Quezon City, Philippines.
- PACD Evaluation Survey. Manila: Presidential Arm on Community Development, June 1959. (Mimeograph)
- Pacis, Vicente Albano (1957), "Philippine Democracy and the Press, Radio and Television," in Philippine Journal of Public Administration, Vol. I, No. 3, July 1957; University of the Philippines.
- Pal, Agaton P. (1957), "Channels of Communication with the Barrio People," in Philippine Journal of Public Administration, Vol. I, No. 2, April 1957; University of the Philippines.
- _____ et al. (1959), First Report, Silliman Community Development Program. Dumaguete City: Silliman University, May 1959.
- _____ (1963), The Resources, Levels of Living, and Aspirations of Rural Households in Negros Oriental. Quezon City: Community Development Research Council, University of the Philippines.
- Progress in Adult Education, 16th Annual Report of the Adult and Community Education Division, Bureau of Public Schools, for the School Year 1962-63. Manila: Bureau of Printing, 1963. 93 pp.
- Quiton, Vicente A. and Alice M. de Guzman (n.d.), The Farmer Speaks, mimeographed copy, undated. A paper based on a year's compilation of comments of farmers and housewives residing within the eight pilot Barrios covered by the Sta. Maria-Mabitac Development Project sponsored by the Commission on Agricultural Productivity, the Presidential Arm on Community Development and the University of the Philippines through the College of Agriculture, Farm and Home Development Office.
- Ravenholt, Marjorie S. (1956), Report on the Survey and Evaluation of Information Materials. Manila: Presidential Arm of Community Development, 73 pp. (Mimeograph)
- Rogers, Everett (1962), Diffusion of Innovations. New York: Free Press, 367 pp.
- Singh, Tej Pratap (1966), "The Effect of Aspirational Level on the Adoption of Recommended Practices in Rice Cultivation," M.S. Thesis, College of Agriculture, University of the Philippines, Los Banos, Laguna, July 1966. 153 pp.
- Schramm, Wilbur (1961), The Process and Effects of Mass Communication. Urbana, Ill.: University of Illinois Press.
- Sycip, Felicidad C. (1960), Factors Related to Acceptance or Rejection of Innovations. Quezon City: Community Development Research Council, University of the Philippines.

REFERENCES (Cont'd)

- Tuvera, J. C.(n.d.), "Mass Communications in the Philippines," Report of a survey sponsored by the International Cooperation Administration, National Economic Council and National Media Production Center. Quotation from a mimeographed compilation of research findings about communications by the DAIC, UPCA, College, Los Banos, Laguna, Philippines.
- Tiglao, Teodora V. (1964), Health Practices in a Rural Community. Quezon City: Community Development Research Council, University of the Philippines, 232 pp.
- Villanueva, Buenaventura M., Patrocio S. Villanueva, Elso V. Perez, Caridad G. Cuento and Juanita F. Pua.(1966). Government and Administration of a Municipality. Quezon City: Community Development Research Council, University of the Philippines, 129 pp.
- Villanueva, Patrocinio S., Felicidad Cordero, and Gelia T. Castillo (1963), "Leaders and Leadership Patterns in Four Selected Barrios of Los Banos, Laguna (An Abstract), in "Philippine Sociological Review, Vol. 2, nos. 1-2, January - April, 1963 , pp. 43-51.
- Villanueva, Patrocinio S. (1959), The Value of Rural Roads. Quezon City: Community Development Research Council, University of the Philippines, 80 pp.

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