

# Improving the nutritional impact of extension services in rural Africa

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*Experience in nutrition interventions points to several design characteristics of field programmes which could improve their effectiveness. Regular government extension services have the potential to reach large numbers of people, yet staff will require additional training to respond to the changing demands of field work. A new approach to training such staff has been developed by the Food and Agriculture Organization. The approach provides staff with information and managerial skills that are common to all extension work. The practical examples used to introduce these techniques illustrate nutritional problems that fieldworkers face and give a measure of confidence in finding solutions. Training materials based on this approach are presently used by several governments.*

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<sup>1</sup>FAO, *World Food Report*, Doc No 1/Q1500/E/583/1/22000, FAO, Rome, Italy, 1983, p 12.

<sup>2</sup>*Ibid.*

<sup>3</sup>J.A. Daly, J.H. Davis and R. Robertson, 'Determinants of health and nutritional status', eds, R.E. Klein et al, in *Evaluating the Impact of Nutrition and Health Programs*, Plenum Press, New York, NY, 1979.

The food supply of many African countries has markedly deteriorated over the last decade.<sup>1</sup> Not only is there less food available per head of the population than there was in the early 1970s, but now the rate of increase in food production is failing to match population growth.<sup>2</sup> Many explanations can be brought forward to account for these realities, such as the lack of rain, overcropping and overgrazing of land, as well as the inequitable distribution of productive resources that are necessary for high yields.

The chronic food scarcity that results from any of these influences will reduce nutritional health, particularly that of groups which are vulnerable because of physiological needs or social position.<sup>3</sup> In fact many nutritional problems can be identified and most require urgent solutions if permanent damage to health and subsequent loss of economic productivity is to be avoided. Yet policies to increase food supply and achieve equitable distribution of resources on a national scale require several decades to implement fully and affect nutritional status.

To solve the short-term impact of nutritional problems, a variety of interventions have been implemented, such as providing food aid, increasing local food production, influencing infant feeding and food choice.<sup>4</sup> Many programmes were explicitly educational, or had an integral education component, particularly where they complemented the activities of larger

economic development programmes.

Education in this context consists of explaining the causes of nutritional problems to people affected by them and to increase their skills in dealing with those problems. All such education is based on the assumption that those affected by changes in the food supply can minimize their impact through their own actions. This assumption has been proven correct in a small number of educational programmes, but many have not been able to influence the nutritional status of the population. As a result, the experience provided by these programmes has allowed nutrition experts to identify a number of specific conditions that nutrition education activities require to be effective.<sup>5</sup> Among the conditions mentioned are, for example, community involvement in programme operation and the understanding of programme objectives by those at all vertical levels involved in nutrition policy and implementation.<sup>6</sup>

Learning is, by nature, a personal process and the nutritional message must be adapted to the individual's situation. Adaptation to local situations usually requires trained professionals who have experience in assessing the relative importance of situations that influence nutritional status. Unfortunately resources are always insufficient to employ staff of professional calibre in more than a few locations and only a fraction of the rural population in developing countries can be reached in this way. Staff

with lower levels of training and experience are available, large numbers of whom often work in government extension services. However these workers have not been shown the methods they should use to recognize nutritional needs, nor how to adapt their own technical work accordingly.

The majority of governments run extension services in various technical disciplines that can potentially influence many of the factors affecting the individual's nutritional status. To change nutritional status, these services need to work to the same objectives. This implies that separate services agree on a number of common objectives and coordinated activities. Yet skills to establish objectives and to manage the work of several groups of people are often lacking among the staff of government departments.<sup>7</sup>

A new approach to overcome two implementation difficulties found in previous interventions has recently been formulated.<sup>8</sup> Innovative training materials for rural extension workers have been developed to support the new approach. These materials incorporate managerial skill training, together with technical information on nutrition relevant to the extension worker's responsibilities.

The first difficulty addressed is that of reaching large enough numbers of people to affect the national prevalence of nutritional and other health problems. The second difficulty is to present information that is directly relevant to the situation of people in different localities.

Attempts to involve government extension service staff in nutrition interventions have proved difficult, particularly those with an educational orientation. The majority of nutritional problems are of a chronic nature and are not perceived as urgent. Where the justification for a nutritionally oriented intervention is accepted, many field workers do not feel confident in dealing with the proposed solutions.

For example, extension staff from agriculture or social development will not normally spend much time discussing the technical arguments for including nutrition in their work, neither their training nor the ministry's prog-

ramme expect them to do so. They will regard information about nutrition presented to them as less important than other technical information.

The focus of fieldwork is the technical information given during basic training. The adequacy of this information is directly related to the technical responsibilities the worker is given afterwards. Need for additional information is only felt where those responsibilities do not match the expectations of work addressed during training. Such needs will be different for each category of technical staff.

Fieldworkers also have organizational responsibilities and to work effectively should understand the administrative aspects of a programme or service. Knowledge of basic management and administrative procedures are important for the organization of one's own work and these skills are relevant to staff in all disciplines. Experience has shown that more managerial skills are required than are provided by either basic or in-service training.<sup>9</sup>

In addition to technical and administrative working skills, field work relies on effective communication between various categories of staff. In the majority of cases, more than one fieldworker is assigned to a geographical area, serving the same population. They each need to know the programme objectives and day-to-day activities of other workers.

Unfortunately administrative structures and existing working styles make communication between government services difficult and the fieldworker is left with an unsatisfied need to know what others are doing.

To avoid the potential problems associated with inadequate communication and managerial skills, fieldworkers need additional training in basic and in-service courses. Such skills can be taught in the context of specific technical subjects, including nutrition. This is the approach taken by several African governments in introducing nutritional issues into the training of staff from regular government services.<sup>10</sup> The information given to them is unlike traditional nutrition education messages that have been used in the past, since

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## **'Administrative structures and existing working styles make communication between government services difficult'**

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<sup>4</sup>J.E. Austin and M.F. Zeitlin, *Nutrition Intervention in Developing Countries - An Overview*, Oelgeschlager, Gunn & Hain, Cambridge, MA, USA, 1981, pp 49-72.

<sup>5</sup>J.C. McKenzie and P. Mumford, 'The evaluation of nutrition education programmes: a review of the present situation', *World Review of Nutrition and Dietetics*, Vol 5, 1965, pp 21-31; F.E. Whitehead, 'Nutrition education research', *World Review of Dietetics*, Vol 17, 1973, pp 91-149.

<sup>6</sup>Daly et al, *op cit*, Ref 3.

<sup>7</sup>A. McCallum, 'Unsnarling the bureaucracy', *Ceres*, Vol 13, No 2, 1980, pp 36-40.

<sup>8</sup>A. Renaud, 'Field programme management', *Food and Nutrition*, Vol 9, 1983, pp 18-23.

<sup>9</sup>McCallum, *op cit*, Ref 7.

<sup>10</sup>FAO, *Field Programme Management - Food and Nutrition: A Training Pack*, 3rd ed, FAO, Rome, Italy, 1982.

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emphasis is placed on creating awareness of the potential causes of malnutrition that are relevant to the fieldworkers’ situation.

Since 1978 a number of African governments have introduced these materials to sections of their extension services of ministries of agriculture, health, education and social services. The subject of nutrition is often equated with food preparation, which is not a male responsibility in the cultures of most developing countries. The training materials show nutrition in a social context, without domestic connotations, which is a distinct change from previous documentation. This orientation can explain why the materials, including nutritional issues are found acceptable to both men and women. Zambia and Ethiopia have each produced adapted training materials, suited specifically to conditions in those countries. Local adaptations are also being developed elsewhere.<sup>11</sup>

It is intended that the fieldworker will be able to assess the situation in a locality and decide on appropriate action related to the nutritional problems identified. Subsequent action will always conform to the ministry’s technical mandate, but the nutritional implication of those activities should be understood. Activities can then be made more nutritionally relevant or appropriate collaboration with other services can be started.

The process of developing an understanding of the nutritional realities of a locality introduces a number of managerial techniques. These techniques for efficient management of field programmes are explained and demonstrated during training, using examples that are nutritionally appropriate. Fieldworkers learn techniques of field programme management and recognize them to be relevant to field programmes aimed at a variety of problems, including nutritional ones. In showing the step-by-step application of these techniques to nutritional activities, fieldworkers become familiar with nutritional terms. They also become confident in dealing with the nutritional implications of their work.

This approach meets the fieldworker’s own needs in a number of ways. Training in management techniques

that are applicable to their own working situations answer an urgent need that is rarely expressed. In addition, coordination of field work for nutritional purposes crosses the traditional boundaries between technical disciplines and demonstrates the opportunities for cooperation between fieldworkers in doing so. The nutritional considerations are perceived as relevant because of their public-health importance and the material provides practical examples and technical detail for nutritionally oriented activities.

In this way fieldworkers are not expected to act as promoters of nutritional activities, duties that normally do not fall within their mandate. But they can see themselves acting in ways to improve nutritional status and so become facilitators of a process that requires many participants.

The materials generally consist of a detailed course book which lists the behavioural objectives, content, practical exercises that trainers of extension staff may want to use. A trainer’s guide is included which explains the technical background of the material in the course book. In addition the package includes posters, materials for use in sessions and reference information.<sup>12</sup>

The concepts of the approach are generally not familiar to extension services and an introduction to their use in both in-service training and basic training is often requested by senior staff. This process ensures awareness of nutritional objectives at senior and administrative levels.

Living conditions are expected to improve as a result of more efficient extension services and a greater number of nutritionally appropriate activities in rural areas. Programme evaluations will determine the extent to which either of these intermediate goals have been achieved.

By itself this approach cannot change the development process in rural Africa: political commitment and resources are also needed. Nevertheless where these exist a potentially significant contribution is possible, because the approach can be used by large numbers of existing staff and ensures that programme objectives are suited to local conditions.

<sup>11</sup>Renaud, *op cit*, Ref 8.

<sup>12</sup>*Op cit*, Ref 10.