



MISSION REPORT

IN-SERVICE EXTENSION COURSE FOR FRONTLINE EXTENSION WORKERS IN FOOD AND NUTRITION SECURITY

NATURAL RESOURCES COLLEGE, LILONGWE
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PREAMBLE

The course in nutrition and food security being held at NRC in Malawi is a pioneering undertaking. An intersectoral course for extension workers with a focus on nutrition is something generally new for Africa (perhaps also for the world at large). It is clearly needed and the need is increasingly perceived not only in Malawi but also in the rest of Africa. Apart from this, a great deal of thought has gone into the design and the standard of organization and delivery is high.

I hope I will be forgiven for making so many suggestions for improvement. They are all aimed at building on the foundation which the NRC has established to make the course more visibly effective and to adapt it for use by others on a wider scale.

Jane Sherman, Rome, 12 March 2011

ACRONYMS

BCC	Behaviour change communication
EPA	Extension planning area
HFS	Household food security
HSA	Health surveillance assistant
KAPP	Knowledge, attitudes, perceptions and practices
M&E	Monitoring and evaluation
ML	Mobile learning
NEAC	Nutrition education and communication
NRC	Natural Resources College
ODL	Open and distance learning
OPC	Office of the President and Cabinet
RDA/RDI	Recommended daily allowance/Reference daily intake
TOR	Terms of reference

N.B. Important points in the text are underlined.

EXECUTIVE SUMMARY

The two-week pilot cross-sectoral inservice training course in food and nutrition security held recently at the Natural Resources College is a pioneering venture. It aims to fulfil training needs identified in a 2009¹ capacity analysis to strengthen nutrition and nutrition education in Malawi's food security, health and community extension activities.

This review was prompted by the possibility of upscaling the course to train the remaining thousands of frontline workers in Malawi. The review is based on attendance at the course (14-15 February 2011) and on interviews with previous course participants and relevant government officials. The general criteria adopted were approved principles of nutrition education and work-related learning which stress the need for formative research and evaluation, practical application to real life, building on existing experience, and general professional development, with particular importance given to skills-based, behaviour change and health promotion approaches. The following summary sums up the main recommendations of the review.



¹ Department of Nutrition, HIV and AIDS/FAO 2009



PARTICIPATION

At present, supervisors of existing trainees are not included in the training. However, in order for field activities to be set in motion it is essential that they be trained as soon as possible. Consideration should also be given to including some schools representatives in future courses and possible roles of NGOs in the training should be discussed.

COURSE DESIGN

The outline course design, developed in a stakeholders meeting in August 2010, showed a strong mix of knowledge and practice. Along with a grounding in nutrition knowledge, the practical aims were to reinforce and extend existing extension programmes in food security, GMP, HIV and AIDS, hygiene and sanitation and preventing malnutrition, through nutrition education/promotion activities coordinated between the sectors. The thrust of this basic design could be reinforced in a number of ways:

Course content could be strengthened by:

- Adding sub-objectives focusing on systematic understanding of the local situation, professional approaches to nutrition promotion, and the transition from theory to practice.
- Giving more attention to nutrition education and communication (the main activity in nutrition extension work) by (a) introducing it earlier in the course, (b) distributing a nutrition education element throughout the other units and (c) treating nutrition education in depth in an extra unit, with an element of formative research.

Course coherence For participants, course coherence and purpose derive from a developing vision of how their working practices will change. While the details should be self-determined, it would be useful if ministries could produce informal guidelines on what specific nutrition activities can be integrated into existing work routines and what priority nutrition interventions are most suitable for cross-sectoral interventions, with outlines of possible projects. The course can then reinforce this overall coherence and use it to sharpen the focus of particular objectives.

Audience research It would also be valuable for course development to draw up a general entry profile of participants' knowledge, attitudes, perceptions and practices, which can be expanded and refined as the courses continue.

Evaluation Valid and convincing evaluation is particularly important in a pilot course. Participant satisfaction appears to be very high. Action should be taken to reinforce the effectiveness of the existing learning evaluation and to develop and pilot a post-course evaluation and (if possible) of impact (an assessable activity which will yield clear evidence of changes in working practices).

METHODOLOGY

The course ran smoothly, the atmosphere was very positive and most sessions aroused great interest. Some means must be found to ensure a good variety of presenters, and proxies for sessions where facilitators are called away, so as not to overburden NRC facilitators. There is also a need to capture the valuable practical illustrations and advice given by the presenters (not recorded on their powerpoints).

Double paradigm shift. The main barrier to both effective NEAC and effective extension training is the concept of knowledge transfer, which limits "education" to giving talks, advice, lectures (however interactive) or at best to developing appropriate messages. Course participants need to learn what is involved in effective BCC, skills development and health promotion and to practise doing it. At the same time, the course is also aiming at changes in practices and needs to adopt some principles of skills learning and behaviour change. Some steps toward this are suggested below.

General approaches would benefit from more focus on essentials, more participant activity and contribution, more variety in the input and more checks on learning.



Action and practice. The main change required is a more active pursuit of specific objectives, especially action objectives, in line with the original aims. Facilitators need to review their sessions in order to: explore existing understanding; review learning outcomes; align objectives, activities and evaluation; relate input to real life experience; set up exercises/activities for practising objectives; air practical issues; monitor learning; and involve participants in all these processes. In this light, the role of “practicals” should be reconsidered on the basis of actual professional need.

Application of learning. A new “application track” should run parallel to the rest of the course, to relate learning to field activities and build up professional skills for developing interventions.

Documentation. Takeaway reference materials are essential to maintaining learning, and participants frequently expressed the need for them. Stakeholders and facilitators should recommend essential contents to be included in:

- (For each trainee) a manual of essential reference materials in nutrition and food security, which will be of continuing practical use throughout a professional career.
- (For each EPA) a small collection of existing publications.

To ensure that these are used and valued, the course should thoroughly familiarize trainees with them.

UPSCALING

Upscaling must ensure standardization while also responding to local experience, allowing for improvement and developing a community of practice. It also calls for suitable delivery systems and training of trainers.

Good learning materials are essential to these aims. Professional writers familiar with work-related learning should be involved in the process of developing the course for upscaling. Templates should be developed for the essential elements of the whole course and its sessions. For the overall format, the most flexible and participatory is a fully self-explanatory course making all materials available to all parties (however this is also the most time-consuming to develop).

Course delivery and training of trainers. Distance learning and e-learning are largely ruled out, but there is room for blended learning with more preparatory and follow-up work in the field. Optimal mixes of intensive and extensive learning should be experimented.

Training of trainers need to avoid “knowledge transfer” approaches consisting largely of lectures. Instead trainee trainers should “learn by doing”, with the support of reliable course materials, first following the course (or the appropriate elements), then assisting as facilitators, then taking over.

NEXT STEPS

It is expected that the course will be revised and continue to be delivered in its existing form before it is upscaled. Developing materials for the roll-out will probably require a separate small project, which could also include developing the application track and the extra unit on nutrition education.

First actions and decisions

- Training supervisors of existing trainees.
- Decisions about including teacher representatives and the role of NGOs in the course.
- Ministerial guidance on specific nutrition activities to prioritize.
- Developing a profile of frontline workers’ relevant knowledge, attitudes, practices and perceptions.

Course improvement

- Reviewing learning targets and course content; establishing overall course coherence.
- Formulating templates for the whole course and its sessions.
- Capturing the approaches and contributions of current presenters.
- Improving existing sessions in line with recommendations and feedback.



- Selecting course documentation.
- Improving the course evaluation instruments (learning assessment and follow-up evaluation).

Upscaling

- Outlining the format, course delivery and training of trainers.
- Developing the application track.
- Developing the extra nutrition education unit.
- Development of draft materials by course writers.
- Review by stakeholders.
- Piloting.
- Revision.



BACKGROUND

1.1 NEED FOR AN EXTENSION COURSE IN NUTRITION

An analysis carried out in 2009 (Department of Nutrition, HIV and AIDS/FAO 2009) demonstrated that capacity in nutrition and nutrition education needs strengthening in Malawi. It stressed that frontline workers in health, agriculture and community work need more awareness/competence in nutrition and nutrition education issues and strategies and that the training of workers in the three sectors should be coordinated so that they could collaborate more easily and harmonise their messages to the community. It also made particular reference to the desire of donors to support “comprehensive in-service training packages to existing line ministries and NGO personnel working at community level”.

Catherine Mkangana, Director for Nutrition, HIV and AIDS in the Department of Nutrition, HIV and AIDS (DNHA) under the Office of the President and Cabinet (OPC), informed me that a new cadre of nutrition extensionists is in the process of formation in Malawi and a curriculum for their training has been devised (Dept. of Nutrition, HIV and AIDS, 2009?). Bringing this cohort up to strength will however take time. It is also hoped in the long term to move towards incorporating nutrition and nutrition education and communication (NEAC) into the initial training curricula of future extension workers, schoolteachers and health professionals such as doctors and nurses, aligning these reforms with the national nutrition education strategy. This will also take time and will not necessarily ensure inter-sectoral coordination. In the meantime, existing extension workers are in need of training if they are to implement national policy and improve nutrition-related services and education in communities.



1.2 THE PILOT IN-SERVICE EXTENSION COURSE

The pilot cross-sectoral inservice training course in food and nutrition security organized with technical and financial support from FAO and funded through the “One UN” fund, has been located at the Natural Resources College (NRC). The College has the mandate for training frontline staff, and the capacity analysis report recommended that more use should be made of it for this purpose.

The pilot course lasts two weeks and has been offered to extension workers of three sectors: Agriculture, Health and Community Development. At the time of writing it has just been held for the third time and a fourth session is under way, which will complete the present pilot phase. Both as cross-sectoral extension training and as nutrition extension training it appears to be a unique venture in Malawi, and rare in Africa as a whole, according to FAO’s current analysis of nutrition education training needs (see www.nutritionlearning.net). Although NGOs in Malawi (e.g. World Vision) sometimes give nutrition training to government extension workers (Dept. of Nutrition, HIV and AIDS/FAO, December 2009; Walford 2011), this is done ad hoc in relation to specific project aims and the training terminates with the project. The NRC course by contrast has official status, broader scope and a standardized syllabus, and the possibility of upscaling to meet national capacity needs.



1.3 CONSULTANT’S TERMS OF REFERENCE

I attended the third delivery of the course (14-25 February 2011) (see Annex 1: Course programme). My terms of reference for this mission (Annex 2: TOR) were to review the course and the training





materials with regard to coherence, sustainability and potential for upscaling. On the assumption that it may be desirable to continue to run the course in its present format while developing a more durable long-term version, I interpreted my terms of reference (TOR) for the course review as:

1. Reviewing the course to see what strengths can be built on and what immediate improvements can be made, so that the course can continue to fulfil its role in its present format.
2. Proposing an agenda for more extensive revision, with a view to upscaling.
3. Outlining the format and delivery possibilities for upscaling the course.

My TOR also included reviewing funding requirements and exploring donor support. I understood however from Ruth Butao (FAO Food and Nutrition Security Policy Advisor in OPC) and Catherine Mkangana that there were good funding possibilities if the course was seen to be effective and to have the potential for upscaling. My time was limited, so I concentrated on the course review.

Most of my time was spent attending the course and talking to the participants. However I also had meetings with the DNHA in OPC, four ministry officials involved in the course development and two groups of extensionists who had participated in the first NRC course and were now applying its lessons in the field (see Annex 3: Mission diary). Due to this schedule, I was only able to participate in about two-thirds of the NRC course sessions. Comments on the 15 sessions I attended are attached as Annex 4.

1.4 GENERAL CRITERIA

A literature review currently being carried out at FAO in Rome identifies some widely recommended features of work-related learning in nutrition and nutrition education.² Some of these features are:

1. Formative research into knowledge, attitudes, perceptions and practices of the trainees.
2. Evaluation of both learning and work impact in relation to the objectives.
3. Addressing real issues in the local context, with illustrations from real-life situations.
4. Aiming at working competence, i.e. expert practice.
5. Real/realistic practice of target skills rather than just advice, information and exhortation ("knowledge transmission").
6. Applying learning to participants' own working situations.
7. Peer-learning and consultation with colleagues.
8. Acquaintance with the professional field and its literature and access to the community of practice.
9. Development of general professional skills.
10. Planning for maintenance and extension of learning.

These criteria, which tie in with the yardsticks of practicality and application to fieldwork expressed by Catherine Mkangana at OPC, are taken as general guidelines in looking at the content and approach of this course.

1.5 A SPECIAL CRITERION: THE PROCESS OF CHANGING PRACTICES

Most of the above criteria relate to the development of working competence. We expect participants to come out of the course knowing more, able to do more, conscious of learning, feeling valued and ready to go. The question is how course design and methodology can translate broad course aims into such outcomes.

One of the biggest threats to effective work-related learning (and effective nutrition education) is the prevalence of "knowledge transfer" approaches based on the assumption that providing knowledge, information and advice and explaining concepts can alone achieve changes in practice. A repeated

² This activity is part of the needs analysis in nutrition education and communication being carried out for FAO (see www.nutritionlearning.net).



finding in reviews of nutrition education research, as well as in evaluations of work-related learning (see Annex 5: Models of nutrition education), is that this approach is ineffective.

By contrast, work-related learning has to be seen to some extent as a behaviour change intervention, responding to some of the demands of behaviour change and skills learning, such as the need for formative research, specific action targets, modelling, motivation, practice, feedback and application. This is all the more important for the NRC course in that it needs to practise what it preaches, i.e. to act as a model for nutrition education approaches in the field. The detailed design of the course therefore needs to respond in some manner to the following questions:

- What do extensionists know and do already? How do we find out? (Informal KAPP enquiry).
- What do extensionists need/want to know/understand/perceive/appreciate and (above all) do?
- What input is needed? What information, examples, models? What can participants supply?
- How can participants practise the main objectives so as to come demonstrably close to familiarity and working competence? What exercises and activities will be useful?
- How can progress be checked and self-checked? (ongoing evaluation).
- How can this learning be applied to the real working situation? How will the obstacles be identified?
- Are the targets reflected in the course evaluation?
- How can we put this process in the hands of the participants?



COURSE DESIGN AND THE COURSE DEVELOPMENT PROCESS

2.1 NEEDS ANALYSIS AND LEARNING OUTCOMES

The NRC's curriculum development policy involves stakeholder consultation. A meeting was held at Kambiri Lodge in August 2010 (NRC/FAO, 2010) to identify needs. It was attended mainly by managers and educators: representatives of the three ministries with extension arms (health, agriculture and gender/community), NRC, Bunda College of Agriculture, FAO, OPC and PATH. Some of the identified

Module	What trainees should be able to do
1. Nutrition policies and programmes in Malawi	outline issues in national policy explain nutrition components of policy <i>describe nutrition programmes in Malawi</i> know ¹ the nutrition situation in Malawi and own area know/understand local knowledge, attitudes, perceptions & practices on nutrition
2. Introduction to Human Nutrition - Concepts and principles	explain importance of good nutrition describe nutrient functions/sources explain the six food groups and classify foods accordingly <u>make appropriate choices & combinations (multi-mix meals)</u> evaluate diets and recommend improvements know your foods (from plot to pot)
3. Nutrition through the life cycle (LC)	discuss factors that affect LC groups <i>describe nutrition problems of LC groups</i> <u>make food choices for LC groups</u> <u>plan diets for LC groups</u> <i>describe gender issues that affect nutrition</i>
4. Food security (HFS = household food security) Facilitate and promote implementation of integrated food and nutrition security programmes	explain the basic concepts of FS <i>identify the elements of food security</i> describe causes of HFS <i>explain current FS interventions in Malawi</i> assess HFS <u>promote activities to improve HFS (not in course outline)</u> evaluate food gardens and suggest improvements promote food preserving for improved diet
5. Growth monitoring and promotion Monitor and promote child growth	describe methods of nutrition assessment <u>assess child growth with MUAC etc.</u> <u>interpret growth charts</u> <i>describe physical signs of different forms of malnutrition</i> <u>counsel mothers on growth, nutrition & health of their children</u> recognize children at risk, and refer them if necessary
6. Hygiene & sanitation (H&S) Promote adoption of appropriate hygiene and sanitation practices among families	explain H&S practices relate H&S to health <u>mobilize communities to adopt H&S practices</u> <u>train communities to care for water & sanitation facilities</u>





Module	What trainees should be able to do
7. Preventing & managing malnutrition	<p><u>facilitate practices for improving nutrition</u> (<i>not in course outline</i>)</p> <p><u>educate communities on diet and childcare</u> (" " ")</p> <p>discuss causes of malnutrition (UNICEF framework)</p> <p>explain consequences of malnutrition</p> <p><u>identify problems associated with malnutrition</u></p>
8. Nutrition education and communication (NEAC) Plan and implement community level nutrition education activities to foster appropriate behaviour + Promote early health-seeking behaviour	<p><u>explain BCC techniques</u></p> <p><u>use BCC techniques</u></p> <p>describe current BCC programmes at community level</p> <p><u>plan, implement, evaluate a community NEAC programme</u></p> <p><i>tackle misinformation in the community</i></p> <p><i>improve talks given to community groups</i></p>
9. Nutrition, HIV and AIDS Promote appropriate nutrition practices among people living with HIV and AIDS	<p>explain relationship of nutrition & HIV/AIDS</p> <p>describe how HIV/AIDS affects nutrition</p> <p>describe how nutrition affects HIV/AIDS</p> <p>describe ENAs required for HIV/AIDS</p> <p><i>factors in planning nutritional interventions for PLWHIV/AIDS</i></p>
10. Coordination and collaboration with other sectors Work collaboratively, network and coordinate activities at field level	<p><i>see opportunities for nutrition promotion in own routine work</i></p> <p><i>know each other's jobs; share knowhow</i></p> <p><i>develop capacity in planning & implementation</i></p> <p><i>apply participatory approaches</i></p> <p><u>plan field activities jointly</u></p> <p><u>share ideas & information on activities; network</u></p> <p><u>identify existing programmes and entry points for coordination</u></p> <p><i>maximise complementarities and synergy among stakeholders</i></p>
Cross-cutting objectives	<p><i>be familiar with best practices in community nutrition</i></p> <p><i>apply learning to own situation throughout</i></p> <p><i>know where to go for information</i></p> <p><i>carry out nutrition education and communication</i></p> <p><i>build and join a community of practice</i></p>

needs concerned management (intersectoral coordination, supervision/guidance, standardization of messages), policy (priority given to nutrition) and some technical knowledge of nutrition-related issues.

General learning outcomes were suggested in an outline of 10 units, summarized in the table above, which correspond to the units in the course programme (the programme's stated objectives are also given in **bold** in the left-hand column). Work-related action targets are underlined. In the final course outline some objectives were added (*in italics*). Suggestions made in this report for further learning outcomes (described later) are given *in red*.

Knowledge, action and changing practices

A core of nutrition knowledge is covered in units 1, 2 and 3, while the remaining units all have specific practical applications. Each projected unit includes knowledge/understanding targets, usually indicated as *explain, outline, describe, discuss, classify*. Most of these lead up to work-related action targets (underlined in the table) - e.g. *make choices, assess food security/child growth, promote, interpret, mobilise, train, facilitate adoption of practices, plan/implement/ evaluate*. Thus there is a strong mix of knowledge and action in the basic design, with the expectation of achieving new or improved working practices.

Changes

Additions made when the course was developed included a greater emphasis on activities in Malawi (2), gender (1) and some clarifications (4). One action objective was added (counselling mothers) but three were removed (promoting HFS, improving nutrition practices and educating communities in diet), perhaps because of perceived overlap with Part 8 on nutrition education.



Further curriculum dimensions

A number of elements which emerged in the course in a dispersed or fragmentary way should probably become major learning outcomes in their own right. Some such objectives are given in red in the table and are elaborated in Annex 6: New learning outcomes. They mainly concern:

- In-depth knowledge of the local situation, the context, the available resources and each other's work.
- The capacity to evaluate, assess and recognize aspects of the situation.
- Remedying and improving existing practices as well as proposing general messages.
- Professional development in project management and acquaintance with established strategies for nutrition promotion (see e.g. Annex 7: Meta-strategies for nutrition promotion).
- Developing a community of practice (e.g. knowledge of best practices, access to information).
- Application of learning to own work practices.
- The effective practice of nutrition education - as a cross-cutting theme.

Nutrition education

Nutrition education as a learning objective needs special mention. It is covered in Module 8, but since extensionists' work in nutrition is largely education, it is inevitably a feature of almost all other modules. This is explicit in references to training, counseling, educating and promoting, "explaining", "describing" and "discussing" aspects of nutrition; and implicit in planning diets, mobilizing communities and facilitating. Developing educational approaches can be seen as the main learning area after nutrition itself.

At the same time the challenges and complexity of nutrition education have only recently been recognized and this recognition has generally not filtered through to government departments, educators or even nutritionists, who continue to perceive nutrition education as simple knowledge transfer. It would therefore be advisable to give considerable extra attention in the course to practical nutrition education approaches, for example:

- Introducing some basic ideas of nutrition education and BCC early in the course;
- Building up the practical application of nutrition education as a cross-cutting activity, with one or two "nutrition promotion" exercises in most of the units (for example, deciding on appropriate messages for each unit and choosing different ways of promoting them);
- Adding onto the main course an extra module on developing nutrition education initiatives (see Annex 8: Cascade and irrigation).

2.2 AUDIENCE

Supervisors

In the first delivery of the course supervisors were included in the target group; teams of trainees from that course, headed by their trained supervisors, appear to be working well together in the field already. The second and third courses did not include the supervisors. Whatever the reason for this division, supervisor training is essential to implementing new coordinated nutrition-related activities, and it will only be possible to make a valid assessment of the impact of the course once supervisors have also done the training and have had time to develop action responses with their teams. Supervisors' training should cover the same ground as that of the extension workers, but should also (a) call for contributions to the formative research, (b) gather suggestions about suitable joint nutrition-related activities and how to evaluate them, and (c) identify some supervisors as future co-trainers, perhaps also allowing for some preliminary rehearsal of training roles.

Schools participation

The stakeholders' group should reconsider the value of including some local teachers in the course audience. In view of the many fruitful links between schools, community and extension services, the importance of sensitizing teachers to nutrition issues and to the work of the extension services, and the value of having some education expertise among the course participants,³ schools could certainly profit from and contribute to a nutrition extension course, especially if course participants were encouraged to plan for passing on their learning to their colleagues.

³ According to the National School Health and Nutrition Strategic Plan (MoEST 2008?) teams of health workers have been oriented and trained as school "health masters" and among other things are responsible for using the revised Malawi Food Guide to promote better nutrition, while under the National Food Security Policy schools are expected to promote "productive school environments".



NGOs

NGOs are constantly mentioned in discussions about extension training. Some NGOs train government extension workers; sometimes their activities overlap with extension work but they do not coordinate; some are carrying out exemplary extension programmes which are of interest to extension services; some have collaborated in the production of relevant publications; some have relevant expertise and are happy to share it. Stakeholders should discuss how best NGOs can be involved in the course itself.

2.3 AUDIENCE RESEARCH

Education “starts from where the learners are” and extensionists already have considerable experience, skills and knowledge. An effective curriculum is based on the mismatch between desired competences and existing competences, together with barriers to performance.⁴ It is important in all work-related learning that there is a constant and systematic flow of relevant information, experience and comment from the trainees. Some of this can and should take place within the course itself, but it would be useful to establish a general entry profile of participants’ knowledge, attitudes, perceptions and practices in relation to the main learning areas of the course, e.g.

- Knowledge of local nutrition issues and dietary practices, nutritional value of foods.
- Understanding/perception of good diet, how dietary practices contribute to malnutrition.
- Current work practices such as existing approaches to education/ promotional activities.
- Skills and competences in HFS assessment, growth monitoring, food preserving, food gardening.
- Understanding of nutrition education and how it works.

This would amplify the 10 questions in the NRC course evaluation questionnaire.⁵

Such a profile, ideally an organic and developing construct, can be built up in a variety of ways (e.g. questionnaire, consulting field supervisors, informal brainstorming among course facilitators and the participants themselves). During the course, establishing existing knowledge and perceptions can become a standard part of each session (the lead-in groupwork in some of the sessions, if well monitored by the instructor, can have this role). This will ensure a closer fit of instruction to learning needs, help to highlight the essential points in the curriculum and also increase the effectiveness and economy of sharing expertise between trainees. It can also be a great aid to educators if their field experience is thin or old.

Such a description can also become a useful course document in itself. It can be circulated for discussion and emendation at the beginning of each course, and reviewed at the end as a form of self-assessment, to see what has changed.

2.4 OVERALL COHERENCE

The programme has a logical order, moving from the overall nutrition picture in the country to technical aspects of nutrition, to applications for different groups and then to particular areas of action (e.g. food security, sanitation, education, HIV).

From the point of view of the consumer (the extension services) these parts need to be linked into a purposeful whole tied to field routines. Some of the target tasks (e.g. assessing HFS and child growth) appeared to be tied to existing work programmes, perhaps with a view to increasing their coverage and impact. Some were more general promotional activities (e.g. mobilising communities for H&S, facilitating improved nutrition practices). Some were explicitly linked (e.g. assessing HFS and promoting HFS activities), and others not – e.g. assessing child growth did not automatically lead to promoting HFS or educating communities on childcare. Nutrition education was diffused through

⁴ For example:

- Re the six food groups we must know how people understand them and act on them. The message may (for example) be misinterpreted to mean equal amounts of all groups, or all groups at every meal. Once misunderstandings are known, particular aspects of the message can be rehearsed by reiteration or by application.
- Re cooking vegetables, it is important to know what participants do themselves and why; and then whether they have a good idea of what is done in their area. Small-group discussion makes a good entry point.

⁵ Knowledge/understanding of government policy; six food groups; the meaning of “food security”; vulnerability of children under 5; causes of malnutrition; malnutrition and HIV/AIDS (see also Annex 9).



almost all parts in the form of promotion, training and facilitation activities but also had its own action programme. It would be useful to have some guidelines from ministries and supervisors at a more detailed level on how nutrition activities should be integrated into existing work routines⁶, and what priority nutrition interventions are most suitable for cross-sectoral interventions, with outlines of possible projects.

Such work-based coherence could be reinforced in several ways during course delivery. For example:

- *Conceptual* Participants set up a framework of nutrition needs, causes and essential actions in the form of a large problem tree, keep it permanently on show and develop it through the course. Individual presenters and facilitators are asked to make explicit connections between their sessions and their framework. Key tables and slides are recycled frequently through the course;
- *Visual / imaginative* Participants create a large illustrated sketch map of a Model Village and use it as a running simulation of individual/household/community needs, causes, solutions and obstacles, with case studies, role-plays etc., calling on their own experience. Points where help is needed could be identified on the map, together with appropriate strategies;
- *Administrative* The course as a whole is represented as a modular course-map, showing how the sections link and build up to changing community perceptions and practices;
- *Performative* The application track (see 3.4 below) builds new learning step by step into a programme of local action.

2.5 EVALUATION AND FOLLOW-UP

Evaluation of training is an important part of the design of this pilot course, not only for its own sake, but also because attracting funding for upscaling will certainly be facilitated by the ability to demonstrate functional impact. Measures should be taken as soon as possible to make the evaluation instruments as effective as possible.

Educational evaluation is popularly divided into four levels (Kirkpatrick 1975) dealing with consumer satisfaction, learning achieved, impact on work practices, and ultimate impact on targets (in this case the nutritional status or dietary practices of the community). The first two levels are generally assessed immediately after the training, and the third and fourth in the workplace, some time after the course, with collaboration between management and the educational provider (in this case the NRC).

1. Assessment of learning

A report on the evaluation of learning was reportedly being produced during my visit. I was not able to see it at the time,⁷ but I was able to look at the marked pre- and post-questionnaires for the second course of the series.

The design of the learning evaluation (see Annex 9: Evaluation of learning) is simple and sensible, aiming to measure changes in understanding on a sample of important points in the course curriculum. There is a pre-evaluation form and a post-evaluation form, with ten parallel sets of questions, while the second questionnaire includes five extra questions on participants' reactions to the course.

Details of recommended changes are given in Annex 9. The coverage of course content could be a little wider and measures could be taken to ensure individual answers. The questions need some revision in order to discriminate better between before and after. The answers, if simply marked right/wrong, do not (according to my rough analysis) show a great increase in understanding. Nevertheless, reading between the lines, the enhanced understanding is there: the answers are richer and better expressed, and there are fewer incomprehensible responses. Rephrasing the questions should do more justice to the learning achieved in the course. For action objectives, an element of continuous assessment could also be considered (e.g. a portfolio as proposed in Annex 10: Application track).

⁶ For example, in discussing crop planning with farmers what nutrition factors should be considered by agricultural extension workers? In growth monitoring routines, when and how should HSAs discuss breastfeeding? Can community workers explore children's understanding of handwashing? How can all three services collaborate on complementary feeding and what particular practices should they focus on?

⁷ I have now received this. It gives evaluation results in some detail for the first two courses.



2. Assessment of participant satisfaction

The participants' reactions to the course can only be described as ecstatic, if uncritical (see Annex 9). Unless this enthusiasm is a gesture of courtesy, it would seem to reflect the genuine quality and interest of the course, and a real hunger for learning, professional exchange and the value and recognition that the course gives to the profession.

3. Evaluation of impact on working practices

Follow-up evaluation was apparently not part of the TOR of the NRC. The needs analysis workshop stressed that the respective ministries should develop a plan for supervision and follow up of the trained staff (NRC/FAO, 2010) which could be used to measure the success of the training programme. A suggestion made in the most recent review meeting (FAO/NRC minutes) was that sectors should agree together on the methodology and incorporate it as part of their routine work. As far as I know, this has still to take place.

In the NRC course design, participants meet at the end of the course to devise action plans for their areas which aim to give nutrition a higher profile in the extension programme. The plans involve briefing supervisors, carrying out awareness activities in the community and contributing to the next workplan. These mainly procedural activities are relatively easy to track, since they are a matter of record; in my two visits to EPAs I found these plans well under way, coordinated by (trained) agricultural extension supervisors.

Qualitative evaluation of improved work practices will require a more substantive activity, for example, a case study, a mini-survey or a monitored mini-project aimed at improving the diet of a group, household or individual through nutrition education (see Annex 10: Application track, second part, and the nutrition education project outlined in Annex 8). If such an activity is set up it may be necessary to establish separate or at least distinctive reporting procedures.

4. Evaluation of impact on health and nutrition behaviour

Since many actions resulting from this training will be informal and fragmentary, it will be difficult to trace them through to specific changes in health and nutrition behavior in the community unless they are harnessed in specific nutrition-related projects or activities with their own M&E components, as suggested above (see also Annex 8: Cascade and irrigation), and prepared in some detail within the course.



COURSE DELIVERY

3.1 THE PROGRAMME

Most of the programme went ahead as planned, with some rearrangement of the sessions and a few minor omissions.⁸ The major omission was the OPC presentation on national nutrition issues, policy and strategy, missing (I understand) for the second time. Judging from the PP slides in my handout, this contained an overview of Malawian nutrition issues as well as an outline of national policy and strategy. These are crucial early inputs and some strategy must be developed to replace this session if OPC is typically too busy to attend. If the course is to be upscaled, there would be ample justification in making a 30-minute video, with related class activities and exercises. Tuning the content to the audience and building motivation might be desirable side-effects of this re-think.

3.2 METHODOLOGY: GENERAL APPROACHES

The course, which was well-managed, followed an established rhythm. Each day began and ended with a prayer. The group appointed its own officials (president, timekeeper, recorder) and time was set aside for housekeeping. At the start of each day there was a summary of the previous day's learning.

Sessions were generally presentations with some kind of visual support, with pauses for exercises, demonstrations or group work. Participants sat at tables around the seminar room, allowing presenters/facilitators to move around the central space if they wished. Two patterns of facilitation predominated:

- a) "Interactive presentation". The presenter talked through points (usually on a powerpoint), elaborating and illustrating them, asking questions and sometimes calling for comments. There was room for questions and ad hoc discussions could develop easily. Quality of illustration, interactivity, interest of the speaker in the audience and vice versa varied quite widely from session to session. "High-interaction" presentations engaged the audience most of the time, while "high-delivery" presentations were largely "teacher talk". In all cases the audience were polite, attentive and interested.
- b) Groupwork followed by presentation. Groups met at the start of the session to discuss some of the main questions and then fed back to a plenary session by presenting their ideas on flipchart sheets. Presenters used this feedback as a take-off point for their presentations, making more or less strong links between group feedback and the content of the presentation.

This basic organization is familiar to all and generally worked well. Some limitations of the format are the sometimes low level of autonomous student activity, the difficulties of checking individual learning and the fact that the audience is essentially at the mercy of the presenters (often very good, sometimes tired or boring). These limitations however can easily be countered, and many of the strong points in the sessions could be multiplied. Annex 11 (Building on the strengths of the existing sessions) calls among other things for more focus on essentials, more participant activity and contribution, more variety and range in the input and more checks on learning.

Particularly important is participant activity: calling on workers' experience, illuminating existing understanding and practising action targets. The course abounds in opportunities for more purposeful small-group activity (for specific suggestions see Annex 4: Comments on sessions attended).

Also very important is ensuring and checking understanding by stepping up monitoring and self-monitoring of individual learning. Since those who don't know don't talk, many doubts and misconceptions are invisible in a standard seminar format. Even when presenters are aware of a gap



⁸ Wild foods, personal hygiene?



in knowledge they may not know how widespread or entrenched it is, or how much mental work and rehearsal is necessary to change it (e.g. the concept of food security). Exercises, activities and frequent checks and self-checks are good mechanisms for bringing this remedial curriculum to the surface.

Presentations are distinguished from one another partly by the quality of the illustration, for example direct advice about known situations (e.g. *Don't let children handle baby rabbits*) or applications of principle to daily life (*So eggs are a wonderful food? So why do we deny them to children?*). These illustrations are a major learning input but seldom appear on the powerpoints. If the course is to be upscaled, an attempt must be made to capture these essential links between theory and practice.

3.3 METHODOLOGY: FOCUS ON ACTION AND PRACTICE

The main change required in the current approach is a more active pursuit of specific objectives, especially action objectives, in line with the original design in which knowledge and understanding are intended to lead to work-related action. The need for this practical orientation was emphasized in the review meeting (NRC/FAO. 2011).⁹ The way to achieve it is mainly through more specific focus on fewer targets, and more (relevant) learner activity.

In a well-structured course with experienced facilitators this shift in approach is not difficult to achieve, but of course each session has its own strengths and weaknesses. In practice, therefore, facilitators should review their own sessions, going through the following processes and bearing in mind some criteria of effective work-related training (see sections 1.4-1.5).

1. *Explore existing understanding and practices* with the participants.
2. *Review learning outcomes*, i.e. translate the broad targets into more specific knowledge, attitudes and competences, looking at how objectives relate to what participants already know and do, what exactly is needed, and how the objectives can be practised within the course.¹⁰ Relevance, need and usability will be more important than subject mastery.
3. *Consider the nutrition education implications* of the session and build in an exercise in which course members identify messages for the community and discuss how they can be activated.
4. *Narrow the focus* Reduce the complexity and quantity of information so as to highlight essential points and increase relevance; refer briefly to background information which can be covered in greater depth in a handout.
5. *Align objectives, activities and evaluation* Make sure that action objectives are practised in activities and checked in the learning evaluation, so that objectives, activities and evaluation are all "aligned" (Biggs 1999).
6. *Relate the input to real life* Include illustrations, case studies, models, examples, making sure that the voice of experience is heard (including from practitioners and trainees).
7. *Set up exercises and activities* for practising both knowledge/understanding and work actions (some suggestions are made in notes on specific sessions). To bring the practice closer to reality

⁹ When presenters touched on how participants might adapt their jobs, the response was immediate. For example, when a speaker urged sampling a few households to explore food security on the ground, a course member mentioned that farmers often tried to hide the fact that they did not have enough food. In this exchange, as in several others, we can see pointers to a fully functional work-related syllabus.

¹⁰ For example, for "growth monitoring and promotion" (Unit 5 in the table of learning outcomes)

1. *What do they already know and do?* Can it be assumed that HSAs (health extensionists) have already been trained to assess child growth? If so they themselves can demonstrate it to the others. Does everyone need to be able to assess child growth? (in which case they need proper training). Or do they need only to understand what is done? (in which case they could practise by giving running commentaries to each other while watching a demonstration).
2. *What do they need to know and do at work?* Some possible answers are that all extensionists should:
 - know the incidence of stunting in their district (and have some data)
 - identify the dietary lacks which contribute to stunting and malnutrition
 - explain the dangers of stunting to parents and discuss causes with them
 - recognize possible cases of stunting and malnutrition (knowing that they cannot be sure), check on diet and growth charts, and refer parents to the health centre if appropriate OR discuss on a case-by-case basis with other sectors.

All these targets can be practised within the course. It is particularly important that trainees can *recognize* undernutrition and hidden hunger in real life (from behaviour as well as from appearance) – especially since most of them are probably not in the habit of doing this – and also that they are aware that they may make mistakes (e.g. assuming that small size means stunting).



include a lot of micro-teaching, role-play, stories, simulations and discussions, including scenarios generated by participants.

8. *Make sure that practical issues are aired and discussed* (what to do and how to do it) giving a lot of attention to potential obstacles/barriers.
9. *Monitor learning*, including plenty of self- and group-monitoring (e.g. with personal diaries, group quizzes, pair feedback, discussion, class recaps etc).

3.4 METHODOLOGY: APPLICATION TRACK

It is hoped that the new nutrition learning will bear fruit not only in informal ad hoc counseling but also in organized projects and activities. This area of planned action needs to be marked out and tackled in parts of the course which focus specifically on applying learning to participants' own situations, trying out both the new nutrition emphasis and the new collaborative partnership. At the moment this dimension needs to be greatly enlarged.

The suggestion is to add a new "application track" running parallel with the rest of the course (see Annex 10: Application track). It should relate new learning step by step to field activities, with the aims of reinforcing learning, raising awareness of the potential of trainees' situations and developing professional skills. The trainees work through the stages of project development in intersectoral teams, applying their learning to their own communities, and building up a portfolio of short documents; then present their proposals to other teams. This activity can contribute to the suggestions participants are expected to make for their next district plan and can result directly in a small intervention which can be evaluated for impact.

3.5 METHODOLOGY: NUTRITION EDUCATION AND COMMUNICATION (NEAC)

Since education is the mainstay of extensionists' work in nutrition, the course members' concept of nutrition education is of great importance. Judging from the talks I had with participants, the prevailing view of community nutrition education is of knowledge transfer and is based on a chain of assumptions (see Annex 5):

- That if people are told, they will know and understand.
- That if they know, they will want to change.
- That if they know what is needed, they will also know what to do.
- That if they know what is good, they will act, even if they are alone in their convictions.
- That they will continue to act, even if the actions are time-consuming, the results are a long time coming and outcomes are not visibly linked with the actions.

Although course members often mentioned non-adoption they did not often speak of exploring and explaining it. When asked about their nutrition education plans, they mainly spoke of adding nutrition advice to their existing work dialogues, and giving talks to community groups.

These perceptions and practices need to be expanded by this course. The course presents the theory and illustrates it well with presentations of TIPS, the Hearth Model and stages-of-change theory; but it needs to allow time for participants to work out what these approaches mean in practice and to try their hands at them, and to prepare them to continue experimenting in the field. As suggested in 2.1, ideas of nutrition education should be introduced early in the course, nutrition promotion should be practised in most sessions, and an extra module should be devoted to devising a small nutrition education intervention (Annex 8). Since information transfer concepts are pervasive and a major barrier to effective education, it would probably also be worth while also to include some advocacy practice.

3.6 THE PRESENTERS

The course I attended had fewer presenters than usual, doing more of the work, because of a sudden deluge of important workshops. The three main presenters therefore had to take on much of the burden of coursework. As long as the course remains in this format, it would be good to do whatever is possible to ensure a variety of facilitators by inviting outside speakers, preparing participants to



contribute, calling on experienced field programme officers, and arranging debates and discussions between interested parties. This would also allow for trying out proxy presentations in preparation for scaling up.

3.7 PRACTICALS AND FIELD TRIPS

On the days I was present there were short practical sessions on preparing infant porridge, making jam and planning meals, and participants went on a field trip to a severe malnutrition rehabilitation centre. Also scheduled on the programme were:

- Assessment of HFS.
- Clinic visit for use of anthropometry tools.
- Water treatment field visit.
- Visit to CTC/NRU Likuni Hospital.
- Field visit to a model village.
- Case studies on dietary management for opportunistic infections.

I am not sure how many of these sessions took place, since I was not always present and I was not able to check with the course organizers.

The practicals I was aware of were enjoyed by the participants but I was led to question whether they embodied practical learning essential to the job. I assume that many of the participants were already versed in the target skills, while the others could not learn enough in a half-hour session to make a difference in their work. The purpose of the practical sessions should probably be re-thought in order to:

- a) Identify what technical skills really need to be learnt and practised to a level of professional competence and which ones simply need to be understood and appreciated. If there is a need for real competence then it should be determined how this can be arranged (e.g. one-to-one demos by course colleagues, followed up by further practice on location once the course is over).
- b) Identify what other competences need active practice (e.g. advising on dietary practices, building food knowledge, evaluating food gardens) and practise them throughout, not only in special practicals.

The field trip to the rehabilitation centre made a strong impression. There is a prima facie case for seeing relevant activities at first hand (*Why can't we see this done?* asked one participant about child growth monitoring). Such visits are powerful learning experiences, if the rationale is strong, if they are well prepared in a spirit of enquiry, and if they are well followed up, with lessons drawn and passed on to others. Once courses are being delivered locally, participants should be able to invite each other to their own workplaces for a firsthand look at what is done there.

3.8 DOCUMENTATION

Course manual

The powerpoint slides have been converted into normal texts and included in a take-home handout, which is still in draft. The final version will also be distributed to those who have already taken the course, who are anxious to receive it. Ultimately, however, the take-home Manual should be reviewed and revised so as to become an essential vade mecum on nutrition for all extension workers, with basic data, practical actions, tips, guidelines, reference information etc. Facilitators, course participants and other stakeholders should be asked to suggest the material to be included.

Course programme

The course programme is nicely set out. It should probably contain a statement of the overall course methodology and a course map. Facilitators should check "their" pages to ensure that they are accurate and that their objectives are achievable within the course. The list of equipment for each session may be unnecessary. The references make a useful basic reading list: efforts must be made to make some of them available to extension workers in the field (see **Other literature** below).



Course materials

Extra elements to be considered when the course is upscaled are:

- Illustrations, examples and anecdotes given by the lecturers (i.e. their professional experience).
- Outline instructions for class activities, practicals and the preparation and follow-up of field trips.
- Outlines of assignments and suggested feedback.
- Lists of reference resources and educational resources.

Other literature

There appears to be a fair amount of useful literature in the environment (see Annex 12: Available literature), including reference materials (e.g. food lists and food tables), full courses (e.g. a training manual on ENAs for infant and child feeding) and educational materials (e.g. the food groups poster). However, copies are scarce and very little is available to extensionists, who also do not have access to the Web. Any future project should include funding a high-utility mini-library of about a dozen publications (selected by course developers), to be lodged in each participating EPA (Extension Planning Area). The cost in relation to the course itself would not be high. To ensure that these are used and valued, however, trainees must also be familiarized with the materials during the course.



REVISION AND UPSCALING

The four current pilot courses will train only about 120 extension workers. The need for upscaling is indicated by the very large number of extension workers in Malawi (approximately 3000 in Agriculture alone) and the limitations on the time and availability of the lecturers and organizers at NRC. To upgrade capacity on a national scale would require about 200 such courses in their present format.

Upscaling has implications for learning materials, course delivery and sustainability. Some challenges are to:

- Ensure some standardization (quality and consistency of content) for all presentations of the course, e.g. set materials and approaches which will reliably achieve the outcomes; failsafe instructions for activities.
- At the same time, respond to local experience and ensure freshness, interest and ownership.
- Integrate theory and practice and benefit from professional experience.
- Ensure that the course is open to improvement through evaluation, feedback and new input.
- Identify delivery approaches which will facilitate learning and suit clientele and trainers.
- Develop a system for identifying and training new trainers.
- Develop a community of practice through shared experience, information flow and continuing professional development.

4.1 DEVELOPMENT OF MATERIALS

Template

To meet these challenges, good materials are essential. A good start is to produce a template or set of guidelines for further course development. These could include:

Overall

- An emphasis on work-related activity supported by new knowledge.
- A course map displaying the relationship between the parts.
- Potential for high-interest self-investment (e.g. through applying learning to own situations).
- Evaluation and self-evaluation of learning.

For each unit

- A core of essential new high-utility knowledge.
- Very specific work-related action targets.
- Extensive illustration from real life (international, national and local).
- Exploration and use of the experience, knowledge and insights of participants and facilitators.
- Exercises and activities to practise understanding and target competences.
- Frequent active recycling of new learning.
- A high level of discussion and debate.
- Course “products” which will be of direct use in the field and can be recycled in future courses.
- Familiarization with available literature.
- Systematic application of learning to workers’ own situations, including case studies, surveys and projects.

Format

The template should also specify the format of the materials. Some widespread formats are:

- *Outline lectures* for use by presenters (Ex. Pronutrition training course on nutrition for HIV+ mothers in Uganda) http://www.pronutrition.org/files/NHANM_Training_Manual_Complete.pdf
Comment on suitability: Over- academic and provides no practice.





- “Tell and test”: information texts with short follow-up knowledge-based tests (Ex. much untutored online learning material).
Comment on suitability: A poor learning model, does not aim at working practices.
- *Text with outline exercises/activities* (Ex. Draft chapter on nutrition education at www.nutritionlearning.net).
Comment on suitability: The basic minimum, but needs a very experienced facilitator.
- *Two books* Coursebook/Manual with basic information and exercises and activities + Facilitators’ Notes with course activities, answers and further resources. (Ex. most schoolbooks).
Comment on suitability: All the ingredients but no equity: learners do not have access to all the resources.
- *Fully self-standing self-explanatory course* with textbook/manual, exercises and activities and how to do them, comments on answers, further resources, all included (Ex. the FAO Nutrition Education Curriculum Planning Guide).
Comment on suitability: The most flexible, effective, participatory, self-sustaining, “rights-based” format: it can even be used by self-study groups; also the most demanding to produce.

4.2 COURSE DELIVERY

The two main approaches to upscaling are ODL (open and distance learning), and various forms of training of trainers (ToT) to re-deliver the course. The options are set out below.

ODL (open and distance learning) Can be IT- or paper-based, with or without tutor back-up.

- *Online ODL* offers the greatest possibilities for flexibility, communication, access to the international community and maintenance of learning, especially with a fully social Web2 platform such as Moodle. By all accounts, unfortunately, online courses are not feasible for Malawian extension workers due to lack of electricity, hardware, internet connectivity and IT capacity in the potential students. Not even CDs can be used, except possibly for packaging materials for facilitators, who are more likely to have PCs.
- *Paper-based ODL* is the traditional “correspondence course”, with assignments and tutor feedback exchanged by post. The social dimension is largely lacking, although the course can be enlivened with ML (mobile learning using SMS or telephone calls). This model is still used with some success for health care topics by AMREF, the largest distance-learning African organization in the area of health education. Generally, however, people will only do such courses if passionately interested or if there is some recognized career certification. Moreover the lack of group interaction makes them unsuitable for this particular course.
- *Blended learning* has an ODL element and a face-to-face element, which may be residential. Many international and national university courses are run on this basis, usually as a sandwich. The existing NRC course, with its built-in follow-up project, already has an element of blended learning. This might be extended to include a small amount of preparatory work and an extension of the work-based project, with thorough documentation and monitoring. An extensive course delivered in the districts would have much greater opportunities for hands-on assignments.
- *Extensive or intensive courses* Intensive in-service courses arouse enthusiasm and create a sense of shared purpose; however these sensations tend to evaporate gradually after participants disperse and return to their normal environments. Extensive courses lend themselves better to the application of learning, since there is more time to digest input and assess its practicality; changes can be tried out in real circumstances and discussed at following sessions. There may however be problems of attendance or commitment if the course lasts too long. Malawian experience should be consulted and optimum blends should be experimented.

Training of trainers

Whether ODL or face-to-face, new trainers will be needed to run new courses. The process of developing methodology, establishing standards and evaluating course impact needs to be established by practice and led by good training materials which clearly embody the training aims, content and activities.



Training of trainers often consists of lecture sessions aiming at knowledge transfer. These are largely inappropriate to work-related learning, which is mainly concerned with changing practices through facilitating a series of experiences and activities, and is embedded in social and physical contexts. In line with skills learning principles, trainers of such courses need to learn how to do the training by doing it.

New trainers should take part in the course as learners and observers, then assist as facilitators in a second course, and finally operate independently, training further facilitators in their turn. This process depends not only on exemplary model facilitators and practice, but very much on quality learning materials. Ideally the training is assisted with video programmes which model and explain the approach required, but this an expensive and demanding undertaking.⁹

It has been proposed that supervisors from the sectors would be trained as a team of trainers. If the materials are good, there is no reason why others could not be brought in as regular trainers (e.g. from district offices or health services), provided they go through the same training process. Again, if the materials are good, some sessions, or even complete courses, may also be run by the trainees themselves, in groups of any size.

⁹ It should perhaps be mentioned that most of the NRC facilitators have star quality!



SUGGESTED NEXT STEPS

5.1 OVERALL COURSE DESIGN

The stakeholders should review and make decisions on the following aspects of the course design.

Institutionalization

The initial concerns (2.1) about intersectoral coordination, supervision and standardization of messages may still need to be fully addressed. It seems relatively easy for extension workers to collaborate in the field, but some ministerial guidance is needed on how nutrition activities should be integrated into existing work routines, what priority nutrition interventions are most suitable for cross-sectoral interventions (with outlines of possible projects), and how they will be supervised, reported, monitored and evaluated. These will increase the coherence of the course, give it more action focus, and allow it to demonstrate impact.

Training of supervisors

Training the supervisors of the already trained extension workers must go ahead as soon as possible, so that activities in the field can be coordinated. This training should also enable supervisors to contribute to the existing curriculum, make suggestions about joint nutrition-related activities and how to evaluate them, and observe and perhaps imitate some training sessions with future facilitation in mind.

Audience

Consideration should be given to including teacher representatives from local schools in future courses, with a special mandate to pass on their learning to their colleagues. The possible role of NGOs in the course should also be considered.

Audience research

Steps should be taken both outside and inside the course to develop a full profile of frontline workers' knowledge and understanding, attitudes, practices and perceptions. Maintaining and developing this learner profile should become part of the course manager's task for each course delivery.

Learning outcomes – broad and specific

The existing broad learning targets should be reviewed to include some of the proposals made in Section 2.1 and to give a higher profile to nutrition education approaches and activities.

Course coherence

Course organizers/developers should suggest ways of increasing course coherence and making the practical application of the course thoroughly visible to participants (see e.g. 2.4).

Upscaling

A template for developing the course materials needs to be formulated (see 4.1), in consultation with professional course-writers who have experience of work-related learning. The guidelines should include a general specification of the format of the proposed course materials. The eventual form of course delivery and training of trainers also need to be decided and shared with all presenters/facilitators, so that they know what they are working towards.

5.2 DEVELOPING COURSE MATERIALS

Adapting the course materials is a considerable job, which will require a separate small project.





First revision

It is suggested that the present course should continue to be delivered while the roll-out is organized and the materials are prepared. During this time it should be revised by the organizers and presenters so as to:

- Accommodate recommendations of the stakeholders and respond to feedback.
- Explore participants' knowledge, attitudes, perceptions and practices more fully (see sections 1 and 2 of this report).
- Accommodate more specific outcomes, more activities and practice and more work-related application, as suggested in sections 1 and 2 of the report; rethink the need for practical sessions and decide what really needs to be practiced (e.g. nutrition education approaches; food knowledge).
- Capture the approaches and contributions of the current presenters (organized activities, illustrations and professional insights), which are not reflected in the powerpoints.
- Make a selection of existing literature to included in the course manual or in a "mini-library" for ENAs, and decide how it will be introduced and used in the course.
- Improve the instrument for the evaluation of learning.
- Decide what independent course preparation and in-course assignments can be required of course members.
- Develop the course follow-up project into an independent assessable nutrition-related activity (e.g. the NE project in Annex 8) which will yield clear evidence of improvements in nutrition promotion practices.

Writing up

1. Course writer(s) sit in on further deliveries of the present course in order to capture presenters' extra comments, note connections between the sessions, collect further material, develop exercises and activities and write instructions for them, gather participants' experiences, develop substitutes for missing sessions, and perhaps organize short "talking head" videos to be included in powerpoints.
2. The writers produce a draft which is reviewed by NRC and the course development stakeholders, revised, piloted by NRC and then revised again.



PROGRAMME OF ACTIVITIES FOR IN-SERVICE TRAINING FOR FRONTLINE EXTENSION WORKERS IN FOOD AND NUTRITION SECURITY

Date	Day	Topic No.	Time	Duration (hours)	Activity	Facilitators	Institution contact details
Monday 14/2/11	1		08.00-09.00	1	Pre-training assessment	Gabriella, Marion, Naomi	NRC
			09.00-10.00	1	Introduction to human nutrition 1. Definition of terms and concepts Nutrients, their functions, sources and deficiency signs and symptoms	Naomi	NRC
			10.00-10.30		Tea break		
		2	10.30-11.30	1	Introduction to human nutrition (contd.) Nutrients, their functions, sources and deficiency signs and symptoms	Naomi	NRC
			11.30-12.30	1	Composition of foods (nutrients and anti-nutritional factors)	Gabriella	NRC
			12.30-13.30		Lunch break		
		2	13.30-14.30	1	Opening remarks: • Principal (NRC) • FAO Representative • OPC Representative • Group photo	Naomi	NRC
			14.30-16.30	2	Practical 1: Calculating nutrient content of food using food composition tables	Gabriella	NRC
Tuesday 15/2/11	2	2	08.00-10.00	2	Nutrition policies and programmes in Malawi • National nutrition policy and strategic plan • Infant and young child feeding policy • Sectoral policies (ASWAp, Health SWAp, NESP, etc) Nutrition programmes in Malawi	H Mdyetseni	OPC
			10.00-10.30		Tea break		
			10.30-12.30	2	1. The six food groups 2. Why we need to eat well Practical 2: Meal planning using multi-mix principle - Marion	Marion, Inglet	NRC
			12.30-13.30		Lunch break		
			13.30-15.30	2	Nutrition throughout the lifecycle 1. Nutrition before and during pregnancy 2. Nutrition during lactation	Naomi	NRC
Wednesday 16/2/11	3	3	08.00-10.00	2	3. Infant and young child feeding 4. Feeding children of different age groups (0-5 months, 6-24 months)	J. Guta/Gabriella	PATH/NRC
			10.00-10.30		Tea break		
			10.30-12.30	2	Nutrition throughout the lifecycle (contd.) 1. Feeding sick infants and young children	Gabriella	NRC

Course programme



				12.30-13.30	Lunch break			
				13.30-16.30	<ol style="list-style-type: none"> Nutrition for school aged children Nutrition during adolescence - Teenage pregnancies Nutrition during adulthood Nutrition for the elderly <p>Practical 3: Planning meals for different age groups and nutrient requirements - with emphasis on complementary foods - Marion</p>	3	Marion, Ingjet	NRC
Thursday 17/2/11	4	4	08.00-10.00	2	<p>Food security</p> <ol style="list-style-type: none"> Definitions of food security Basic causes of household food insecurity Important elements of food security Factors that promote household food stability 	2	Stella, Kurmwenda	NRC
				10.00-10.30	Tea break			
		4	10.30-12.30	2	<p>Food security (contd.)</p> <ol style="list-style-type: none"> Food processing, storage and preservation 	2	Naomi	NRC
				12.30-13.30	Lunch break			
		4	13.30-15.30	2	<p>Small livestock production</p> <p>Aquaculture/fish keeping</p> <p>Use of wild foods</p> <p>Integration of food security, health and nutrition interventions</p> <p>Practical 4: Assessment of household food security using HFIAS and DDS</p>	2	T. Pasani	NRC
Friday 18/2/11	5	5	08.00-10.00	2	<p>Growth monitoring and promotion</p> <ol style="list-style-type: none"> Definition of terms and concepts in nutrition assessment Methods of assessing nutritional status 	2	Gabriella	NRC
				10.00-10.30	Tea break			
		6	10.30-12.30	2	<ul style="list-style-type: none"> weight, height, MUAC, age <p>Dietary assessment - 24 hour dietary recall, food records</p>	2	Gabriella	NRC
				12.30-13.30	Lunch break			
	5	6	13.30-15.30	2	<p>Growth monitoring and promotion (contd.)</p> <ol style="list-style-type: none"> Importance of growth monitoring Growth monitoring and developmental milestones Brief discussion of physical signs of malnutrition Interpretation of child growth and use of growth charts as an educational tool <p>Practical 6: Use of anthropometry tools - NRC clinic</p>	2	Kathumba	Min. of Health



Monday 21/2/11	6	6	08.00-10.00	2	Hygiene and sanitation 1. Personal hygiene 2. Clean and safe water in the home 3. Food safety 4. Hygiene around the home Practical 5: Water treatment and field visit	Paul Sakanda	Malawi College of Health Sciences
			10.00-10.30		Tea break		
	7	7	10.30-12.30	2	Preventing and managing malnutrition 1. Conceptual framework on causes of malnutrition	Gabriella	NRC
			12.30-13.30		Lunch break		
			13.30-15.30	2	Preventing and managing malnutrition (contd.) Nutrition disorders of public health concern	Naomi	NRC
Tuesday 22/2/11	7	7	08.00-10.00	2	Preventing and managing malnutrition (contd.) 2. Approaches and programmes for preventing malnutrition Practical 7: Field visit to CTC/NRU - Likuni Hospital	Marion	NRC
			10.00-10.30		Tea break		
	8	8	10.30-12.30	2	Nutrition education and communication 1. Introduction to communication skills 2. Behaviour change and communication 3. Communication techniques 4. Evaluation of communication performance	Stella	NRC
			12.30-13.30		Lunch break		
	7	8	13.30-15.30	2	Nutrition education and communication (contd.) 5. Definition of nutrition education 6. Effective communication to improve nutrition • How to conduct nutrition education and communication	Marion	NRC
Wednesday 23/2/11	8	8	08.00-10.00	2	7. Common approaches in behaviour change nutrition programmes • Positive Deviance Hearth (PD/Hearth)	Marion	NRC
			10.00-10.30		Tea break		
	8	8	10.30-12.30	2	8. Common approaches in behaviour change nutrition programmes • Trials of Improved Practices (TIPS) Practical 8: Field visit - model village; planning and conducting nutrition fairs and case studies	Gabriella	NRC
			12.30-13.30		Lunch break		
	9	9	13.30-15.30	2	Nutrition and HIV and AIDS 1. Link between nutrition and HIV and AIDS Infant and young child feeding in the context of HIV (PMTCT)	Marion	NRC

Course programme



Thursday 24/2/11	9	9	08.00-10.00	2	Nutrition and HIV and AIDS 1. Nutrition requirements for PLHIV Nutrition programmes for PLHIV and ART	Naomi	NRC
			10.00-10.30		Tea break		
	9	10	10.30-12.30	2	Nutrition and HIV and AIDS 1. Herbal remedies for HIV and AIDS 2. Dietary management for opportunistic infections Practical 9: Case studies	M. Lwanda & F. Phiri	OPC/MOAFS
			12.30-13.30		Lunch break		
			13.30-15.30	2	1. Coordination and collaboration with other sectors 2. Roles and mandates of different sectors in nutrition Definition of collaboration and coordination 3. Multisectoral nature of nutrition		
Friday 25/2/11	10	10	08.00-10.00	2	4. Monitoring and evaluation (reporting formats and structures) 5. Nutrition related programmes in Malawi by sector Practical 10: Develop a take home project on how to coordinate and collaborate on food and nutrition security programmes and activities in respective areas of work	M. Lwanda & F. Phiri	OPC/MOAFS
			10.00-10.30		Tea break		
			10.30-12.30	2	Individual task: Participants to work on their projects and prepare a presentation for the Group	M. Lwanda & F. Phiri	OPC/MOAFS
			12.30-13.30		Lunch break		
			13.30-15.30	2	1. Presentations on projects that the participants have developed 2. Evaluation of the training process	M. Lwanda, F. Phiri, Gabriella, Marion, Naomi	NRC/OPC/MOAFS
			15.30-15.45		Recess		
			15.45-16.45	1	Closing remarks: • Principal (NRC) • FAO Representative • OPC Representative	Gabriella, Marion, Naomi	NRC

ANNEX 2

TERMS OF REFERENCE



Food and Agriculture Organization of the United Nations Terms of Reference for Consultant/PSA

Job title	International consultant (COF.REG), Nutrition Education/Training and Curriculum Development		
Division/Department	AGN		
Programme/Project Number	UNJP/MLW/039/EDF		
Location	Rome, Italy (with travel as needed)		
Expected Start Date of Assignment	Within existing contract the consultant will be hired for 15 days from 13 to 27 February 2011 *	Duration	15 days
Reports to	Ms Ellen Muehlhoff	Title	Senior Nutrition Officer, AGNDE

GENERAL DESCRIPTION OF TASK(S) AND OBJECTIVES TO BE ACHIEVED

Terms of Reference: UNUP/MLW/039/EDF:

Under the overall supervision of the Senior Officer, AGNDE, Nutrition and Consumer Protection Division and in close collaboration with the Food Security and Nutrition Policy Adviser, Ms. Butato, the Consultant will undertake the following activities:

- Participate in and review the in-service training course of extension staff at NRC from 14 to 25 February and make recommendations on its coherence and sustainability.
- Review current training materials and make recommendations on possible improvements (i.e. comprehensive package of trainer's background notes and learners' materials).
- Review the training from the point of view of potential for upscaling and accelerating it to achieve broader coverage.
- Review funding requirements and explore donor support for preparing a comprehensive and coherent training package and training strategy with an emphasis on upscaling the number of trainees, including the potential use of modern technologies.
- Prepare an end-of-mission report with recommendations for next steps.

Travel Dates: Rome-Lilongwe 13 February 2011
Lilongwe-Rome 26/27 February 2011

*** These TORs for 15 days between 13-27 Feb. 2011 are in addition to existing TORs (70 days WAE from 19 Nov. 2010 to 31 March 2011).**

KEY PERFORMANCE INDICATORS

Expected Outputs:	Required Completion Date:
1. Participate in the in-service training course in Lilongwe;	27 February 2011
2. Review existing training materials and training;	
3. Prepare report with recommendations for next steps	

REQUIRED COMPETENCIES

Academic Qualifications			
Advanced University degree			
<ul style="list-style-type: none"> • Technical Competencies and Experience Requirements; experience in nutrition and education; experience in writing and editing; experience in education curriculum development • Familiarity with FAO (and in particular of AGN) structure, activities and capacities • Training and facilitation skills 			



ITINERARY

Dep. Rome Fiumicino	13.02.11	00.05	Air Ethiopia
Arr. Addis Ababa	13.02.11	07.50	
Dep. Addis Ababa	13.02.11	09.45	Air Ethiopia
Arr. Lilongwe	13.02.11	12.20	
Dep. Lilongwe	26.02.11	15.05	Air Ethiopia
Arr. Addis Ababa	26.02.11	19.45	
Dep. Addis Ababa	27.02.11	00.20	Air Ethiopia
Arr. Rome Fiumicino	27.02.11	04.45	

DIARY

Monday 14 February

- 08.30-11.00 Met Ruth Butao, FAO Food and Nutrition Security Policy Advisor, the FAO Representative Pinit Korsieporn and other FAO staff, including Vincent Kadzitze, Nutrition and HIV Project Officer, who acted as a guide, interpreter and organiser throughout my visit. Mr Korsieporn advised meeting Catherine Nkangama, Director of Nutrition, HIV and AIDS of the OPC (Office of the President and Cabinet), the course organizers from the NRC (Natural Resources College), representatives of the four relevant ministries, past trainees from the first course, and Stacia Nordin (GIZ Quick Win School Health and Nutrition, Technical Advisor). Most of these meetings were organized for the second week of my mission.
- 11.30-16.00 Attended the extension course at NRC. This was the third delivery of the course, training extension workers from Nkhata Bay district in the Northern Region. The day's programme included the official opening ceremony and Parts 1 and 2 of Introduction to Human Nutrition. A report on the course evaluation is promised. Most of my time in the first week was spent attending the course, talking to participants and presenters, and writing up notes.

Tuesday 15 February

- 08.00 – 16.00 Participated in the NRC course: sessions on food composition, the six food groups and multi-mix meals, and nutrition through the life cycle.
- 16.00 – 16.30 Met with the NRC team Gabriella Chiutsi-Chapota, Naomi Mkandawire and Marion Sanuka. Discussed my TOR and raised some questions re packaging of the course for further delivery and upscaling, possible formats, the form of support materials (e.g. manual, handouts), impact evaluation and the relation of the course to the field programmes. I promised to go through my comments with them before leaving.
- 18.00-20.00 Wrote up notes.

Wednesday 16 February

- 08.30-16.30 Participated in the course: sessions on feeding young children, nutrition for other groups.
- 18.00-20.00 Wrote up notes.



Thursday 17 February

08.30-16.30 Participated in the course: sessions on food security, food processing, storage and preservation, growth monitoring and promotion. In the absence of the forthcoming evaluation report (computer crash?) I asked to see evaluation forms completed by previous courses.

18.00-20.00 Read documents and wrote up notes.

Friday 18 February

08.30-16.00 Participated in the course: sessions on Hygiene and sanitation and small livestock production.

19.00-21.30 Wrote up notes and analyzed evaluation responses from the second course.

Saturday 19 February

10.00-15.30 Visited Stacia Nordin of GTZ, together with Charlotte Walford, nutrition consultant with CIDA.

Sunday 20 February

Wrote up notes and finished analysis of course evaluation responses

Monday 21 February

Much of my time in the second week was spent on visits and interviews. I therefore missed several important sessions of the course.

08.30 Interview with Catherine Mkangana, Director of Nutrition, OPC

09.30 Meeting with Ruth Butao, FAO Nutrition Adviser attached to OPC

10.30 Emergency trip to dentist

13.00 Interview with Galitso Kang'omde, Chief Nutritionist, Ministry of Health

14.30 Interview with Dr Charles Muziya, Deputy Director, Nutrition Unit, Ministry of Education

16.00 Interview with Margaret Rwanda, Dep. Director of Food Security and Nutrition, Ministry of Agriculture

18.00-20.00 Wrote up notes

Tuesday 22 February

09.00 Interview with Pickmore Swira, Principal Nutritionist, Ministry of Gender, Children and Community Development.

10.30-16.00 Participated in NRC course: sessions on communication and nutrition education.

16.00-17.00 Brief meeting with NRC course organizers.

18.30-20.00 Wrote up notes.



Wednesday 23 February

- 08.00-11.00 Wrote up notes (the course was on a field trip to a malnutrition rehabilitation centre).
- 12.00-15.00 Visited Mkwinda Extension Planning Area to talk to trainees from the first NRC course.
- 16.00-22.00 Prepared a debriefing powerpoint .

Thursday 24 February

- 09.00-11.00 Visited Chileka Extension Planning Area to talk to a second group of extensionists.
- 12.00-13.30 Met Prof Beatrice Mtimuni from Bunda College of Agriculture and Ruth Butao in Lilongwe to talk about the NEAC training needs analysis and the training course for extension mid-managers at Bunda College.
- 14.00-15.30 Participated in the course: jam-making practical session.
- 15.30-16.00 Met with NRC organizers to review debriefing powerpoint: meeting eventually reduced to 8 minutes.

Friday 25 February

- 08.30-08.45 Paid a leavetaking courtesy call on the FAO Representative.
- 09.00-15.00 Participated in workshop, including closing ceremony and award of certificates.
- 15.00-17.00 Meeting (on and off) with course organizers and Ruth Butao.
- 18.00-19.30 Wrote up notes.

Saturday 26 February

- 10.30-12.00 Wrote up notes.

PEOPLE MET

Ruth Butao, FAO Food and Nutrition Policy Adviser attached to OPC
Pinit Korsieporn, FAO Representative Malawi
Vincent Kadzitcha, Nutrition and HIV Project Officer, FAO
Gabiella Chiutsi-Chapota, Head of Department, NRC
Marion Sanuka, Lecturer, NRC
Naomi Mkandawire, Lecturer, NRC
Other facilitators on NRC course
Catherine Mkangana, Director for Nutrition, HIV and AIDS, OPC
Galitso Kang'omde, Chief Nutritionist, Ministry of Health
Dr Charles Muziya, Deputy Director, Nutrition Unit, Ministry of Education
Margaret Rwanda, Dep. Director of Food Security and Nutrition, Ministry of Agriculture
Pickmore Swira, Principal Nutritionist, Ministry of Gender, Children and Community Development
Stacia Nordin, GIZ Quick Win School Health and Nutrition, Technical Advisor
Charlotte Walford, Nutrition consultant, CIDA
Course participants, third in-service course in food and nutrition security for frontline extension workers
Extension teams at Mkwinda Extension Planning Area and Chileka Extension Planning Area (trainees from the first NRC course)



DOCUMENTS READ

- Dept of Nutrition, HIV and AIDS, OPC. 2010. NECS (National Nutrition Education and Communication Strategy): 1,000 Special Days: Preventing Child Stunting in all Malawian Families.
- Dept. of Nutrition, HIV and AIDS/FAO. Nutrition Capacity Assessment in Malawi Report. December 2009.
- Dept. of Nutrition, HIV and AIDS, OPC, Malawi. Training curriculum for nutrition, HIV and Aids community workers, 2009 (?).
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- Dept of Nutrition, HIV and AIDS. 2010? Adequate nutrition. Key to economic growth and prosperity. CD collection of nutrition documents.
- Mtimuni, B.M., V.M. Chilima, M. Shawa, A.A. Kalimbira, B. Kumwenda, M. Mkwamba, Z.K. Mwandira. 2003. Community Nutrition Training Manual, Ministry of Gender and Community Services.
- Nordin, Stacia. 2005. Growing and Eating More Using Less. WFP Malawi.
- NRC/FAO Minutes of FAO/NRC inservice training review meeting, 10.02.11.
- NRC/FAO. Report of a consultative meeting on development of a cross-cutting training module in food and nutrition security for frontline extension workers. Kambiri Lodge, Salima. 8-12 August 2010.
- UNICEF & Ministry of Health, Malawi. 2006. Interim guidelines for the management of acute malnutrition in adolescents and adults. <http://motherchildnutrition.org/malnutrition-management/pdf/mcn-interim-guidelines-for-the-management-of-acute-malnutrition-malawi.pdf> Accessed 3.03.11.
- Ministry of Education, Science and Technology. National School Health and Nutrition Strategic Plan 2009-2018.



LANGUAGE

The main lectures were in English but most exchanges with the participants and contributions from them were in Chichewa. In this way I missed some of the more interesting points, anecdotes, and jokes although I rooted out some of them afterwards. Undoubtedly the mix of languages is of great benefit in terms of comfort zones and encouraging discussion.

DAY 1

1. INTRODUCTION TO HUMAN NUTRITION - PART 1

Content and approach

This first session rigorously went through all the micronutrients and their functions, making some good practical points about (for example) fat-soluble vitamins which can be stored in the body, can't be destroyed by cooking, but can go rancid. There was a reference sheet giving the functions of the main micronutrients and their food sources. There was little interaction so we could not explore what the audience knew or what they were learning.

Comment

Not the place to start the course! – we need some framing activity/overview and idea of why we are doing this, before we launch into the technical detail – perhaps I missed it. There was no evident reason for knowing so much detailed information.

A need for more selection/ prioritization and more obvious relevance: participants should be introduced to a handy reference leaflet to keep to hand and re-use throughout the course.

Possible exercises would be

- An opening group exchange to establish what we know, what we need to know and why.
- Getting to know foods by identifying those which have a large amount of one micronutrient or a great variety of micronutrients, and quizzing each other; picking out foods which can reinforce a diet deficient in micronutrients and saying how to add them in; looking up the foods eaten in one's last meal etc.
- Discussing possible messages for communities (if any).

2. INTRODUCTION TO HUMAN NUTRITION - PART 2

Content and approach

The content of this session was more selective (e.g. a focus on iron and sources of iron) and more closely related to real life (e.g. how the nutritional value of rice is leached out in preparation, how watering fruits in the market carries away their water-soluble vitamins). Interaction and interest were ensured in several ways:

1. Work was based on lists of questions which were initially answered by participants – e.g. *Why is iron important?*
2. Personal anecdote and personal application roused the participants and set them thinking - e.g. nutritional content of junk drinks – *add up the number of Pepsis and cakes you are consuming in this workshop – think what they're doing to you...*
3. Some points had surprise or provocation value – *Why is water important? - What kills you in cholera is not the germs but the dehydration. / What are you agriculture people doing about vitamin A?* (a question which could have been discussed at length).
4. Food composition tables were consulted – although there were no handouts and the tables were a bit over specialized.



Comment

Stimulating and relevant.

Needed were more practice and application of the essential points of the learning, and simplified usable food composition handouts to take away.

Possible exercises would be

- identifying cooking methods which conserve or reduce food value by applying some basic principles; saying which methods are most common and what minimal improvements could be made in practice;
- pulling out some important messages for the community from the practical advice given.

DAY 2

3. THE COMPOSITION OF FOOD AND ANTI-NUTRITIONAL FACTORS

Content and approach

The speaker went through the main food groups commenting on their nutrition composition, and branching out into related points (e.g. about the effect of drying vegetables on water-soluble vitamins, the effects of soda, the importance of fresh fruits for micronutrients, smoking for food preservation, eggs for infants, effects of alcohol, special value of pumpkins over carrots and of guavas over citrus, effects of refrigeration on nutritional value, virtues of avocado for young kids, health effects of not drinking enough water. Many questions were raised by interested participants. She then showed how to calculate the food value of a meal using the composition tables.

Comment

A brilliant presentation. The amplifications were not merely illustrative: they also elaborated important messages (e.g. the importance of home fruit trees), targeted local attitudes and prejudices (e.g. denying eggs to children), dramatically highlighted health dangers (e.g. from alcohol or insufficient water), and gave a lot of practical advice (e.g. about cooking vegetables to conserve nutritional value). Much of the information was personalized with striking stories and anecdotes which had visibly high impact and elicited a continuous stream of queries and comments (*How many fruit trees do you have around your house? How many did you plant yourself?*)

Needs

None of this practical curriculum content was on the slides: hence the session's main value could not be replicated. The session could be amplified by more systematic exploration of the audience's knowledge and understanding; and could do with some kind of recap.

Possible exercises

The session was essentially a running dialogue. Some ways in which participants could give it practical focus and to recycle some of the content would be:

- Collecting the important practical messages, and presenting them at the end.
- Creating quiz questions to test each other the next day as part of the standard day's recap.
- Explaining a list of practical do's and don'ts to each other (this could also be the foundation of a good "course product").

4. SIX FOOD GROUPS AND MULTI-MIX MEALS

Content and approach

The facilitator sent participants outside to teach each other the six food groups, then brought them back to report. Some misconceptions were current in the groups – for example, some of the "teachers" had included nutrients (carbohydrates, vitamins) among the food groups. The facilitator picked out two sets of answers, put them up, commented on the old and the new versions (three versus six food



groups). Then she collected examples of each food group and commented on their nutritional value, with many interesting examples and uses (e.g. guava sieved into baby food, avocados mashed in), some reference to the food composition tables and some revision of food functions (e.g. fats and oils regulate body temperature). Participants sorted bags of foods (some of them new and interesting, all dried) into food group categories in the middle of the room. She finished by introducing the multi-mix principle, in advance of tomorrow's practical (making a porridge from the 6 food groups for under-five kids).

Comments

An active teacherly session, with suitably limited aims. The presenter used the outside, the centre of the room, the participants and her own wit and knowledge, and did it all in a power blackout. Good also on pace, and thorough treatment. A little more monitoring of the group activity and responses might have revealed that not all the groups were as certain as the presenter assumed; and that only one person had remembered the functions of fat and oil from the previous day.

Everyone enjoyed this session but I did not get the feeling that anyone felt that it was very important! (I could be wrong.) Perhaps the objectives and activities should be a bit more challenging and also we should spend more time on how this knowledge is to be used, and how to promote it.

Needs

Perhaps less time spent on identifying and plugging the knowledge gaps, and more on applying the 6-food-groups dietary concept and how to promote it educationally. Objectives could be extended to include:

1. Recognizing poor diet and what's lacking.
2. Having ideas about how to improve it.
3. Recognizing difficulties of doing this.
4. Discussing ways and means.

As far as I know these are not covered elsewhere in the course.

Activities and exercises

There was plenty of activity relevant to the objective – but the objective was fairly limited. Not sure that preparing the food is necessary practice, but it adds a touch of realism. A useful activity would be:

- Discussing and planning what communities need to know and do, how the 6 food groups have been promoted, how successful it has been and how the promotion can be improved.

5. NUTRITION THROUGH THE LIFECYCLE: PREGNANCY AND LACTATION

Content and approach

The presenter posed the problem, with data - high national maternal mortality rates and deaths of low birthweight babies under one - and demonstrated the devastating permanent cyclical effect of poor maternal nutrition on the children born (essentially crippled for life, "programmed for inadequacy")(an excellent slide). She dwelt on the social and physical dangers for girls who become pregnant too young (the subject of her Masters thesis). She went through the nutritional needs of pregnant and lactating women and explained them; also discussed the disorders of pregnancy.

Comment

This straightforward presentation was quieter, less interactive and more conventional than the others; the call to action, though deeply felt, was made in muted measured academic language rather than the more popular tone of the previous two presenters: *I think this is unfortunate, We are positioning you strategically to go back and see if you can make a difference.* There was very little overt response and it is hard to say what was the effect on the audience.

Really needed to start by probing participants' own experience of cases of undernourished mothers, young girls getting pregnant, related sickness and death and social ostracism, their perception of how



widespread this situation is and their ideas of what can be done about it. If it is the case (as she explained to me) that men regard this as women's business and do not want to discuss it, then tackling this attitude or at least discussing it should itself be a starting objective (otherwise why broach the subject?).

Quite a lot of the latter part of the presentation (e.g. disorders of pregnancy, records kept of birthweights and some recaps) was not strictly relevant and could be reduced or cut.

Possible exercises/activities

- Studying and explaining the critical diagram to each other in groups and in plenary, narrating the cycle of deprivation, and saying whether they themselves have seen any of these processes at work (giving examples from own experience is very important in activating and practising perception).
- Discussing and practising briefing the traditional authority on this subject: what points should be made, what remedial measures should be discussed, how to convince men that it matters.
- Holding a full discussion on one of the following questions, with prepared contributions from spokespersons of the different extension groups:
 - ◇ Can extension workers act to prevent maternal mortality and premature pregnancies?
 - ◇ Is there an attitude problem in the communities? If so, what can be done about it? (might be a case for drama).

DAY 3

6. FEEDING YOUNG CHILDREN

Content and approach

Four groups discussed four questions for each of four age groups (0-5, 6-8, 9-11, 12-24 months):

- What are the common local feeding practices?
- What are the feeding problems?
- What are the ideal feeding practices?
- What are the constraints on improving feeding practices?

There was feedback from the groups, with expansions and comments by the facilitator (unfortunately for me a lot of this was in Chichewa). A lot of push-and-pull facilitation kept the group busy: there were many prompt questions about local practices in order to establish the ENAs for each infant group (Do mothers give their babies the first milk/colostrum? When do mothers first give their babies the first feed? What do they put in the porridge? – say what is the reality). The facilitator insisted that each group's answers were complete and correct and invited all to contribute in writing up the answers.

Comments

1. Participants' contribution on what they knew about local practices was very valuable.
2. Excellent facilitation
3. Feedback from four groups is demanding on the facilitator and on the class's attention.
4. The questions have immediate relevance for some participants but for others are a bit abstract and need pinning down.

Needs

To handle the long process of feeding back from four groups, possibilities are to a) split into two + two with a break between; b) circulate the four flipchart sheets between the groups before responding to them in plenary.

Activities/exercises

- (To recycle learning in groups at the end of the session) identifying the main practices which need improving and why (those who have most to learn should lead).



- Saying what is currently done by extensionists to improve practices, and how successfully.
- Looking at realistic case studies of mothers and children (their practices, situations, motivations, family pressures, food sources etc.); extending these descriptions to reflect own reality.
- Adopting the mothers' roles in the case studies and saying how they would respond to various remedial interventions involving extension workers.
- Discussing what knowledge, competence and action should be expected of agriculture and community extension workers in this area of activity.

7. NUTRITION FOR OTHER GROUPS

Content and approach

The participants divided into six groups, each looking at the nutritional problems of a particular age-group (e.g. social problems affecting adult diet, teenage problems, problems for school-age children). Groups reported back and the facilitator expanded and illuminated the answers

Comment

High relevance, plenty of participant contribution and some useful additions.

Needs

- Needs to be reinforced with cases and data and examples from participants' professional experience.
- This description is the start of a situation analysis and should be carried forward into a discussion of how to tackle the problems of each group.

Activities and exercises

- Working up a description of each social group in their own area, with the object of identifying the particular needs and of establishing priorities.
- Drawing up behavioural guidelines for a particular age group in their area, then selecting a guideline and discussing how to promote it (general dietary guidelines for the population as a whole (e.g. those for Namibia or Ghana) can be used as a model).

DAY 4

8. FOOD SECURITY

Content and approach

Participants divided into three sector groups to discuss three questions:

1. What do you understand by National Food Security and Household Food Security?
2. What do the communities say about food security (or what do they understand as food security)?
3. What can you say about Malawian food security at national or household level?

The workshop reconvened to feed back. The exercise revealed a prevailing concept of food security as having enough staple food (as one participant said "In Malawi we talk about staple security"). It also revealed considerable specialist knowledge among agriculture workers of the indicators of food insecurity, which provoked much discussion.

The facilitator (who had once been an agricultural extension worker) introduced her presentation by talking about changing the discourse: "What do you discuss with your farmers? You talk about 6 bags of maize per person for year, 400kg of roots in the garden – 10 kg of groundnuts or 30 kg of pulses. But do we stop at the discussion of staples? Our definition of food security needs polishing." She then presented the FAO and USDA definitions of food security, indicating their wider scope (involving nutrition security), the distinctions between national and household FS, types of food insecurity¹⁰ and basic causes.

¹⁰ Queues at the government maize depot, rising cost of staples, maize imports (in a good year they exported maize to HAITI).



Comment

The initial exercise was excellent in bringing out participants' understanding of the concept of FS and in allowing them to share and air their specialist knowledge. We needed cases of food security activities in Malawi (especially agriculture and horticulture), with and without a nutrition focus.

The concept may need more reworking to make a real dent on entrenched ideas. It would be useful to establish the expanded concept of food security near the beginning of the course when the Malawian nutrition situation is being described and analysed. This session would then reinforce it.

Main needs

The application to work needs to be reinforced with discussion of such questions as: How can households achieve food security (in its wider sense)? What should be the top action priorities? (propose and discuss) What should the extension services be doing?

Possible activities and exercises

- looking at several cases of different countries and households and analysing their FS status;
- practising explaining and exemplifying HFS (for example to colleagues, to traditional authorities);
- distinguishing different types of food insecurity (based on real cases) and examining their roots, for example with a problem tree;
- identifying the main causes of food insecurity in their own district and the main groups at risk;
- exchanging information about how the three extension services are tackling HFS; discussing what else they could do and what they could do together.

9. FOOD SECURITY: FOOD PROCESSING, STORAGE AND PRESERVATION

Content and approach

This appeared to be a new session, not covered in the folder outlines, and the objectives were therefore not available. It went through the reasons for preserving food and the methods (with examples) bringing out how they work. The assignment was to describe a method of bottling jam or fruit juice from any local fruit (not sure that this was followed up).

Comment

The coverage was rather academic and lacking in local illustration.

Needs

The session needed some inspiring examples of Malawian enterprise and genuine improvements in HFS through food preserving – e.g. an invited contribution from the One Product, One Village fund; the I-LIFE project also has some examples on line. It could be re-shaped with more local relevance, a more functional orientation, and a great deal more participant contribution by responding to these questions:

1. Why is it good to preserve food?
2. What methods do you know?
3. How do they work?
4. What is the effect on nutritional value?
5. What is happening in Malawi?
6. What is done most in your area?
7. What should/could be done more? What could the effects be?
8. Why is it not done? What are the obstacles?
9. How would you promote these activities? Where can we get technical advice?
10. What would be the best time of year to do it?

Exercises/activities

The technical question (3 above) could become an engaging exercise – after establishing the principles of preservation, participants choose particular preserved foods, say how they are preserved and explain why this process works.



10. GROWTH MONITORING AND PROMOTION

Content and approach

The presenter talked through her powerpoint, explaining nutrition assessment and its terminology, purposes, methods, factors, advantages and disadvantages: a rationale for a major health programme. Some calculations were explained and one (on body-mass index) was done by participants with great enjoyment. The approach was pure presentation, redeemed by a wealth of personal and illuminating anecdote and illustration (a lot of it was presented in Chichewa). There was quite a lot of technical language – do we need to talk about *the uterine environment*?

Comments

As regards the learning objectives of this session, what are the needs in people's working lives? what do they know already? Perhaps I am mistaken, but I could not see the need for so much information about this programme. GMP appears to be a main part of the health workers' TOR, so they must already know how to do it (and could probably explain and demonstrate much of it themselves), whereas the other extension workers will presumably not be called on to do it and will need only a lay person's understanding of its importance and perhaps an ability to interpret a growth chart. Other suitable objectives might be:

- Recognizing danger signs of poor growth, hidden hunger and obesity.
- Taking suitable action with the support of own and other services.

Do the non-HSAs have these capacities?

Need somehow to capture the extra illustrations and comments of this experienced presenter.

Exercises/activities

- Demonstrating and explaining the importance of GNP to those who don't know about it.
- Working out what each sector group needs to know and do in relation to the GMP programme.

DAY 5

11. HYGIENE AND SANITATION

Content and approach

Slightly changed from the programme, which had a more domestic orientation and included personal hygiene. The presenter talked through water-related diseases and their causes, dealing with safe water, locating water sources and purifying water (in great practical detail); then went on to food hygiene and dangers, sources of contamination, prevention of contamination etc. The talk made much use of question and answer; the audience was very involved and made many contributions, with a lot of information exchange between the sectors. There was no powerpoint. The presenter had many tricks of long experience – used the central area, walked around (keeping people's attention alive), reiterated his points after each section, picked up questions in the vernacular and repeated them in English etc.

Comment

High relevance and very practical, this is the business of Health Extension

Needs

I felt the need for more context, more real-life illustration (also from the participants), some reference to the Malawi situation (the main threats from poor sanitation, with some data) and some application to the work situation. (Some of the HSAs told me that the communities know all this – in that case, what is the problem?) I would have added an opening section – e.g.

1. Discuss prevalence of waterborne diseases, with national data if available and health impact, establishing the importance of the issue for the nation (and hence the importance of extensionists' role) and possible action priorities.



2. Probe participants' experience and knowledge of the main diseases.
3. Look at existing practices in the communities and at problems – establish any educational needs.
4. Share experiences of what action is taken and how/how often participants talk with communities on this subject.

Exercises and activities

For (2) above, some activities which would reinforce learning and illuminate participants' existing knowledge and uncertainties are:

- classifying diseases into given categories (waterborne, water-related etc.) would illuminate participants' existing knowledge and uncertainties;
- identifying causes of diseases and explaining them to each other

12. SMALL LIVESTOCK PRODUCTION

Content and approach

The presenter introduced and explained his selection of animals (chickens, rabbits, goats and a brief trip into aquaculture), then dealt with each in turn from the point of view of small-scale household production. For each he considered the potential and advantages; feeding; housing; common diseases and prevention, referring to recommended practices and mentioning common errors, risks and precautions (e.g. stopping children from handling baby rabbits; not feeding roots which could have been contaminated by dogs; the danger to children who consume chickens grown with steroids).

The approach was simple powerpoint and talk, the slides being the only ones in the course with photos and section heads (devices which could be adopted by all presenters). Delightfully few points on relatively few slides (another sign of an experienced presenter). Some very good practical tables made a handout absolutely necessary.

Comment

An eminently useful session, full of common sense advice which clearly sprang from experience and must have struck home with extension workers dealing with just these situations. It would be good to know how much the participants already knew, however.

Needs

- We need a sketch of the Malawi situation – how much small animal production there is, how important it is to the diet, how risky it is, how hard it should be promoted, what resistance there is.¹¹ Extensionists' contributions should be useful (e.g. one course member told me that experienced rabbit farmers need to be persuaded to help novices).
- A few illustrative anecdotes would add memorability.
- Carry the discussion forward into practical application, discussion of problems etc.

Possible exercises and activities

- brainstorming the potential, the priorities, the problems, the strategies of small-animal raising and producing a page of tips for extensionists
- attempting to persuade HSAs and community workers to produce chickens, goats or rabbits and identifying the most convincing arguments and approaches to persuasion
- discussing the contribution that can be made by HSAs and community workers, and what they need to know.

DAY 6 ABSENT (DOING INTERVIEWS WITH MINISTRIES)

PREVENTING AND MANAGING MALNUTRITION

¹¹ I am told that bush chickens are often preferred to the more productive recommended breed and rabbits are seen as a lot of trouble



DAY 7

Absent for the first session, still on preventing and managing severe malnutrition.

13. COMMUNICATION

Content and approach

Groups discussed three questions: How do we do communication? How do people receive it? How do we communicate effectively? Group feedback produced a list of media (e.g. posters, drama, talks) and a graphic list of negative responses to dietary advice (can't manage, time-wasting, food-wasting, fill the gut but do not assuage hunger, no need, and Who are you to tell us something new?). The facilitator gave definitions of communication and talked through a list of communication barriers and a list of communication skills (e.g. clarity, interest, networking, courtesy, listening), illustrating each.

Two demonstration role-plays followed, much enjoyed by the audience. In the first a dictatorial health worker counselled a mother badly and the mother walked out in disgust; in the second an understanding health worker explained, asked questions etc. and the mother adopted his advice. The two presentations were analysed by the group.

This was followed by a presentation of the stages of change theory, with each stage accompanied by suggestions for appropriate interventions.

Comment

Since most extension work involves communication, this is an important session. Generally, the selection of material was useful, and there was a good variety of activities. Perhaps we needed a clearer concept of communication: at different times it meant one-way messages or interactive dialogue, achieving understanding or achieving compliance, speaking politely or conveying information.

Needs

Other needs were for a stronger relationship between theory and practice; more pinning down to specific communications; and a clearer purpose for class activities. Some points:

- It is good to start by exploring participants' ideas of effective communication. The questions could be pinned down to particular topics and audiences (each group could choose its own) and the questions could change to *How do we do this? What are the barriers? What are the secrets of good communication (give some tips)?*
- The real challenges mentioned by the participants were an excellent opportunity for discussing how our communications interact with existing mindsets and how we can deal with this – needs to be followed up.
- The list of effective communication skills (dealing mostly with one-way communication) could be expanded to include illustrating, giving real examples, telling stories, calling on known role-models, using (almost any) visuals, and leaving visual reminders. Two-way skills (such as audience involvement, eliciting, asking questions, finding out what people think) could also be developed. Best if these lists were developed by participants after looking at actual cases.
- The role-plays aimed to show that being courteous and understanding will persuade mothers to feed their babies correctly. The class should be consulted as to how important this factor is in the complex of motivations that produce compliance.
- As regards the stages of change, with suggested interventions, I am not sure if this move from description to prescription is theoretically valid, but it is a useful protocol which cries out to be applied in practice.

Exercises and activities

The main objective must be to improve communication skills, perceptions of skilled communication and develop the habit of evaluating the effects. Participants must be able to see how they could improve their own practices and how they can judge their success. This requires practice. Some questions are:

- What discourse should we focus on? One is the "short talk", since this appears to be a standard extension practice. We can also go for "giving advice", the communication modelled in the role-



plays. I would suggest adding “finding out”, a sympathetic exploration of what people do and why and how they perceive it, essential to any effective nutrition education.

- What are the criteria? Criteria can be pulled out of practice activities, out of participants’ own experience (they have plenty of ideas) or even provided in checklists.
- What kind of practice? There must be some kind of realistic practice.
 - ◇ evaluating and discussing video clips: the NRC should give thought to making a few videos of themselves or of extension workers actually engaging in communication in the field
 - ◇ planning and practising short talks on subjects already covered by the course
 - ◇ some real counseling (for example to improve each other’s eating habits).
 - ◇ exploratory interviews and focus groups, using open questions, follow-up questions, leading comments).

A small project could involve applying the stages of change interventions to a specific communication target from one of the other sessions. Participants could choose a message which they often try to propagate, consider it from the receiver’s point of view, and develop an approach in line with the stages mentioned.

14. NUTRITION EDUCATION

Content and approach

The speaker presented a communication model and a definition of nutrition education, emphasizing the importance of scientific accuracy in the information given. (This later led to an interesting discussion on combating misinformation in communities.) She then called on volunteers to simulate two talks to community audiences, which were critiqued by the participants. Some of the comments were: *Start with questions, give examples, ask more questions; use “We” not “I”; reiterate the points.* The presenter concluded with advice on how to manage talks and evaluate their effect, and gave several examples of “non-effective” talks ignored by mothers attending clinics.

Comment

There are many definitions of nutrition education: the one used here prioritises a one-way communication model and accuracy in the information. This may be why nutrition education is largely interpreted as giving talks, and evaluation is seen mostly as self-reflection on how well the talk was done. The definition is not intrinsically wrong, but it is very limiting. Other definitions give more attention to the learning experience and the functional effect (e.g. a popular definition is “Nutrition education is any set of learning experiences designed to facilitate the voluntary adoption of eating and other nutrition-related behaviours conducive to health and well-being” (ADA 1996)). This covers courses, counseling, chats, publicity campaigns, IEC, BCC, demonstrations, model gardens, role-modelling, sanitation inspections: indeed, everything that an extension worker does and can do for nutrition other than taking growth measurements or physically handing out pills. It also implies evaluation in terms of effects on practice and hence an understanding of the long process of achieving changes in practice.

Needs

Apart from the need for a wider interpretation of nutrition education, the session needs closer links between theory and practice. For example, (a) symmetric relationships between communicators – how does this apply in extension workers’ relationships with the community? When and how should there be some leveling? (b) The advice on giving talks needs to be recycled by the audience in relation to the talks themselves.

Exercises/activities For improving talks:

- *Building up the practice.* The group establishes their ideas of what makes a good community talk, what its aims are and how its “learning effects” can be assessed (conviction, understanding, interest, likely effect on action). Demonstration talks are given and the criteria are expanded into a list of tips. Further talks are then practised in groups of four on self-chosen subjects, with stated aims and follow-ups on effectiveness. Participants say what they have learnt from each other’s talents.
- *Discussing what talks can do.* From this experience, participants discuss what talks can achieve and what role a talk should play in the whole process of nutrition education.



DAY 10

15. COORDINATION AND COLLABORATION WITH OTHER SECTORS

Content and approach

Groups discussed two questions: Why do we need good collaboration? (give an example) and How do we achieve collaboration? Feedback was presented (although no examples were given)) The presenter gave two textbook examples of poor coordination and one of good:

- A mother feeds a child well, following advice given, but the child still suffers from diarrhoea because of unsafe water.
- Fish farms are established by agriculture extensionists, but the MoH wants them cleaned out because they encourage mosquitoes.
- A HSA advises burying waste for hygiene; an agriculture extensionist advises turning it into compost.

Participants brainstormed some of the causes of malnutrition and drew the conclusion that most nutrition efforts needed to call on all the sectors. The presenter introduced a checklist of aspects of collaboration (combining resources and saving expenses, combining ideas, sharing common goals, sharing information, planning together to avoid conflicts, discussing problems with others).

Participants discussed how they coordinated programmes at the moment. It emerged that by and large they did not (“There is not much cooperation between the sectors – we do our own programmes”) and that there was a fourth potential partner in the picture (“In our area we have NGOs who work mostly in isolation. How can we work with them on nutrition and sanitation? The NGOs are duplicating our efforts.”). Participants mentioned a few examples of collaboration initiated from outside – e.g. World Vision has a project of cookery demonstrations in collaboration with Health and Agriculture.

Participants then created a workplan, using their standard planning form to list planned joint activities:

- Joint planning meeting.
- Sensitisation meetings with AEC, ADC, VDC.
- Formation of community nutrition groups and rejuvenating existing ones.
- Training groups in the six food groups and other nutrition issues.
- Making demonstrations and displays.
- Conducting nutrition fairs.
- Doing follow-up visits.
- Monthly reporting.

The list was approved by the presenter – however he pointed out that they should have taken note of the list of methods in their plans, as he had advised.

This was an active session, with plenty of participant engagement and some leavening jokes. The presenter used the centre of the room, walked around and interacted a lot. The fact that the session leads to a real-life assignment gave the whole session purpose: there was less disconnect between theory and practice (although it's hard to see how the aspects of collaboration could have been incorporated in the action plan). Slides were used economically, mainly to set up activities, and frequently reviewed.

Comments

It would have been nice to explore the question of collaboration with NGOs in more depth. More examples of actual collaboration or lack of it would also have been valuable (perhaps NGOs could supply some?) - in fact the presenter was able to think of several when asked. Participants too might be able to find cases where collaboration is called for, if asked to do this the day before.

The workplan created in this session, like those of the other two courses, was mainly procedural. To maintain active collaboration in the field it will probably be necessary to undertake more specific initiatives. Participants should arrive at this final session with a clear idea of where nutrition issues can be integrated into their normal routines, and how exactly they can collaborate with the other sectors



to promote them. This session would then involve finalizing a project plan as well as planning briefing and sensitization sessions. This issue of how the learning is to be applied is however a concern of the whole course design rather than of this session.

ANNEX 5

MODELS OF NUTRITION EDUCATION AND COMMUNICATION



INFORMATION DELIVERY

The most rudimentary form of nutrition education is “information delivery”: simply providing information (e.g. in lectures, leaflets or food labels), without interaction, focus on needs, or practice. This approach, which remains widespread, assumes that “putting the information out there” will have some effect.

THE KAB MODEL

A more focused model is known as KAB (knowledge-attitude-behaviour) (Contento et al. 1995). It may be interactive and needs-oriented, but it still aims above all to increase knowledge. The assumption is that “new knowledge leads to attitude change, which, in turn, leads to behaviour change”: that is, that knowledge is enough *in itself* to change eating habits. KAB learning objectives focus on attitudes and understanding (e.g. “appreciate the role of fruit and vegetables in the diet”, “list foods rich in vitamin A”) but do not push them into action (e.g. “eat more fruit and vegetables”).

KNOWLEDGE DOES NOT LEAD TO PRACTICE

The compelling evidence, however, is that *knowledge and awareness alone do not lead to practice* (Contento et al. 1995), even in optimal circumstances. Some of the reasons are:

- It is hard to change a long-established habit.
- It is especially hard if the habit is shared and approved by one’s group and society.
- People need to be convinced that a change really matters and can bring rewards.
- They often need someone to lead the way, or to give encouragement/praise.
- They need to see what to do, when and how.
- The change needs to be easy and convenient (and if possible enjoyable and profitable).
- There should not be strong temptations to do the opposite.
- People need to be ready – the change should fit with what they are already thinking.
- They need to believe they can do it and keep it up.

THE NEW MODEL OF NUTRITION EDUCATION

To change behaviour, *it is essential to aim at behaviour*, not just at knowledge and attitudes (Contento et al. 1995). The pendulum has therefore swung towards models of behaviour change, drawing on a range of theories of behaviour change, skills learning, social learning theory and learner-centred approaches. The importance of formative research is emphasized and there is greater recognition of the power in changing practices of social influences, existing practices and attitudes, recognizing need, observing models, taking one’s own decisions, practice, social interaction, feedback, incremental learning, passing on learning etc.

Below is a rough model of the process people go through (more or less consciously) in changing nutrition behaviour, and what influences them. Different forms of nutrition education exploit different parts of the model. The central column shows the main process. New learning and other influences are in the two side columns.

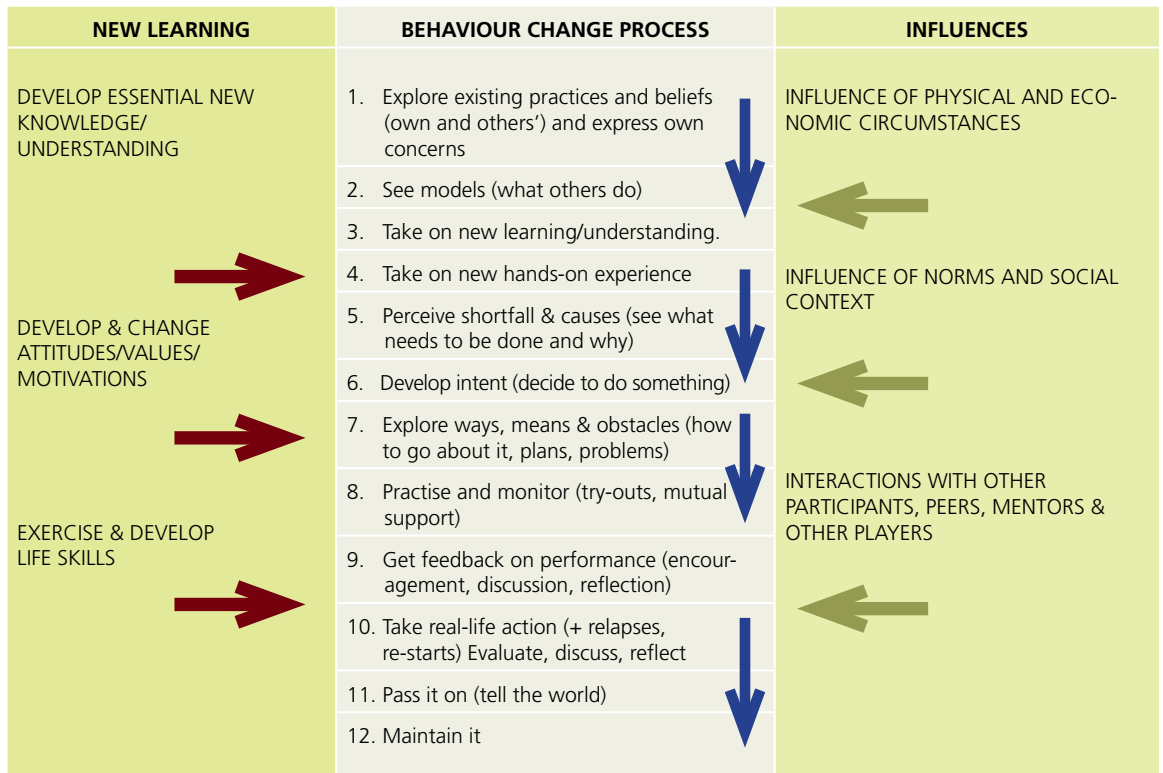
THE ROLE OF THE COMMUNITY NUTRITIONIST

Many nutrition education interventions are still limited to information delivery. Community nutritionists can play an important role by assessing and discussing ongoing interventions and making suggestions for improvement where appropriate. Some questions to ask are:

- Does it focus on specific nutrition needs?
- Does it aim at changing practices as well as increasing knowledge and awareness?
- Does it put the change process into the hands of the actors?
- Does it explore existing practices, attitudes, knowledge and perceptions, and the physical and social contexts in which people make decisions and take action?
- Does it recognize the difficulties of changing practices and the time required?
- Does it follow through the skills learning process, including practice and experimentation?
- Does it have a social dimension?



THE PROCESS OF BEHAVIOURAL LEARNING



- Does it reinforce learning by ensuring that it is passed on?
- Does it aim at long-term nutrition literacy as well as immediate effects?
- Does it operate in all the relevant dimensions of the learners' environment?

Reference

Contento IR, Balch GI, Bronner YL, Lytle LA, Maloney SK, Olson CM & Swadener SS. 1995. The effectiveness of nutrition education and implications for nutrition education policy, programmes and research: a review of research. *J Nutr Ed*, 27(6), Special Issue.

Adapted from draft chapter on nutrition education, www.nutritionlearning.net

ANNEX 6 NEW LEARNING OUTCOMES



The elements below appeared to be de facto learning outcomes, which should get full treatment as learning objectives. They are proposed as additions to the NRC course curriculum.

1. (Add to Unit 1) KNOW ¹² THE NUTRITION SITUATION IN MALAWI ¹³ AND OWN DISTRICT (nutrition issues, contributory practices and attitudes, challenges and current strategies). Participants should be able to illustrate with some striking data, and explain to communities what matters and why.
2. (Add TO Unit 1) KNOW/UNDERSTAND LOCAL KAPP An aspect of the nutrition situation is the knowledge, attitudes, perceptions and practices of the community; it is also an essential element in any nutrition/nutrition education intervention. For example, according to the capacity survey (Dept. of Nutrition, HIV and AIDS/FAO 2009), malnutrition is often seen as an illness, but not a preventable one. In the course itself, comments about rejection of messages, lack of cooperation, unwillingness to adopt, “unreceptive” farmers, households or communities, suggest that local attitudes and perceptions are important to success and need to be probed and understood.
3. (Add to Unit 2) KNOW YOUR FOODS from plot to pot. All participants should demonstrably know a great deal when they leave about a range of common foods (food group, nutritional content, how grown, harvested and stored, how processed and preserved, how prepared and how to promote). Much of this can be achieved by sharing existing knowledge, but the additional nutrition information needs practice.
4. (Add to Unit 2) EVALUATE OWN AND LOCAL DIET AND SUGGEST IMPROVEMENTS Participants should be able to describe a given diet, evaluate it and make two or three practical recommendations. They should also do this for themselves and/or their families and try out one dietary change during the course, in order to develop a personal understanding of what it means to change one’s diet. The course can capitalize on the intense interest of the participants in their own health and how it is affected by diet.
5. (Add to Unit 4) EVALUATE FOOD GARDENS All extensionists should be able to see at a glance what a household food garden contributes to the diet, make a few recommendations for changes or additions, explain their value and discuss feasibility.
6. (Add to Unit 4) PROMOTE FOOD PRESERVING FOR IMPROVED DIET In some aspects of food security there appeared to be a need for guidance on what activities to promote. I was unable to discover (for example) what food is typically preserved in Malawi, if there were any guidelines about what should be preserved to improve diet during the hungry season, and what should be grown for this purpose, if solar driers were recommended (and if so what model), if training was available in other kinds of preserve-making etc. Perhaps I simply did not find the right sources.
7. (Add to Unit 5) RECOGNIZE CHILDREN AT RISK in several age groups by a range of signs, physical and behavioral, and REFER CHILDREN where necessary. This action is a logical extension of existing objectives.
8. (Add to Unit 8) TACKLE MISINFORMATION. Extensionists must be able not only to give correct information but also to combat the many myths (traditional and new) which circulate in the community and the media. They should collect examples of popular nutrition errors, decide how to counter them, train each other and circulate the results. A small illustrated book of Malawian food myths would make a good “course product”.
9. (Add to Unit 8) IMPROVE TALKS given to community groups. Although the main emphasis should be on broadening the idea of nutrition education, it is likely that talks to community groups will remain a standard part of extension programmes. Many extension workers are very good at these set pieces and can certainly learn from each other. (A good “course product” would be a list of TIPS ON TALKS.)

¹² Speech performatives are often used for knowledge and comprehension targets (e.g. state, explain, describe). I understand the reasons for these formulations but I find them misleading, and have used “know” or “understand” instead.

¹³ According to the course organizers this topic is covered in the presentation on policy (which was omitted in the course that I participated in). Nevertheless it should be an explicit objective.



10. (Add to Unit 10) DEVELOP CAPACITY IN PROGRAMME PLANNING AND IMPLEMENTATION Some issues identified in programme implementation in the capacity analysis (Dept. of Nutrition, HIV and AIDS/FAO 2009) were weak monitoring and evaluation, little knowledge of impact and little dissemination of best practices. These should be taken on board in the course curriculum. For example, trainees should learn to:
 - “see what works” - take an empirical and experimental approach, building in formative enquiries, monitoring and evaluation even in small informal interventions
 - be able to evaluate and comment on existing or proposed measures (including those made by their course colleagues) as well as planning and implementing new ones
 - apply principles of successful health promotion in evaluation and planning, including participatory approaches (see Annex 7: Meta-strategies for nutrition promotion)
11. (Add to Unit 10) KNOW EACH OTHER’S JOBS, PERCEIVE OVERLAP AND SHARE KNOWHOW (in order to refer, collaborate, make use of) - an essential preliminary to successful coordination and collaboration. Participants could prepare a one-page position paper on the relevant tasks and skills of the other sectors for consideration at the next planning meeting in their sectors. Explaining the value of others’ activities might also help to combat perceived status differences.
12. (Add to Unit 10) LOOK AT OWN ROUTINE ACTIVITIES, identify points for nutrition emphasis and plan individual action. This may be particularly important for agriculture extensionists, who traditionally ignore nutrition in their work.
13. (Cross-cutting) KNOW BEST PRACTICES IN COMMUNITY NUTRITION in Malawi and the world at large; be able to explain how they work and discuss their applicability in own contexts. The course rightly covers TIPS, the Hearth Model and stages-of-change theory. It could also deal with the Care Group model,¹⁴ Credit with Education (successful in Ghana), stakeholder analysis to identify household influences on nutrition actions (WHO 2001), strategies for involvement of schools and a number of other examples of successful (and less successful) community nutrition interventions. This knowledge should be acquired at first hand if possible, from the horse’s mouth (e.g. speakers from NGOs¹⁵ or government projects) and through discussion of cases.
14. (Cross-cutting) KNOW WHERE TO GO FOR INFORMATION It is essential to maintaining, sustaining and extending learning that course participants are introduced to the available literature and reference sources and become familiar with them, and that they have access to them once the course is over. This implies a course objective: to make available the relevant literature and introduce participants to it systematically.
15. (Cross-cutting) APPLY LEARNING TO OWN SITUATION (see Application Track Annex 10).
16. (Cross-cutting) NUTRITION EDUCATION AND COMMUNICATION Nutrition education is covered in Module 8, but since extensionists’ work in nutrition is largely education, it is inevitably a feature of almost all the other modules. This is explicit in references to training, counseling, educating and promoting, “explaining”, “describing” and “discussing” aspects of nutrition; and implicit in planning diets, mobilizing communities and facilitating. Developing educational approaches can be seen as the main learning area after nutrition itself. *It would therefore be advisable to introduce some basic ideas of nutrition education and BCC early in the course and build up the practical application gradually through one or two “promotion” exercises in every unit – for example, deciding on appropriate messages for each unit and choosing different ways of promoting them*

¹⁴ In the capacity analysis (Dept. of Nutrition, HIV and AIDS/FAO 2009) it is proposed that the Care Group model tried out by the I-Life project should be reviewed and documented and if found to be working well should be implemented in Malawi. It is also a main strategy in the proposed National Nutrition Education Strategy (Dept of Nutrition, HIV and AIDS, OPC. 2010). Trainees should therefore have some idea of how it works and should discuss its feasibility. (NB this may have been covered in session on the Hearth Model, which I unfortunately had to miss.)

¹⁵ E.g. WALA, World Vision, PATH



from given examples. Nutrition education is so crucial to change that it would be a good idea to add a *practical module on developing nutrition education initiatives on to the main course* (see Annex 8: Cascade and irrigation), possibly with separate funding.

17. (Cross-cutting) BUILD AND JOIN A COMMUNITY OF PRACTICE. This includes a number of more specific objectives, for example: knowledge of best practices worldwide, exchanging experience, access to resources and information, self-evaluation, maintaining networks, career development.

ANNEX 7

META-STRATEGIES FOR NUTRITION PROMOTION



Reviews of nutrition education activities (e.g. Rogers and Schlossman 1997; WHO 2001) have recommended a number of “meta-strategies” for success. The summary below can help to identify strong points and gaps in existing programmes, or to design new ones.

Overall:

KAPP	Explore people’s knowledge, attitudes, practices and perceptions.
Players	Consult all core players (e.g. whole family, community groups etc.).
Community	Promote participation and action in the community.
Start from where people are	Integrate with existing practices and build up incrementally.
Aim for behaviour	Work through the behaviour learning process.
Participation	Put the process in the hands of the actors.

In the activities:

Action	Link theory and practice, with the emphasis on practice.
Relevance	Go for reality or reality feel: hands-on experience and practice.
Multi-strategy	Use several strategies (e.g. public messages, social networks, direct counselling).
Animation/fiction	Project situations and problems into dialogue, drama and story.
Motivation	Generate status, pride and social recognition. Link with actors’ other interests and motivations.
Modalities	Use several modalities (e.g. hearing, writing, talking, visuals).
Technologies	Use cheap available technologies (e.g. mobile phone photos, SMS).

Sustainability:

Sustainable training	Work for sustainability of learning and learning programmes.
Costs	Keep costs down.
Exit strategy	For projects, plan the exit strategy from the beginning.
Maintenance	Make maintenance planning part of the programme.
Passing it on	Create breeder effects: e.g. actors act as messengers or teachers.

Based on:

- Rogers, Beatrice and Schlossman, Nina. 1997. “Public nutrition”: the need for cross-disciplinary breadth in the education of applied nutrition professionals. *Food and Nutrition Bulletin* 18, 2.
- WHO. 2001. *Complementary feeding: Report of the global consultation*, Geneva, 10-13 December 2001, Annex 4. Geneva, WHO. Available at: http://www.who.int/nutrition/publications/Complementary_Feeding.pdf. Accessed August 12, 2010.

ANNEX 8

CASCADE AND IRRIGATION: A PROPOSAL FOR A SHORT NUTRITION EDUCATION TRAINING INTERVENTION FOR EXTENSION WORKERS



This mini-project is suitable for trainees who have a basic knowledge of nutrition but not much experience of the challenges of nutrition education. It aims to introduce and apply the idea of effective nutrition education at three levels (trainers, extension workers and community), and to coopt them into exploring the situation, trying out a new practice, measuring its effects, and passing on the experience. The title refers to the idea of a “cascade” training, passed from one group to another, but suggests that the process should be thoroughly worked through at each stage (hence “cascade and irrigation”).

Project objectives:

- To train trainers at two levels in approaches to effective nutrition education, including formative research and evaluation
- To produce training materials which will help to train others effectively.

Phase A: Formative research

(NB This phase is not repeated in further training activities.)

1. *Creating the team* A team is set up consisting of an expert on nutrition education and four trainers with a good knowledge of community extension work, preferably representing all the interested sectors (health, agriculture, education and community development).
2. *Preparing the initial briefing* The nutrition education expert prepares the initial briefing and drafts protocols for the formative research in (3).
3. *Briefing the training team* The training team meets to establish and practise the concepts and to prepare for the research. They establish the concepts by:
 - Discussing their starting ideas of effective nutrition education.
 - Learning about models of nutrition education, successful and less successful, with operational examples from several different settings.
 - Practising discriminating between limited and enriched approaches, and enriching limited approaches.

They prepare for the formative research by:

- Discussing the research needed, the nature of the objectives and possible indicators.
 - Being briefed on the project and the protocols.
 - Role-playing/walking through the investigative process to be carried out, and anticipating problems.
 - Identifying materials and cases to be gathered for the workshop in phase B.
4. *Formative research* into practices, perceptions and attitudes, needs analysis
Trainers in pairs accompany four multi-sectoral teams of extensionists on their nutrition-related activities for a week. They also gather a description of that week’s other extension activities. For each nutrition-related event, they:
 - Describe the event (participants, numbers, aims, activities, roles).
 - Find out what process/sequence it is part of and confirm by talking to participants.
 - Discuss what outcomes extensionists expect and how their approach is meant to work.
 - Ask a sample of community members informally about the intentions and aims they perceive and how they themselves intend to act as a result.
 - Gather cases and observations for the workshop.

The team also identifies other openings for nutrition promotion in routine extension work.



5. *Analysing the results.*
 - The training team analyses the findings and describes the processes that are under way in nutrition education, the practices in place, and the perceptions of all parties.
 - Referring to NE models and real examples, they discuss how these might be improved.
 - They produce a short report to guide Phase B.
6. *Revising the protocols* The team revises the protocols in response to feedback from trainers.

Phase B: Training workshop

7. *Developing the workshop* The training team develops a three-day workshop for the extension workers, including materials which can be re-used by future trainees.
8. *Conducting the workshop* Participants.
 - Learn about the findings of the formative research in Phase A and discuss.
 - Discuss action targets and identify some priorities.
 - Learn about a few nutrition education models with examples in different settings (as in 2b), and experiment by making small changes in own household or own behaviour.
 - Evaluate some sample initiatives and suggest improvements; practise planning some small-scale interventions and building in participatory approaches.
 - Repeat steps (a) to (d) in groups to ensure that they can run the workshop for others.
 - Plan the extension of ONE existing activity (or a new one). The plan should as far as possible put the decisions and initiatives into the hands of the participating community members, but should also establish some objective indicators in terms of trainee practices, target group practices and actual nutritional status, if possible.
 - Simulate the approach, anticipating reactions and difficulties.
 - Draw up a form for recording actions and progress. They are encouraged to value problems and record them and other reactions in a regular project diary. Photographs are also encouraged.

Phase C: Implementation

9. *Implementation* The experimental implementation is carried out over 3 months. There is a review meeting every 2/3 weeks (coinciding with other team meetings) to report progress and troubleshoot. If possible, one of the trainers attends each meeting and tries to capture the project experiences – anecdotes, problems, pictures, quotations from clients or other stakeholders.
10. *Evaluation* is in terms of trainee practices and target group practices.
11. *Finalize materials* During the implementation process, trainers revise the workshop materials, circulate the final version to trainees and write a report. Some striking illustrations from project experiences are included in boxes.
12. *Further training* Both trainers and extension workers should now be ready to train other extensionists in pairs, using the developed materials (and if possible collecting more material).

ANNEX 9

EVALUATION OF LEARNING: QUESTIONS AND ANSWERS



1. THE EXISTING QUESTIONNAIRES

PRE-TRAINING EVALUATION QUESTIONS

1. Which of the government policies are you familiar with?
2. What challenges do you face in implementing government policies?
3. Are you familiar with the six food groups? Yes/No What are they?
4. Mention one thing you would consider when teaching communities about meal preparation for different age groups.
5. Malawi is a food secure country. What does this statement mean?
6. In your opinion, why is it important to monitor growth patterns for under five children?
7. In your opinion, what causes malnutrition in Malawian communities?
8. For every project implemented, why is evaluation essential?
9. What is the effect of malnutrition for someone that has HIV and AIDS?
10. What advantage is there if various government departments work together on projects?

POST-TRAINING EVALUATION QUESTIONS

1. After undergoing this course, which of the government policies are you now familiar with?
2. Considering what has been covered in this course, what challenges were highlighted as the ones that hinder effective implementation of government policies?
3. What are the six food groups?
4. Mention one thing you would consider when teaching communities about meal preparation for different age groups.
5. Malawi is a food secure country. What does this statement mean?
6. In your opinion, why is it important to monitor growth patterns for under five children?
7. What causes malnutrition in Malawian communities?
8. For every project implemented, why is evaluation essential?
9. What is the effect of malnutrition for someone that has HIV and AIDS?
10. What advantage is there if various government departments work together on projects?
11. How would you describe the nature of the content that was presented during the training sessions?
12. If there was an area that more information was to be added, which area would it be?
13. What information was presented to you that you regard as not important?
14. In your personal opinion and considering your experience as well, how would you describe this training programme?
15. Which areas in this training programme would you suggest that improvements be made?

2. COMMENTS ON QUESTIONS AND ANSWERS

QUESTIONS

Coverage

Not all parts of the course are represented in the questions: the rationale for choice of the questions should be explained.

Copying

Some of the more timid respondents carefully shared identical answers.



Formulation of questions

Some of the questions could be more specific.

Pre-training questionnaire

- Q2 depends on question 1.
- Q3 cut Yes/No
- Q4 Underline for different age groups, since this is the point of the question, missed by many.
- Q4 What is the range of acceptable answers? One could consider many things!
- Q5 Does this refer to the way the expression “food secure” is actually used, or to the way it should be used?
- Q7 What is the range of acceptable answers? It was clear that the answers were difficult to assess, yet the question is very important. Needs a slightly different formulation.
- Q 8 seems to be largely self-answering, and in fact many got it right in the pre-evaluation. Again, a slightly different formulation is needed.
- Q 10 is also largely self-answering – hard to see how one could get it wrong!

ANSWERS

I did a very rough and ready analysis of the answers to some of the questions, which proved quite difficult to assess.

- Q 1 on known government policies showed more participant awareness of food security policy in the post-test (12 compared to 4) - is this what was wanted?
- Q3 on the six food groups showed quite good knowledge both before and after; not much change.
- Q4 on food for different age groups showed a slight increase in those who considered the special needs of the different ages.
- Q5 on the meaning of food security: there was a slight increase in those mentioning that food security applied all year round, otherwise not much change.
- Q7 on causes of malnutrition: in the post-course test sickness was mentioned more often, there is a narrower range of answers and a few more have specifically mentioned lack of nutrients.

We need questions which discriminate better!

3. ASSESSMENT OF PARTICIPANT SATISFACTION

The participants’ reactions were extremely positive. They described the content as *relevant, helpful, beneficial, well presented, timely, marvellous, excellent, well prepared and well presented*, and said they had learnt a lot. The programme was seen as *very important, very very important, one of the best, lovely, good, excellent, long overdue and “slightly fine”*. The group was unanimous that all the information was important. Several thought nothing needed to be added, while a few wanted more on various elements. Suggestions for improvement of the course were mostly to do with “logistics” and allowances, but there were requests for more about *Hearth* programmes, and practicals.



This sequence of activities is intended to run parallel to the rest of the course, applying new learning and insights to participants' own communities and integrating them with their own work practices. The planned intervention can be put into effect and evaluated for impact.

1. Analysis of existing work situation and potential for collaboration

- a. Participants describe their own work and explain to other sectors
 - Its relation to national nutrition issues, policy and plans
 - Points in normative activities at which nutrition could be highlighted, opportunities for dialogue, settings for main NEAC activities, main challenges
 - Points of collaboration and mutual reinforcement.
- b. Participants describe existing collaborative activities, possibilities of sharing knowledge about particular areas, villages or individual cases, and the challenges.

2. Nutrition situation and needs analysis for own region

- a. Participants describe the nutrition issues and priority targets in their own communities as they perceive them, including particular cases they are aware of.
- b. Participants describe and analyze the local diet, food practices and attitudes, levels of dietary diversity and HFS; sources of food - purchases, prevalence of home gardens and usual crops, school feeding; and exploring causes.
- c. Participants gather KAPP information about the target groups; recognize children at risk.

3. Review of possible interventions which participants have come across or studied in the course.

4. Selecting an intervention activity and a community in which to pilot it (e.g. a Model Village)

5. Identifying behaviour or attitude targets and indicators and formulating messages

6. Looking at best practices and selecting possible strategies. Participants also explore potential barriers.

7. Planning implementation, including frequency of contacts, feedback on try-outs, group or individual approaches, self-monitoring possibilities, encouragement and celebration.

8. Mapping out a plan for evaluation of impact.

9. Practising presenting and promoting the plan.

Cross-cutting criteria are:

- community participation at all stages
- collaboration and coordination of the different sectors
- sustainability
- economy of effort and resources.

This exercise could result in small booklet for the area, to be reviewed by management/supervisors.

Possible pre-course activities to support the above are:

- A mini-survey to explore one of the points in the situation analysis (e.g. 3 questions for 10 people about what they see as good food), the findings to be shared with the rest of the course.
- Participants bring with them to the course some of their previous monthly reports and analyse them with a view to seeing where nutrition activities can complement other tasks.
- Participants describe briefly on a card any nutrition activities they have undertaken to date. During the course they discuss how these could be improved or extended.



Post-course project:

If there is room for a post-course project, the following would reflect the same process on a smaller scale and also give direct experience of the challenges of behaviour change.

Extensionists select a group/household/individual that they are involved with in their normative activities. If possible they work as an intersectoral team, though not necessarily in the same place at the same time. In collaboration with the target group, they:

- a. Explore and describe current dietary practices, food practices, sources of food and perceptions of what is good food, without comment.
- b. Identify one or two shortfalls and their causes.
- c. Work with the target to see the benefit of making ONE change in practice.
- d. If the target group is interested, work out what there is to do and how to do it – use demos, models, visual aids (if the target group is not interested, find out why).
- e. Discuss difficulties and how to resolve them; seek support in the enterprise; discuss some form of self-monitoring.
- f. Meet two or three times, discuss progress (or lack of it), encourage.
- g. Whatever progress has been made, celebrate it and get the target group to spread the word about the experiment.

ANNEX 11

BUILDING ON THE STRENGTHS OF EXISTING SESSIONS



Some suggestions for maximizing the strong points of the sessions:

1. *Reduce passive listening.* When facilitators are tempted to present information at length, they should consider what kind of mental engagement they are really asking for, find the real purposes of this apparently passive activity and set up some kind of comprehension activity.¹⁶
2. *Illustrate more extensively.* Illustrations, problems, anecdotes and personal insights are more memorable than abstract points; moreover, stories of all kinds give the brain a rest.
3. *Malawian picture.* Make sure all important points are illustrated from Malawian experience (including historical), finding inspiring or illuminating examples and a few striking data. Ensure that main nutrition-related activities in Malawi are covered, including NGO activities, together with their achievements and challenges (call on successful NGOs for speakers). Indicate important sources of information on Malawi nutrition and food security, familiarize the group with them, and ensure that they are available in EPAs after the course.
4. *Vary and enrich the input* Use other kinds of text for input (e.g. newspaper articles, extracts from reports, stories, internet blogs, video clips and far more pictures (free from Google Images or own photos). Quite feasible are “talking heads” (e.g. experts, VIPs or absent speakers) videoed on mobile phones and projected or passed around.
5. *Shorten the powerpoints* and improve them with a few pictures, photos, section headings and an opening Contents slide to orient listeners. Standardise the layout and add a logo.
6. *Limit continuous “teacher talk”* to 15 minutes (otherwise attention flags); break longer presentations into sections with exercises, teabreaks, writing/ reading, energizers and icebreakers.
7. *Vary presentation techniques.* Use the space; get participants to walk through processes; ask trainees to prepare questions on the next topic and set yourself up as an interviewee; ask a lot of (real) questions; interview some participants upfront to start the session; ask participants to explain figures and tables instead of explaining them yourself; brief participants to contribute to the presentations; ask participants to anticipate the main messages; bring in guest speakers for cameo appearances and interview them.
8. *Discussions.* Include a few 20-minute debates on controversial issues.¹⁷
9. *Ensure and check understanding* before, during and after sessions. Get a personal impression of whether anything has changed.
10. *Recap more often*, and get participants to recap, in a variety of ways – e.g. turn the formal day’s recap into a quiz created by the group; ask participants to pull key messages out of all the sessions and to take individual responsibility for ensuring that everyone remembers them; use triggers, keywords and visuals to rehearse important points; print out powerpoint slides, cut them up and pass them round – ask groups to explain them to each other and put them in order.

¹⁶ For example, two objectives from the first module are Outline the main issues in the national nutrition policy and Explain nutrition components of sectoral policies and programmes. In fact, outline and explain probably here mean “listen and understand”. But what does this particular audience really need to do? First, they need to perceive the relationship of the nutrition issues to the policies, and the relation of the policies to the work done, and they may need to explain this to their peers. Secondly they need to relate sectoral policies to each other, perceiving overlap, separate strengths, possible synergies. Both of these are mentally engaging activities, can be genuinely practised in discussion or dialogue, and can result in an increased mastery of the situation which all can appreciate.

¹⁷ For example:

- The main goal of food security must be to ensure enough staple food for all the population.
- Malawians do not need to eat more animal foods.
- Agriculture specialists forget nutrition because they only think of increasing production.
- Nutrition education is useless if food is lacking.



11. *Encourage participants to develop “course products”*. This takes up very little extra course time and generates a lot of interest. Possibilities are: a cumulative list of important nutrition messages; a general situation analysis of own district (illustrated booklet); a competition for “our greatest success at work” – short descriptions posted up and voted at the end; a booklet of anecdotes from the field, bringing out the point of each; a set of tips on giving good talks; a short position paper on the potential for cross-sectoral collaboration, with several contributors; a list of operational problems, with suggested solutions.
12. *Call on participants’ experience* as much as possible; invite them to prepare and present parts of the sessions. Enable trainees to learn about jobs and programmes in other sectors from each other.
13. *Expect participants to do a little reading/writing* and a little preparatory and follow-up work before and after sessions (e.g. Make sure you know the 6 food groups and can classify 20 common foods. Tomorrow you will test each other). This can hugely increase engagement and ownership.

ANNEX 12

AVAILABLE LITERATURE



There appears to be quite a lot of useful published literature. The course developers say that much course material is taken from Prof Mtimuni's booklet "Community nutrition resource book for extension workers in Malawi" (2003). Other useful references are given in the course programme (e.g. Burgess, Dickins, Gibson). A full annex in the national Nutrition Education and Communication Strategy is devoted to relevant publications dealing with Malawi, some of which have also been used by the NRC course developers. Some are:

Older

- Nutrition facts for Malawian families. Food and Nutrition Committee. 1990
- Weaning facts for Malawian families NE Booklet 1 MoH. 1992
- A good food for young children, locally produced complementary food, NE Booklet No. 4 MoH 1992
- NAP - Food for people living with HIV/AIDS (date?)
- Community Nutrition Training Manual for Extension staff. Ministry of Ag and FS. 2000

More recent

- Malawi food groups poster, English and Chichewa
- Infant and young child nutrition policy. 2007
- Malnutrition: A silent crisis in Malawi: invest now. 2007
- Key messages for improving nutrition during pregnancy and lactation among women in Malawi. 2009
- Booklet of key messages using essential nutrition actions: approach to improve the nutrition of women and children. OPC. 2008
- Draft Training Manual for community-based growth monitoring and promotion. MoH and USAID. 2009
- List of foods in Malawi, with English and local names, available from Stacia Nordin at www.neverendingfood.org
- In-service training module in food and nutrition security for frontline extension workers (draft). MoH with UNICEF assistance. 2010. (mostly dealing with ENAs)
- The PATH training manual in infant and young child feeding (mentioned by Ruth Butao). This may be the same as the booklet of key practical action messages to be produced by PATH, mentioned by Mrs Mkangana, which (according to PATH) is likely to be ready in about two months' time.
- OPC (date?) CD "Adequate nutrition: key to economic growth and prosperity" contains a number of useful documents, including:
 - ◊ A booklet of key nutrition messages for Malawi (the ENAs for infant feeding) in English and Chichewa
 - ◊ A training manual for service providers (Concern Worldwide and OPC) intended for use by "trainers of service providers in all the sectors". This again mostly concerns infant feeding and is quite theoretical and knowledge-based. It gives detailed instructions for the conduct of all the sessions.
 - ◊ The national nutrition strategy plan
 - ◊ The Malawi nutrition profiles 2004
 - ◊ A malnutrition fact sheet
 - ◊ A nutrition leaflet in Chichewa
 - ◊ A policy summary in Chichewa and in English
 - ◊ A training Manual for the prevention and management of malnutrition for people living with HIV etc. (CRS and OPC) – also very knowledge-based.

These may not all be suitable in their entirety but could be cannibalized for use as handouts.

- A quantity of useful literature is published by major NGOs and international organizations – for example the FAO can offer the Family Nutrition Guide and Traditional Food Plants (1988); the WALA project now active in Malawi is using the Care Group manuals (<http://www.caregroupinfo.org/blog/>)



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Kirkpatrick, D. 1975. Evaluating training programs: a collection of articles. American Society for Training and Development.

Ministry of Education, Science and Technology. National school Health and Nutrition Strategic Plan 2009-2018.

NRC/FAO. 2011. Minutes of FAO/NRC inservice training review meeting, 10.02.11

NRC/FAO. Report of a consultative meeting on development of a cross-cutting training module in food and nutrition security for frontline extension workers. Kambiri Lodge, Salima. 8-12 August 2010.

Strategy. 1,000 Special Days: Preventing Child Stunting in all Malawian Families.

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