

Information Needs of Small Scale Farmers in Africa: The Nigerian Example

By Vincent Nnamdi Ozowa

Over the years, deliberate, though ineffective efforts have been made by donors and African countries to bring about agricultural development without much to show for it. Much of the failure can be attributed to the adapted transformation approach to agriculture which is characterized by the introduction of a wide variety of large scale farming and processing technologies. It is however gratifying to note that there is now a shift in emphasis from the big scale transformation approach to the small scale improvement strategy approach which is attuned to African age-long farm practice.

The failure can also be attributed to the treatment of information delivery as a matter of course by most African governments. As often happens, agricultural information is not integrated with other development programs to address the numerous related problems that face farmers. Information is an essential ingredient in agricultural development programs but Nigerian farmers seldom feel the impact of agricultural innovations either because they have no access to such vital information or because it is poorly disseminated. The information provided is exclusively focused on policy makers, researchers, and those who manage policy decisions with scant attention paid to the information needs of the targeted beneficiaries of the policy decisions. The non-provision of agricultural information is a key factor that has greatly limited agricultural development in developing countries.

If the approaches to agricultural development programs are to work, African governments need to take new approaches to information dissemination and management that grow out from a clear understanding of what farmers information needs are.

Nigerian farms are classified into small scale, medium scale and large scale. When judged by international standards whereby all farms less than 10.00 hectares are classed as small, then 94.37 percent of all farm holdings in Nigeria in 1973/74 (or 28 million holdings) must be classified as small scale farms while the remaining 5.63 percent or 1.7 million are medium scale holdings.

A small scale farmer depends on his efficiency in the utilization of basic production resources available to him or her. He/she makes a significant and important contribution to the national product. i. e. 99 percent of total crops output. The small scale farmer is the main producer of 98 per cent of the food consumed in Nigeria with the only exception of wheat.

Experience has shown that small farms outyield large farms on calorie output per hectare and are therefore more efficient. Even though small scale farmers' accessibility to agricultural innovations is often limited by unfavorable economic, socio-cultural and

institutional conditions, they have achieved some level of efficiency through deployment of their indigenous knowledge. If provided with the right inputs, feasible technology and relevant information, they are capable of transforming traditional agriculture.

Information Needs of Small Scale Farmers

No one can categorically claim to know all the information needs of farmers especially in an information dependent sector like agriculture where there are new and rather complex problems facing farmers every day. It is safe to assert that the information needs of Nigerian small scale farmers revolve around the resolution of problems such as pest hazards, weed control, moisture insufficiency, soil fertility, farm credit, labor shortage, soil erosion and so forth.

The information needs may be grouped into five headings: agricultural inputs; extension education; agricultural technology; agricultural credit; and marketing. Modern farm inputs are needed to raise small farm productivity. These inputs may include fertilizers, improved variety of seeds and seedlings, feeds, plant protection chemicals, agricultural machinery, and equipment and water. An examination of the factors influencing the adoption and continued use of these inputs will show that information dissemination is a very important factor. It is a factor that requires more attention than it now gets.

Extension Education

The general lack of awareness among small scale farmers can be attributed to their high level of illiteracy. This contributes to the low level of adoption of agricultural production technology.

Extension is a type of education which is functional rather than formal. It is better provided by extension workers whose main task is to convey information in a meaningful form to farmers. One of the ways they do this is by training a group of model farmers with the hope that such farmers come in contact with other farmers. This "trickle down effect" is particularly necessary because farmers outnumber available extension workers with the present ratio of 1:3000.

Agricultural Technology

Agricultural technology for the small scale farmer must help minimize the drudgery or irksomeness of farm chores. It should be labor-saving, labor-enhancing and labor-enlarging.

The farmer needs information on production technology that involves cultivating, fertilizing, pest control, weeding and harvesting. This sort of information is at the moment being diffused by extension workers, other farmers, government parastatals and agricultural equipment dealers. The impact is yet to be felt.

Agricultural Credit

Agricultural credit encompasses all loans and advances granted borrowers to finance and service production activities relating to agriculture, fisheries and forestry and also for processing, marketing, storage and distribution of products resulting from these activities.

Small scale farmers are among the potential beneficiaries of agricultural credit in Nigeria but because of their low level of literacy they are mostly unaware of existing loan facilities. To reap the benefit of credit, farmers need information relating to sources of loan such as names of lenders, location and types of existing credit sources. They need information on the terms of loans such as the interest rates, loanable amount and mode of repayment.

Information regarding agricultural credit gets to small scale farmers usually through channels such as relations, friends, neighbors, government officials, commercial and credit banks. Grassroot organs such as village heads and local government officials are used to diffuse such information because of their personal touch with small scale farmers. Extension agents need to intensify their efforts in educating farmers to increase their level of awareness.

Marketing

All business activities involved in the movement of commodities from production to consumption is marketing. The farmer's market information needs are those that enable him make rational and relevant decisions. Market information services have the function of collecting and processing market data systematically and continuously, and of making it available to market participants in a form relevant to their decision making. Market information needs of small scale farmers include:

- Information on product planning. This is information on what crop and variety to grow at a given season with marketability of such a crop as an important deciding factor.
- Information on current prices.
- Information on forecast of market trends. This type of information assists farmers in planning their market products.
- Information on sales timing. This assists farmers in ensuring that they do not cause a market glut. It enables them to stagger harvesting and quantity for marketing.
- Information on improved marketing practices. It includes information on improved harvesting methods. This information is disseminated by field level extension workers by demonstration on farmer's fields, at local and wholesale markets.
- Information on group marketing. This enables small scale farmers to have organised sales of marketable surplus and bulk transport of produce.

In Nigeria, agricultural market information to small scale farmers is provided by the Ministry of Agriculture through the field level extension workers and by the broadcasting

media. A lot still has to be done in this area. Some of those in charge of market information are not trained for the job.

Agricultural Information Dissemination

Within the past two decades there has been a burst of research activities in the area of agriculture in Nigerian universities and agricultural research centres located around the country. Far reaching innovations that are capable of boosting the small scale farmer's agricultural production and Nigeria's economic development have been discovered. The yam miniset technique, protein rich soyabean production and utilization techniques, production and use of animal vaccines and drugs and labor saving devices are some of the many improved agricultural innovations not properly diffused. Prominent among the agricultural centers are the International Institute for Tropical Agriculture (IITA), the National Root Crops Research Institute, the National Veterinary Research Institute and the three universities of agriculture.

Unfortunately, most of these innovations do not reach the farmer's field. This is because the medium for information dissemination in use are not quite effective.

Present Situation

Institutional and governmental organs have been put in place to ensure that farmers get to know and adopt agricultural innovations relevant to their situations, e.g. the Agricultural Extension and Research Liaison Services (AERLS), the extension services of the Agricultural Development Project (ADPs), Ministries of Agriculture at both state and federal levels, Media Forum for Agriculture, Cooperative Extension Centres (CEC) of universities and public enlightenment units of the 18 agricultural research centers. These bodies serve as facilitators of agricultural messages by acting as communication departments.

They use media such as leaflets, newsletters, posters, exhibits, visual aids and radio programs in communicating agricultural information. Radio and television programs are popular although controlled by government with its attendant problems regarding the choice of programs.

Of all the existing channels of agricultural communication, Nigerian farmers rank extension high est in terms of providing credible information and advice, especially on agricultural technology. A major function of extension is to get the farmer into a frame of mind and attitude conducive to acceptance of technological change. The use of fertilizers, for example, is fairly widespread in the middlebelt region of Nigeria where information about fertilizers is well diffused. Even though the demand for fertilizers is buoyant, the supply is mostly inadequate to meet the demands.

Apart from the use of extension for diffusion of agricultural innovation, other channels like rural development field staff, contact farmers, school teachers, private sector agri-

business people, staff of the Ministry of Agriculture and the electronic and print media are used. These channels have their strengths and weaknesses.

To strengthen the efforts of the print and broadcasting media in ensuring proper agricultural information dissemination to farmers, the Media Forum for Agriculture, was formed by media practitioners from all over Nigeria in 1989 with the aim of providing better support for agriculture by improving the quality of agriculture coverage in the media.

Again, the targeted audience is not properly reached as the main beneficiaries of information carried by the print and broadcasting media are urban elites.

Problems of Agricultural Information Dissemination

There are some limiting factors and apparent constraints in agricultural information dissemination in Nigeria, including status differences between extension agents and their clients; agents' inadequate knowledge of "how communication works"; lack of interagency cooperation both in program planning and implementation; and the extension's general lack of interest in traditional media.

One of the obvious constraints in the use of the broadcasting media in Nigeria is poor reception quality and the area covered. The messages carried are not tailored to the information needs of rural populations. Even when the information is relevant, it is seldom aired at the proper time and so does not get to the targeted audience.

Another major constraint is the use of print media: Leaflets and newsletters as message carriers are of limited use in reaching illiterate farmers. Technical language used in communicating information is incomprehensible to the farmers.

Another major constraint to agricultural information dissemination is the inadequacy of existing extension programs. Some of these programs are conceived without well thought out plans and are prepared in a hurry without the farmers whose attitudes are to be changed making any input. Such agricultural information packages can neither sustain the farmers' interest nor effect the desired attitudinal change. Farmers' interests are disregarded even more as most of the agricultural innovations are written and broadcast in English instead of the local language.

When local language is used, emphasis is often on the three major Nigerian languages Hausa, Ibo and Yoruba. These programs are broadcast when farmers are far away in the fields or too tired to listen after the day's toil. A majority of the farmers do not own radio sets.

Well intentioned agricultural programs can be marred by poor implementation and too much bureaucracy. For example, the Cooperative Extension Centre of the University of Agriculture, Makurdi, has a competent corps of subject specialists without adequate funding, facilities and logistic support like visual aids, equipment, transportation and

adequate communication channels. As a result, the Centre has not been able to achieve the expected impact on the immediate university community.

The present ratio of 1 extension worker to 3,000 farmers is inadequate for effective agricultural information diffusion. The problem is compounded by the paucity of women in extension agents especially in a society where cultural and religious taboos make it impossible for male extension workers to reach women farmers who outnumber male small scale farmers.

Many people in extension are ill-prepared for extension and an extension communication job. The emphasis in their training is more on technical proficiency rather than on rhetorical and persuasive skills. An extensionist trained in this way, is unlikely to make an impact on a conservative farmer who is not likely to put his farm inputs to risk by trying the extensionist's improved technique. There is real need for extension agents training to be relevant to their jobs at the grassroots.

[V. N. Ozowa is Senior Librarian at the University of Agriculture, Makurdi, Nigeria. An earlier version of this article was published by the Quarterly Bulletin of the International Association of Agricultural Information Specialists, IAALD/CABI (v. 40, no. 1, 1995) which has given kind permission to reprint.]