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Social Marketing as a Strategy for Communicating Agricultural Innovations in Rural Development

by John C.G. Isoba

Abstract

This article is a systematic assessment of how nine key concepts in social marketing can help us in drawing up effective rural development campaigns in Africa. The focus is on how to use these concepts in formulating a strategy for communicating agricultural innovations in African rural settings. The article recognises the fact that there is no single overall reliable method for communicating with farmers everywhere but believes that the social marketing principles can be more successful with the farmer in most rural situations.

Re'sume'

L'article est une étude de la manière dont 9 concepts clés du marketing social peuvent aider à mettre au point une campagne de développement efficace en Afrique.

L'attention est ici palarisée sur la manière d'utiliser ces concepts pour formuler une stratégie de communication des innovations agricoles au sein des communautés rurales en Afrique.

L'article reconnait qu'il n'y a pas une méthode unique pour communiquer avec les paysans partout, mais néanmoins, affirme que les principes du marketing social peuvent réussir avec les agriculteurs dans un grand nombre de cas.

*John C.G. Isoba is a Ugandan Communication Researcher, formerly Senior Research Fellow, International Institute of Tropical Agriculture, Ibadan, Nigeria.

While the theme of this paper is communication strategies, let us start by looking at the general concept of development since we are concerned with using communication for development purposes. However, here we are not going to discuss the various theories of development. Rather, we shall discuss a few assumptions underlying some development theories to see how they relate to strategies of communication. We shall be looking at the question, why theories of social change fail. In trying to answer this question, Boudon (1983)[1] presents four postulates. These are the postulate of the coherence of social structure, the nomological postulate, the structural postulate and the ontological postulate.

According to the postulate of the coherence of social structure, the various features in a society cohere, i.e. they are bound firmly together so that if we identify one feature, we expect to find all the others that are bound with it. The implication of this assumption in development terms is that introducing change in one of the features will lead to change in the others cohering with it. In other words, change in one feature will set off a chain reaction in the whole system. This assumption is not necessarily correct.

Let us take a simple example. In Uganda in the late 1960s, it was recommended that cotton growers should spray their cotton four times at weekly intervals. Using the postulate of the coherence of social structures, we would say that when a farmer is convinced about the value of spraying his cotton, he will buy the insecticide and spray his cotton four times at weekly intervals. However, things did not turn out that way. Not all farmers sprayed their cotton four times even though the spray was sold in a package to spray four times so that all farmers bought enough chemical to spray four times.

Therefore, the chain reaction did not occur. In this case we should speak of interdependence rather than coherence. Spraying four times depends on whether the farmer buys the insecticide, which in turn depends on whether the farmer is convinced that he should spray his cotton which also depends on whether the farmer has enough money to buy the spray. As we have seen , buying the insecticide does not necessarily lead to spraying four times. In more complex situations, change in one feature may even lead to change in the opposite direction.

The nomological postulate assumes that there are universal regularities in all societies and that one of the main tasks of the social scientist is to indetify them. This assumption may lead to making generalizations about situations based on information obtained from a single observation. Under such circumstances, we may make misleading statements. To realize the importance of this in terms of development we only have to remember the

number of agricultural development schemes that failed in Africa because they depend on technology imported whole sale from temperate countries.

Under the structural postulate, we assume that there are features in a system which are essential in detecting and explaining the main trends in development. In other words, we assume that if we identify these essential characteristic features, we are in a position to say that this system will change through a given characteristic process. In this case, all the features within the system not considered essential in bringing about change are ignored. Here again, we may run into problems when we are planning trends in agricultural development.

Let us go back to our example of growing cotton. We know that the key features in producing more cotton in Uganda are increased acreage, growing varieties, proper weeding and, spraying against pests and diseases. According to the structural postulate, we would now say that when we fulfill these four conditions we shall increase cotton production in the country. But this is not necessarily so. There is one element which we have ignored. Yet it can contribute substantially to increased cotton production in the country. This element is the limited labour available to the farmer. Since the cotton grower in Uganda depends on family labour, there is a limit to the amount of cotton he can grow because he may not be able to increase his cotton acreage.

The ontological postulate assumes that there are categories of variables in which the main determinants of change are found. In its extreme form, this postulate assumes that the same category of variables is always responsible for change. In its mild form, it assumes that the nature of the variables for change can be different under varying situations, but there are always these main determinants of change. However, change is a result of individual reactions within the system so that it becomes difficult to isolate the variables responsible for change.

Suppose a research station recommends that the government should import and sell to the farmer a particular insecticides for spraying cotton to increase production in the country. The government imports the spray and gives it to the cooperatives to sell to the farmer. But the farmer does not buy the insecticide because it is too expensive for him. The research station comes up with a cheaper, but equally effective insecticide. The farmer sprays his cotton. Cotton production in the country goes up. In this case, who has been responsible for the increase in production? Is it the researcher who made the recommendations? Is it the government that imported the spray? Is it the cooperative that sold the insecticide to the farmer? Or, is it the farmer who sprayed the cotton? This example points out the pitfall in regarding some features of society as being unimportant in the development process.

The foregoing show that some projects fail or can fail because we start planning using the wrong premises. In the process we neglect or ignore certain features of the social system that are actually important for the success of our programs. One element we tend to forget to include in our plans is the person who has to change.

For example, even though several approaches were used, rural development programs in Ghana had little impact on the rural population in the 1960s. One of the main reasons is that local participation in conception, planning and implementation was minimal (Brown, 1978).[2] At Glacier Valley in South Australia, the Department of Agriculture mounted a campaign to improve pastures. After five years of continuously running the this program, it was found that farmers showed mild interest in improving their pastures and had adopted little of the advice they wer given. A major reason for this was that farmers were not involved in planning the pasture regeneration programme. (Blencows, *et al.*, 1981).[3]

These and other campaigns fail because they take the notion of distributed benefits too literally so that they never address the potential individual benefits which would be gained from participating in a national programme (Solomon, 1983)[4]. In other words, putting excessive emphasis on community or national interest at the expense of individual welfare is counterproductive (Liu, 1983).[5] To try and overcome this problem, campaign designers are turning to the principles of marketing in which social marketing is defined as:

> The design, implementation and control of programs seeking to increase the acceptability of a social idea or practice in a target group(s). It utilizes concepts of market segmentation, consumer research, idea configuration, communication, facilitation, incentives, and exchange theory to maximize target group response (Kotler, 1975 as quoted by Solomon, 1983).

In this paper we discuss nine concepts of social marketing to see how they can help us in drawing up effective rural development campaings. The nine concepts are:

1. The marketing philosophy
2. The "Four Ps" of marketing
3. Hierarchies of communication effects
4. Audience segmentation
5. Understanding all the relevant markets
6. Information and rapid feedback systems
7. Interpersonal and mass communication interactions
8. Understanding the competition
9. Expectations of success.

The Marketing Philosophy

The philosophy in social marketing is based on two main principles. The first is that the goal of an organization should be to meet the needs and wants of the consumer. The second is that for an exchange to occur, the organization and the consumer must interact roughly as equals with each having something to offer the other and each one being in a position to benefit from the exchange. The two principles taken together say that the exchange is mutual. In campaign terms, the mutual exchange is between those mounting the campaign and those supposed to adopt the idea or the practice.

However, this mutal exchange does not always exist. Most often the campaign is mounted to fulfill the wishes of the organizers while the needs of the person who is to change are ignored leading to failed programs. For example, in the 1960s, the Ghana government decided to modernize agriculture through mechanization by importing a large number of tractors and various implements (Nyanteng, 1978).[6] But farmers could not mechanize economically because their farms were small. In the meantime, the cutlasses farmers needed were in short supply.

A similar situation occurred in Samoa where inflexibility on the part of the organizations led to misunderstanding village life and consequently to failure of rural development programs (Pitt, 1981).[7] Here, the developers explained the slow growth in export earnings and in village income in terms of traditionalism, communalism, authoritarianism and absence of individualism. However, research in the villages showed that village life was flexible allowing for rewarding individual achievement. Researchers also found that traditional institutions could adopt quickly, extended families could be turned into cooperatives while chiefs could be used as managers. But such was the inflexibility on the part of the developer that the good side of village life was not recognized. They continued to introduce change according to what they felt was good for the rural people. They even proposed a land tax which, in previous years, had led to a general revolt. They also proposed growing crops virtually unknown to farmers.

The "Four Ps" of Marketing

The "Four Ps" of marketing are the product, the price, the place and promotion. The product is at the centre of the transaction between the marketer and the target market. It may consist of ideas, practices or services. The price includes more than cash. It covers other costs such as time, effort as well as opportunity cost. In planning a campaign, these costs

should be taken into account because they are factors that could lead to a project being rejected or accepted.

This is one of the main reasons why tick control programs in Eastern Africa have failed (Ferguson and Poleman, 1973).[8] Here little attention was given to the true costs to cattle owners in relation to improvements in their standards of living which could be directly attributable to tick control. Since cash cost per head appeared low, it was assumed that cattle owners would willingly pay fees to achieve the presumed benefits of major increases in income. Therefore, insufficient attention was given to minimizing the noncash costs to owners. For example, tick control centres were widely spaced - up to 8 km radius. This made the costs for tick control higher to cattle owners psychologically apart from the labour costs of walking these long distances.

The place refers to the channels through which the idea, product or practice reaches the buyer. In campaign terms, the place means the channels of communication information to the buyer. However, in campaigns for rural areas the campaign designer must be very careful so that he selects the media that are available to the audience as Table 1 below shows:

Table 1

Per cent Farmers Receiving Information by Source of Information and Improved Practice

	Improved Seed	Seed Dressing	Fertilizer Use
GhRRM	18.7 (1)	38.4 (1)	47.5 (1)
Ministry of Agriculture	18.7 (1)	10.3 (4)	10.8 (3)
Friends	--	17.9 (3)	17.5 (2)
Relations	12.2 (2)	26.9 (2)	3.3 (6)
Local Farmers	4.0 (4)	1.3 (6)	3.3 (6)
Cooperative Union	2.7 (5)	-	6.7 (5)
Radio or School	1.3 (6)	2.6 (5)	10.0 (4)
Other	5.3 (3)	1.3 (3)	-

Source: Compiled from Adoo, N.O., *et al*, 1978.[9]

Notes:
1. A dash means no data given.
2. GhRRM means the Ghana Rural Reconstruction Momvement.
3. Figures in brackets give the column rank.

Table 1 gives farmers' sources of information about improved seed, seed dressing and fertilizer use in the Manpong Valley, Ghana. As campaign designers, there are two main lessons to learn from the data in Table 1. The first is that the mass media, in this case, play a very small role in transmitting information to farmers. It could be that newspapers, television and publications are not available to these farmers. The second is that channels of communication are not always equally important in transmitting information about different practices.

For instance, according to rank scores in Table 1, the Ghana Rural Reconstruction Movement and the Ministry of Agriculture come first in passing information to farmers regarding improved seed. However, as far as seed dressing is concerned, the Ghana Rural Reconstruction Movement still comes first, but the Ministry of Agriculture drops to fourth place. The last of the "Four Ps" is promotion which covers publicity about the campaign as well as designing the message and monitoring the progress of the campaign to be able to make modifications as required.

Heirachies of Communication Effects

Adoption is a process a person goes through from the time he is aware of a practice, an idea or service. This process consists of a number of steps which vary from three to 12 according to different authors. (McGuire, 1983).[10] For example, Wilson (1955)[11] gives seven steps. He says that a person starts by having something he ***wants***. Then his ***attention*** is drawn to it after which he develops ***interest*** and his ***desire*** becomes aroused. He then becomes ***convinced*** and takes action or ***adopts*** it and finally, he is ***satisfied***.

In the adoption process, the interaction and reaction between the communicator and the recipient of the communication is very complex indeed. This is illustrated in Figure 1. Here, the columns present the communication variables of source, message, channel, receiver and destination. For each of these, there is a number of factors which affects the interaction between the communicator and the recipient. The rows represent the 12 steps in the adoption process. This matrix shows the factors to consider at each step in the adoption process.

Audience Segmentation

A campaign designed to satisfy everybody in the community is a bad one. This is because such a campaign will not have a specific aim in which case it will be difficult to isolate the elements to be used in the campaign

such as the channels of communication. Further, a campaign aimed generally at a community assumes that the community is homogeneous which is not likely to be the case. For example, we may want a particular community to grow more maize by opening up more land. The campaign, therefore, should be directed at those who have additional land on which to grow more maize.

In this connection, it is worthwhile to remember that in a rural community there are several classes of farmers. There are small-scale farmers, medium-scale farmers and large scale farmers. There are also young farmers, progressive farmers, tenants, absentee farmers, and sharecroppers. In planning a campaign, it is essential to decide which of these is your target farmer because each one requires a different approach when you are introducing an innovation.

Understanding all the Relevant Markets

When introducing an innovation, it is not farmers only that may benefit from it. There may be people other than farmers who might be interested. For example, in a rural community there are such people as farmers, church leaders, traders, school teachers and medical assistants. All these are potential markets for the campaign designer.

Suppose that we want to introduce a higher yielding variety of soybean to increase production. How can the campaign designer involve all the potential markets? In this situation, the farmer will be the centre of the campaign since he is the one to grow more soybean. However, churches might want to grow this soybean as part of their agricultural projects. The traders, too, might be interested in higher production because they have a lucrative market for soybean in another part of the country. On the other hand, the hospitals might be interested in higher soybean production in the area to provide a cheaper source of protein to combat malnutrition. The schools might be looking for a suitable crop to use in their agricultural syllabus. For them, the soybean might be what they want.

A campaign properly designed should involve all these people as far as possible in a manner that satisfies everyone so that the reaction of each one goes to helping the farmer grow more soybean.

Information and Rapid Feedback Systems

One of the most important components of a campaign is evaluation. This helps in monitoring the progress of the campaign so that we are able to modify our strategy as required. In this case, we have to establish

communication channels to pass information around as quickly as possible. The information we collect will also be very useful at the end of the campaign when we want to answer the question, why did the campaign succeed? Or, why did the campaign fail? The answer to this question shows us the strengths and weakness of our campaign which in turn help us to organize better campaigns in the future.

Interpersonal and Mass Communication Interactions

One of the functions of the mass media is setting the agenda for people in a community. Mass communication researchers have found that increasing emphasis on a topic in the mass media leads to increase relevance of that topic to the public (Becker, *et al.*, 1975).[12] In other words, people rely on the mass media to inform them about issues, but not necessarily to sway them (Meadow, 1980).[13] In this way, the media are giving people what to think about. This research has implications for the campaign designer trying to communicate agricultural innovations to a rural community. For instance, there are people regularly in towns whereas they live in rural areas around the towns. These people have access to the mass media from which they pick ideas. In this situation, the notion of media agenda-setting comes in. The urban worker picks up the ideas from the media and when he goes home in the rural community he discusses these ideas with his friends.

Understanding the Competition

In planning a campaign, it pays to know the competition you will face. Some of the competition will be for the resources you want to use. For example, you will want to know who is competing with you for finances, personnel, media use and audience attention. From the point of view of your audience you will want to know such things as other activities which will coincide with your campaign and what crops or ideas or practices are competing with yours.

If you are planning to promote growing more maize, how would you feel when you read a report which says, "The staple food crops required in large amounts (in Nigeria) consist of maize, millet, guinea corn, rice, cassava, yams, cocoyams, plantain, cowpeas and groundnuts. By 1975, deficiencies are expected in maize, the millets, guinea corn, wheat, Irish potatoes, yams, groundnuts, vegetables, fruits, various oils and butter, which adequate planning, funds, research and effective extension support there is no reason why Nigeria should not be able to produce enough quantities of all these crops" (Okigbo, 1972).[14]

Expectation of Success

Having designed and implemented a campaign in the best manner possible, we may sit back and wait for an agricultural revolution. However, such optimism may be short lived. As past experience shows, immediate and uniform adoption of agricultural innovations is rare (Feder, 1981).[15] This is because adoption of new technology is affected by the social system, attitudes, knowledge, skills and the physical environment. In each of these aspects, change tends to be slow (Svennilson, 1968).[16] There are, however, a few points which can help us avoid making some common communication errors (McGuire, 1963).[17]

1. The attenuated effects fallacy – in the adoption process, the farmer moves from one step to the next until he adopts the innovation, i.e he moves progressively from the first step (awareness) through the intermediate steps until he arrives at the last step (adoption). However, the chances that the farmer will move from one step to the next depend on his having accepted the *preceding* step. But the chances of adopting the preceding step are not 100%. This happens all along the line of steps in the adoption process so that the chances that the farmer will adopt an innovation are small. The implication for the campaign designer is that he should guard against exaggerated expectations that his campaign will produce large changes in behaviour.

2. *The distal measure fallacy* - sometimes the failure or success of a campaign is judged at the wrong step. For instance, if the aim of a campaign is to change behaviour, it would be wrong to say that the campaign was a success because the overwhelming majority of the audience is aware of the required new behaviour. The question is, they are aware of the new behaviour, but are they behaving according to the recommendation?

3. *The neglected mediator fallacy* – it is possible to mistakenly put emphasis on a particular step in the adoption process at the expense of other steps. For instance, in a campaign to increase soybean production, emphasis may go on the value of soybean in the diet at the expense of teaching the skills of preparing soybean in the way that will enrich the diet.

4. *The compensatory principle* – Let us suppose that the farmer can get a higher income from cotton than he gets from soybean. We may decide to produce more soybean at the expense of cotton for nutritional reasons. However, we might have overlooked the fact that with a much higher income from cotton the farmer will have enough cash to buy the required amount of soybean for a balanced diet and at the same time have money left for other purposes. In this case, cotton has compensated for its nutritional disadvantages.

5. ***The golden mean principle*** – in designing our campaign message, we may find that people tend to put more attention to our message if we tell them the dangers of the present practice. Where this is so, we should guard against throwing a scare into the people saying that since a little awareness of the danger produces some attention, then scare will more or less automatically get the people to adopt the recommended practice. For instance, discussing a case study of a cotton project in Tanzania. Keregere, et al.,[18] say that where farmers "resisted" change, a common response on the part of the officials was to put as much pressure as possible on the farmer because the authorities assumed that the researchers were right.

In this paper we have looked at a strategy for communicating agricultural innovations to the rural community. However, we should bear in mind that there is no single strategy that is correct. All depends on the situation you are working in. All we have in this paper are principles that can help us communicate more successfully with the farmer.

INPUT: Independent (Communication) Variables OUTPUT: Dependent Variables (Response Steps Mediating Persuasion)	SOURCE number unanimity demographics attractiveness credibility	MESSAGE type appeal type information inclusion/omission organization repetitiveness	CHANNEL modality directness context	RECEIVER demographics ability personality life style	DESTINATION immediacy/delay prevention/cessation direct direct immune
1. E: Exposure to the communication					
2. A: Attending to it					
3. L: Liking, becoming interested in it					
4. C: Comprehending it (learning what)					
5. S: Skill acquisition (learning how)					
6. Y: Yielding to it; attitude change					
7. M: Memory storage of content and/or agreement					
8. I: Information search and retrieval					
9. D: Deciding on basis of retrieval					
10. B: Behaving in accord with decision					
11. R: Reinforcement of desired acts					
12. P: Post-behavioral consolidating					

Figure 1. The Communication/Persuasion Model as an Input/Output Matrix.

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