

PLANNING & MANAGING COMMUNITY NUTRITION WORK



Planning & Managing Community nutrition work

*Manual for personnel
involved in
community nutrition*

Arne Oshaug



International Nutrition Section
WHO Collaborating Center
Nordic School of Nutrition
University of Oslo

1994

Second edition

This book has been co-produced by the Nordic School of Nutrition, WHO Collaborating Centre for Higher Training in Nutrition, University of Oslo and the WHO Regional Office for Europe.

This activity was organized by the WHO Regional Office for Europe to promote work aimed at achieving the following target in the health for all strategy.

Target 16
PROMOTING POSITIVE HEALTH
BEHAVIOUR

By 1995, in all Member States, there should be significant increases in positive health behaviour, such as balanced nutrition, nonsmoking, appropriate physical activity and good stress management.

Key words: COMMUNITY HEALTH SERVICES – organization, administration, HEALTH PLANNING, NUTRITION.

We are grateful for the assistance of the National Nutrition Council, Oslo in the production of this book.

Editor: Mary Stewart Burgher.

Designer: Tove Sandberg.

Production: a.s Joh. Nordahls Trykkeri, Oslo

All rights in this document are reserved by the WHO Regional Office for Europe. The document may nevertheless be freely reviewed, abstracted, reproduced or translated, but not for sale or for use in conjunction with commercial purposes. The WHO name and emblem are protected and may not be used on any reproduction or translation of this document without permission. The views expressed are those of the author and do not necessarily represent the decisions or policies of the co-producers.

¹ Targets for health for all. Copenhagen, WHO Regional Office for Europe, 1985 (European Health for All Series, No 1).

Contents

Editorial preface

Author's acknowledgements

Introduction

Objectives of the Manual
Pitfalls in community nutrition work
For whom is this manual intended?
How to use the Manual
Setting the stage: a tale of Nutopia

1. Where do you fit in?

Objectives
Nutopia: episode 1
Defining community nutrition work
Analyzing the job content
Listing professional functions
Getting things in order – structuring and organization
Writing a job description

2. Where do you start?

Objectives
Nutopia: episode 2
Identifying overall food and nutrition goals
Assessing national goals
A food chain – a suggested organizing concept
Analyzing food, nutrition and related health problems
Identifying actors aims and interests
Describing target groups
Support systems for community nutrition work
Summing up

3. Which projects and activities?

Objectives
Nutopia: episode 3
Formulating goals and objectives
Formulating specific objectives
Formulating strategies and activities
Assessing resources
Working out a budget
Scheduling

4. What has been achieved?

Objectives
Nutopia: episode 4
Evaluation – Concepts and Jargon
Formulating an evaluation system

References

Index

EDITORIAL PREFACE

Improved nutrition is an important part of improved health, and therefore of target 16 of the 38 targets for health for all adopted by the Member States of the WHO European Region. During my travels in the Region, I often meet colleagues working in nutrition in the community. In my discussions with them, they often say that their job as nutrition educators, counsellors, planners and advocates is so enormous as almost to overwhelm them. It certainly is. Dealing with food and nutrition is a task that involves many sectors and actors, and concerns everyone.

In addition, my colleagues often feel that the pressures of their work, the expectations of the people they serve and the tasks they are given would be easier to handle if made part of an overall plan. This sparked the idea to invite people working in community nutrition to attend workshops at which they could study systematic management theory, relate it to their work and, not least, learn from one another.

Arne Oshaug, who has many years of experience as a nutrition teacher and who has worked in all parts of the food chain, conducted the three workshops held so far (in 1987, 1988 and 1990), and felt it important to share the experience of the course participants and the process of the workshops with a wide audience. He has built the course results into the basis for a manual from which all people working in community nutrition (whether experienced or not) can teach themselves to plan ahead in order to get a firmer grip on what they are doing.

This manual is intended to be used, written in, discussed and debated. If you, the user, can think of ways to improve it, please send your suggestions to the author or the Nutrition Unit at the WHO Regional Office for Europe

Elisabet Helsing
Regional Adviser for Nutrition
WHO Regional Office for Europe

Author's acknowledgments

I would like to thank the participants at two training workshops in 1987 and 1988 on «A systematic approach to community nutrition work», organized under the auspices of the WHO Regional Office of Europe, and the participants of a similar workshop in 1990 coorganized by the WHO Regional Offices of Europe and the Eastern Mediterranean.

Firstly, the participants of the workshop held in Kecskemét, Hungary in May, 1988, for their diligent work with the first draft of this Manual. Their open, frank and constructive critical comments, and their encouragement for further work with the Manual was a great stimulus. My acknowledgments goes to each of these: M. L. Barrenetxea (San Sebastian), M.T. Bergmann (Genève), F.F. Boix (Barcelona), A. Dvorsky (Bratislava), E. Kudlova (Praha), N. Levin (Jerusalem), C. P. Rodrigo (Bilbao), H. Howsen (Cardiff), B. Wheeler (Göteborg), A. Yngve (Huddinge).

My thanks also go to the participants of the first training workshop in Asker, Norway, January 1987 and the third workshop in Belgrade, Yugoslavia, May 1990: K. Babinska (Bratislava), M. Bellizzi (Malta), A. Bærug (Vadsø), C. Chase (Altlengbach), A. Djaza-yery (Teheran), K.T. Elvebakken (Bergen), I. Gajic (Belgrade), M. Gec (Belgrade), K. Hetzel (Traunstein), R. Hunt (London), C. Hurren (London), J. Kachel (Sabinia), B. Lande (Vadsø), I. Loureiro (Lisbon), E. Olszon (Gävle), M.C. van der Wal (Rotterdam), G. Zajkás (Budapest). They raised some central issues related to community nutrition work and useful comments on the content of the Manual.

The collaboration of M. Upali Sedere (Kandy) during the workshop in Asker, has greatly contributed to the development of the Manual. I admire his skills and high competence in the field of education and evaluation. I am grateful for the opportunity to work with him in the workshop, of which I learned so much. A thank goes also to M.A. Anderson (Washington D.C.) and E. Briones (Sevilla).

I would also like to thank Asbjørn Tandberg who has always given substantial and constructive feedback on my work in the field of community nutrition. This also goes for Ivanka Gajic and Gabor Zajkás for their support, involvement and important input in the discussions concerning community nutrition in general and the Manual in particular. A special thank go to my colleague Wenche Barth Eide for her support, encouragement and the time she has taken to go through the manuscript and suggest improvements, and to Djamil Benbouzid, WHO Geneva, for his support and encouragement.

Finally, I thank Elisabet Helsing, Regional Officer in WHO, Copenhagen for her initiative to organize the training workshops, her continuing support and encouragement, and her important inputs and suggestions for changes and improvements of the Manual.

However, the responsibility for the approach chosen in the Manual, the viewpoints presented, and the errors and omissions in the text, rest with the author.

Arne Oshaug

INTRODUCTION

Objectives of the Manual

When you have studied this Manual and the reference material you should be able:

- *to undertake a job analysis and write a job description for a community nutritionist/nutrition worker;*
- *to plan programmes and activities for community nutrition;*
- *to plan an evaluation system; and*
- *to construct evaluation instruments.*

These skills will be based upon measurable increase in knowledge of:

- *the determination of priority nutritional problems of a community;*
- *the relationship between your professional training and subsequent practice in community nutrition;*
- *the principles of community nutrition work and the role of personnel involved;*
- *the role of objectives in the planning of community nutrition programme;*
- *the principles and methods in community nutrition planning; and*
- *the principles and practice of evaluating community nutrition programmes and activities.*

For whom is this manual intended?

This manual is intended to be a tool for personnel working in the field of community nutrition or related areas. Such personnel may be community nutritionists, community dietitians, physicians, nurses, mid-level managers and planners and managers in government institutions with responsibility for or interested in community nutrition work. The personnel of nongovernmental and international organizations and university departments concerned with health and nutrition may find it useful. The manual should not be considered as a textbook on basic issues in nutrition or research methodology. It is assumed that the people who will use the manual already have fundamental skills in these areas.

The approaches suggested reflect the author's about community nutrition work. The author has drawn from his own experiences, that of other people working in community nutrition and various theories in nutrition and health planning, education, social marketing, business planning and leadership, and management by objectives.

Some pitfalls in community nutrition work

1. *Lack of job description;*
2. *vaguely formulated or too ambitious job description;*
3. *underestimation of the importance of getting to know the community (through situation analysis) before activities are started;*
4. *focusing only on problems and obstacles, not considering opportunities and resources;*
5. *too little time given to long- and short-term planning (or «Let's get down to action as soon as possible!»);*
6. *lack of, or poorly defined, objectives;*
7. *forgetting the principles, overall view and long-term perspectives owing to preoccupation with inessential details;*
8. *trying to be too comprehensive and not focusing on a few important key problems when formulating programmes;*
9. *underestimation of resources needed in project work;*
10. *evaluation not included in planning;*
11. *follow-up not included in planning;*
12. *use of an individualistic top-down approach;*
13. *disregard for the importance of community participation in the work of programmes and projects;*
14. *underestimation of the importance and complexity in working with and in interdisciplinary groups.*
15. *major and repeated changes of plan during implementation;*
16. *lack of or badly performed evaluation;*
17. *projects not completed and documented because others are being started;*
18. *not being able to refuse to take new projects and activities in spite of existing overload of work;*
19. *lack of proper communication channels for feedback and information to the community, authorities, the mass media and other groups; and*
20. *taking a too theoretical rather than an applied approach in community nutrition education and in community nutrition work in general.*

How to use the Manual

The manual is by no means exhaustive. Its length was deliberately kept to a minimum. Further, the situation in the district of Nutopia, which is used as an example throughout the manual, may differ in many ways from the reality that the reader normally faces. This does not really matter, because the device is meant only to elucidate important principles related to programmes and projects in community nutrition. You can use the manual as a self-teaching instrument, as a basis for working with a colleague or in a small working group, or as a tool in training workshops for personnel in community nutrition. It can be adapted to suit different countries and even different regions in a country.

Like the overall objectives of the manual, the objectives for each chapter describe what you can achieve by using it. If you do not want to go through the whole manual,

the list of pitfalls in community nutrition may help you to identify some of your own problems, and thereby make it easier to choose the part on which to focus. In any case, you should not consider the manual as the only tool to use in the planning of community nutrition work, but use it according to your needs and the working environment. Figure 0.1 shows the close relationship between the four chapters. A community nutrition worker must have keen insight into each area, and understand their interaction and interdependence.

Setting the stage

Once upon a time a nutritionist – Ms O.K. Piano – was appointed to a newly created job in community nutrition. The post was linked to the office of the District Medical Officer (DMO) in the district of Nutopia. There were high expectations of what the nutritionist could do, and a number of areas for activities had been suggested. The actual job description, however, was rather vague. Piano therefore started with feelings of uncertainty.

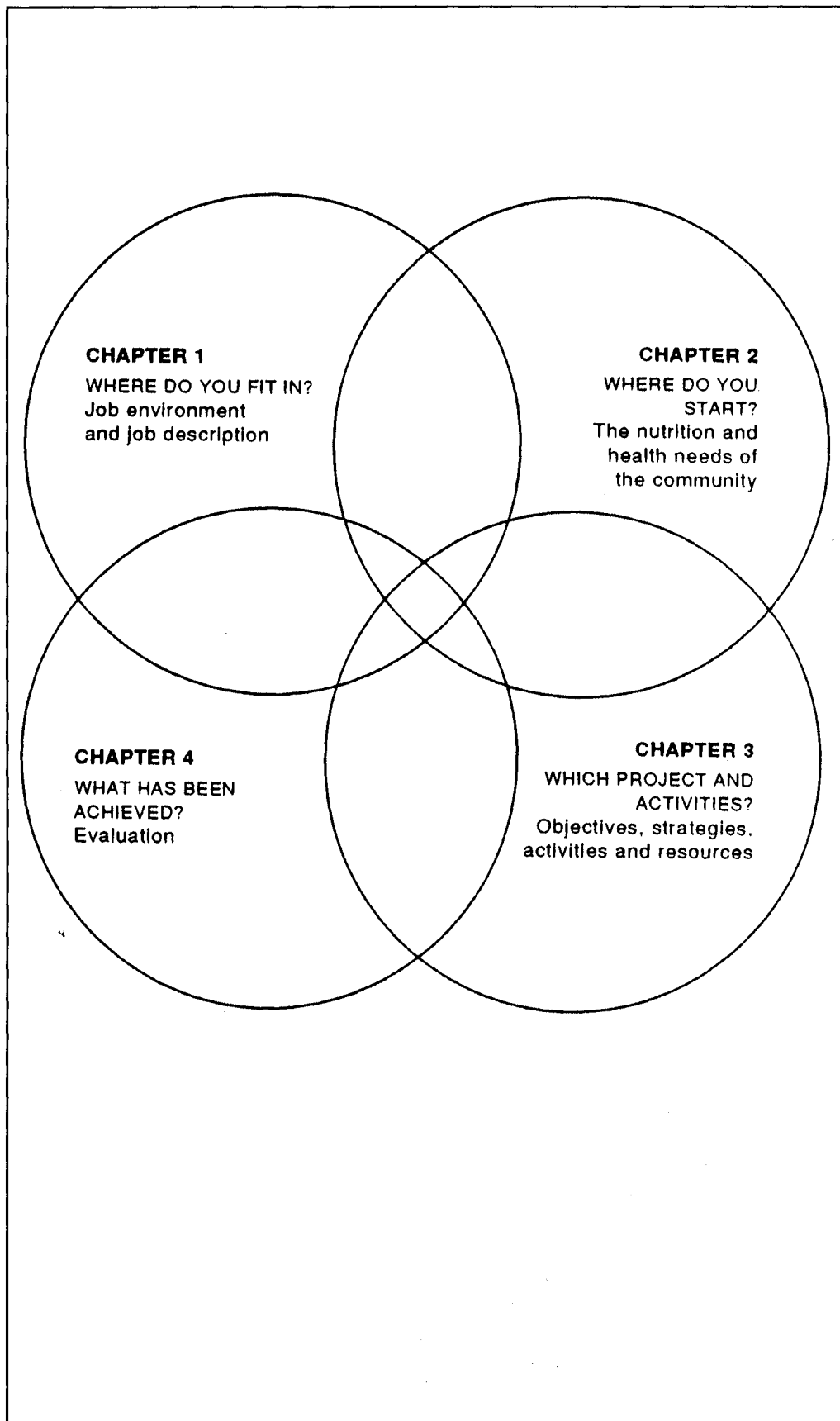
Soon it was rumored that a nutritionist was available to the district. Local physicians in private practice started sending Piano the patients to whom they did not have time to give dietary advice. Requests for starting slimming-clubs and giving lectures at schools and different organizations increased the work load. The DMO was worried about the increasing incidence of coronary heart diseases in groups of people below the age of 50. He wanted a proper study of the food habits of what he called «the high risk groups for coronary heart diseases». A pilot study showed that it would not be easy to enlist the collaboration of the major risk group (busy men in their prime) as a target group for community nutrition work.

Soon Piano felt frustrated, almost paralysed. Tasks were piling up. Problems that she had never encountered at the university needed to be solved – and fast. It was like running after several balls that were rolling faster and faster, trying to hit them without a proper bat or knowing when new ones would appear.

Moral:
***Set aside enough time to plan properly –
have the courage to say no
to requests that keep you from
your own activities.***

Figure 0.1

The topics of and links between the four chapters of the manual



1. WHERE DO YOU FIT IN?

Objectives

After having studied this chapter and some reference documents (McMahon et al. 1980, Oshaug et al. 1988, Romiszowski 1981) you should be able to:

- *define community nutrition;*
- *describe what should be included in a job analysis;*
- *prepare a list of functions and tasks of a community nutritionist;*
- *write a job description of a community nutritionist; and*
- *draw up an organizational diagram of the institution or office where you work and its relationship to other institutions whose work is relevant to community nutrition.*

Nutopia: episode 1

When O.K. Piano came to work in community nutrition in Nutopia, expectations of what she could accomplish were high, but the job description was rather vague and included statements such as:

The nutritionist shall work in areas relevant to food and preventive health, addressing the needs of the public, the health sector, schools, private and other relevant organizations.

No other functions or tasks were specified, and there was no definition of community nutrition. Such a description is too broad and vague, and gives no proper guidance on how the nutritionist should work or the important tasks to be performed. O.K. soon realized that she needed a better job description, which would give such guidance in her daily work. When prepared, however, it had to be acceptable to the DMO. The problem was, how could such a job description be made?

Defining community nutrition work

Work of importance for community nutrition takes place at a number of points along the line between the political decision-maker and the food consumer. Often, however, such work is rather narrowly defined as pertaining only to the immediate relationships between people and their food: the collection of information on food consumption and nutritional status, the analysis of food intake, changing catering practices, counselling and nutrition education, therapy for diseases. It may also include advice on simple food production, such as growing of vegetables.

Community nutrition work can be much more than this. A community nutritionist who had to work directly with individual consumers all the time would not achieve much. For example, a lack of political decisions, faults in the production and distribution system, or administrative malfunction may cause nutritional problems. A broader definition is therefore needed.

Community nutrition means work related to planning, implementing and evaluation of programmes, projects and activities, and consultation to institutions (private and public), business, groups and individuals in the local community in the field of food, nutrition and related health issues. The roles of the personnel involved in such work are defined by their job descriptions (pp 16-17), or, in the absence of descriptions of their functions, by their activities or tasks (pp 11-12).

Analyzing the job content

A job description is usually a tool to guide work, clarify responsibilities and avoid the overlapping and confusion of tasks. A job description should be based on a thorough analysis of the job as it has previously been performed. Such an analysis is an important tool for providing insight into the role and tasks of community nutrition personnel.

A job analysis of a community nutrition post should include:

- a list of functions
- a list of activities and tasks
- lines of responsibility and position of the job in the organization
- decision-making and discretionary power
- tasks the incumbent performed well
- tasks the incumbent performed less well
- what the employer needs from the nutritionist.

This list can be tested for relevance by comparing it with the food needs and nutrition related health needs of the community. It can also help institutions in identifying training needs, so that higher training in nutrition will be more relevant to community needs.

Listing professional functions

The professional functions of a community nutritionist should be listed to clarify areas of responsibility. The employer should then make clear his or her expectations of what the nutritionist should be doing. The list should eventually be fed back to the educational system that trains community nutritionists. The list should include most of the normal functions of this professional group.

People working in community nutrition may vary widely in background and specialization (as community nutritionist, community dietitian, academic or researcher, trainer of public health physicians, for example). They also work at different levels in the administrative structure, inside or outside the health care system, and usually cooperate with other people at different levels of the organizational structure.

An employer's expectations of a community nutritionist can vary from the very precise to only vague indications. The success of large community nutrition programmes, however, may require personnel with skills in three main areas: analysis of the problems of the community (with an ecological rather than a medical approach), the use of the analysis results to generate action (including disseminating

data to users, lobbying without losing the job, and planning and managing activities), and evaluation and feedback¹.

People working in community nutrition at district or local levels are important actors in the implementation of a country's food and nutrition policy (or its policy on food and health, if no such policy is explicitly formulated). The nature of this policy may affect the professional functions of community nutrition personnel. The allocation of resources within the policy to support community nutrition work is also of importance.

Exercise 1.1

List the main functions of a community nutrition worker. Where possible, refer to documents published, job descriptions etc. If no such data are available, rely on your own experience or discuss with your colleagues. Maybe you can interview employers/users of nutritional expertise (if you have not already done so in your job analysis)?

The professional functions of a community nutrition worker are as follows	
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10	
...	
...	

Now compare your list with that below.

¹ Parish, R. Personal communication 1988.

This list of professional functions was prepared by a group of European community nutritionists at a WHO workshop (Oshaug and Sedere 1987). A community nutritionist should be able to:

- identify and assess nutritional problems in the community;
- conduct and participate in research related to food, health and nutrition;
- contribute to the formulation and implementation of nutrition policy at various levels (local, regional and national);
- plan, evaluate, lead, supervise and implement action programmes on health and nutrition, identify and allocate resources for his or her own activities, and do the necessary administrative work connected to the position;
- mediate in nutrition matters between authorities at various levels of health, education and social services systems and act as a catalyst by initiating nutrition-related work in the community;
- provide nutrition education to professionals, organizations and the public, including such groups as nurses, physicians, midwives, teachers, cooks, food retailers and wholesalers, policy-makers and catering managers;
- develop a variety of health education materials for different groups, such as newsletters, pamphlets, other publications, public relations and audiovisual material; and
- perform self-evaluation and maintain and expand his or her professional competence.

Do you think this is too wide and ambitious? If so, what would you eliminate?

Getting things in order – structuring and organization

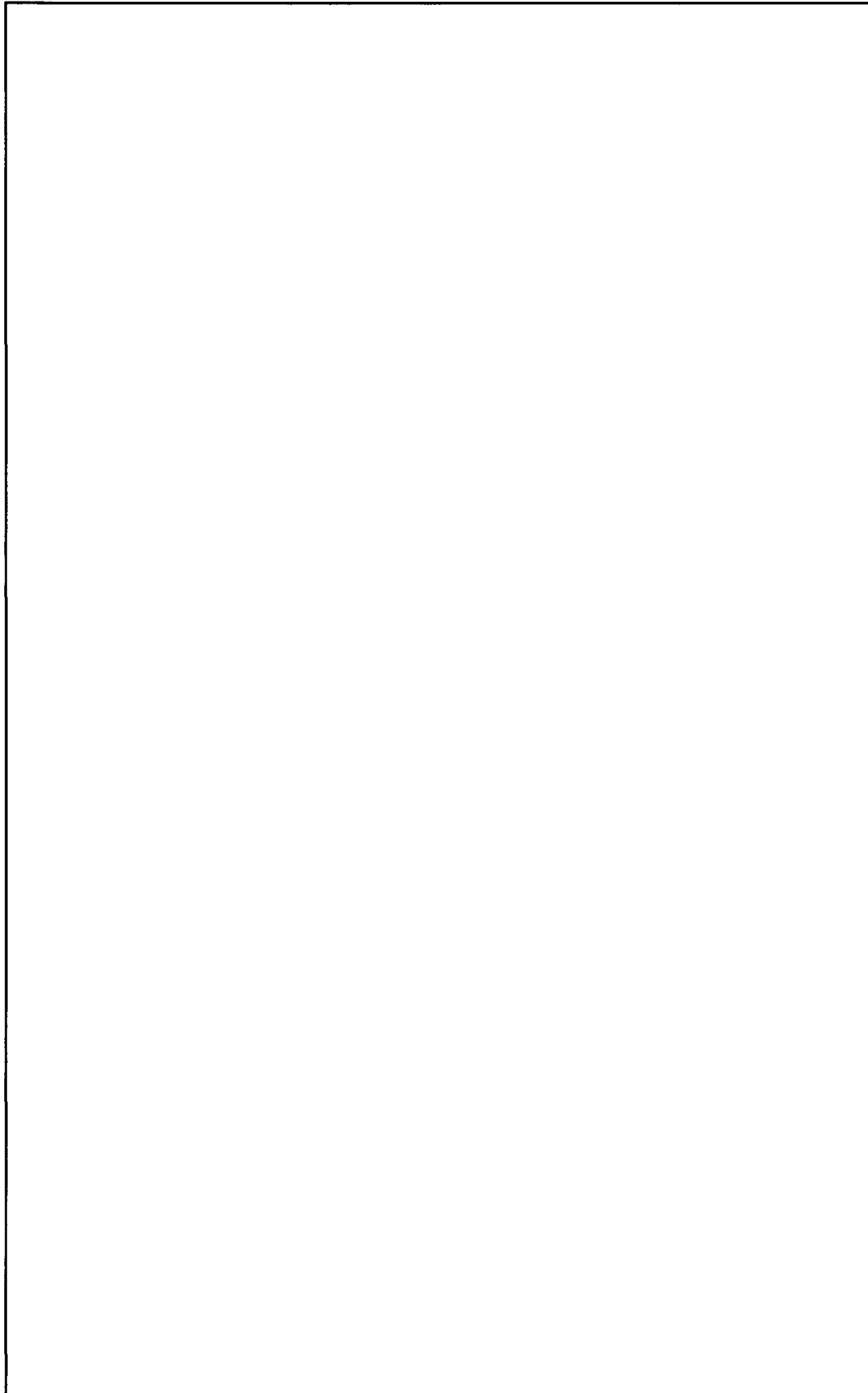
Support systems for community nutrition work are discussed in Chapter 2. To function properly in their jobs, people need support within their work environment, and must often build, strengthen and maintain such support themselves. Lines of responsibility are not always clear.

The job description (discussed later in this chapter) will establish your position in the organization and your responsibilities. You should have an overview of the organization and the personnel which can be used in community nutrition work. You may, however, have to establish, for example, an infrastructure for nutrition and health education and channels of communication. It is important not to see yourself only as part of an organization, but to cooperate with your colleagues and superiors in your own and other organizations.

In other words, you must be sure that the basic conditions needed to support your work are available. If they are not, you must establish the minimum you require with the resources available to you.

Exercise 1.2

Describe in an organizational diagram the institution in which you work. Show where you are situated, the relationship between this organization and others whose work is relevant to community nutrition problems, links to field stations etc. Include the relationship(s) to the responsible ministries or authorities.

A large, empty rectangular box with a thin black border, intended for the student to draw an organizational diagram. The box is oriented vertically and occupies most of the page's width and height.

Writing a job description

A job description should clearly and concisely explain the main characteristics of the job of a person working in community nutrition. The description should be based on a thorough job analysis. Particularly for a newly created job, however, the description may have to precede the analysis. Such a description should be revised in accordance with experience gained. The description may be written in a format that includes:

- *job title and geographical area;*
- *date;*
- *a general statement of purpose, giving the scope of the job;*
- *a description of the lines of responsibility and position of the job in the organization;*
- *specifications of personal attributes that the job demands; and*
- *a list of functions, as comprehensive as possible.*

It is easy to be lost in preparing the job description according to the above format and to forget to think about the purpose of the task. It is therefore important to remember that a job description is a tool to help and guide you in both seeking and executing a job, by means that include:

- establishing position of the job in the organization in terms of salary level, benefits and lines of responsibilities;
- establishing selection criteria and the necessary qualifications of candidates;
- identifying needs for staff training; and
- assessing job performance and evaluating personnel involved in community nutrition work.

It is, however, a good tool only if written properly. As a general rule, a job description should not contain lengthy discussions, but be kept short, simple and precise.

Avoid lengthy discussions!
Use simple language!
Be precise!

A job description is seldom complete, and a complete one will hardly remain so for long. The job description should be regularly and critically reviewed, to allow for flexibility and enable new challenges to be taken up. Let us now return to Nutopia:

After much discussion and negotiation with the DMO, interviews with key people, and analysis of other jobs in community nutrition, O.K. Piano finally worked out a job description which she felt would help her and be acceptable to the DMO. She still thought, however, that it was somewhat long and complex.

Figure 1.1. O.K. Piano's job description

TITLE: Community nutritionist

DATE: 6 July 1992

GEOGRAPHICAL AREA: Nutopia District

PURPOSE: The person employed in this position is the main person responsible for advising on how to include nutrition considerations in all relevant programmes planned and activities initiated by the DMO's office. In specific nutritional programmes and activities, the responsibility will include situation analysis, planning, implementation and management, and evaluation. The incumbent is also responsible for leading the work of formulating a food and nutrition policy in Nutopia. This should be done in accordance with the overall national policy. The community nutritionist will, however, only have an advisory role in questions dealing with policy issues affecting the DMO's office, and in questions which will have economic implications. The incumbent will also advise the staff of the DMO's office on nutritional aspects in general. As regards the services of the supporting staff and equipment at the DMO's office, the community nutritionist has the same rights as medical officers, district nurse, sanitary inspectors, food and water controllers, etc.

LINES OF RESPONSIBILITY: The community nutritionist reports directly to the DMO, and will work in close collaboration with relevant operational groups within, or directly with groups and persons outside, the DMO's office. Such work outside the office must be of high relevance to community nutrition. The community nutritionist cannot sign contracts or other types of agreements which will commit the DMO's office economically or otherwise, without the prior permission by the DMO.

PERSONAL QUALITIES: The incumbent will work in close contact with other professionals, industry and business, teachers and school children, different ethnic groups, etc. The incumbent must therefore be able to communicate in a simple and clear language suited to the target group and to cooperate with different groups and individuals of different educational backgrounds; have a flexible and open mind; have problem-solving skills; not deliberately use language or behave in ways that can offend people for ethical, religious, ethnic, political or other reasons.

FUNCTIONS: The community nutritionist will:

1. identify and assess nutritional problems in different socio-economic, occupational, age, and other types of groups in the community;
2. advise the DMO Office on how to include nutritional considerations in general health policy development;
3. prepare an annual work plan, including specific objectives, strategies, activities, budget and an evaluation system;
4. lead an interdisciplinary group in planning a food and nutrition policy for the district;
5. plan, organize, implement and evaluate nutrition training programmes for health staff, teachers, caterers and others who are in a position to contribute to community nutrition activities;
6. plan, organize, implement and evaluate nutrition education programmes for schools and the public;
7. produce health education materials to support various activities in preventive health care relevant to nutrition;
8. stimulate and contribute to mass media initiatives on matters of diet and health;
9. negotiate changes in the food industry which are in accordance with the dietary guidelines and objectives of the district food and nutrition policy;
10. negotiate changes in menu structure, meal composition and dish preparation in restaurants, catering firms, business and public canteens, and hospital kitchens;

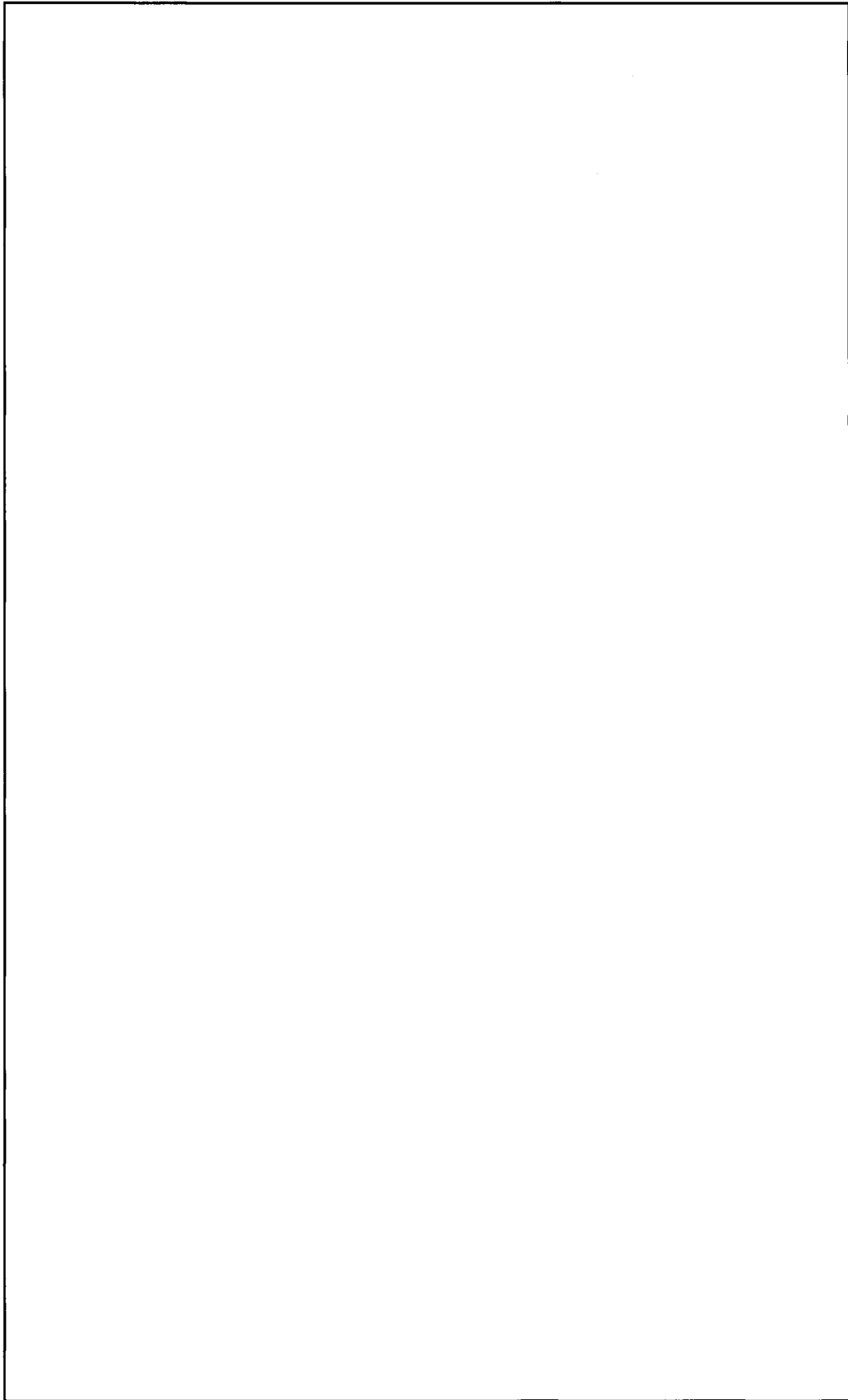
Functions (cont.): The community nutritionist will:

11. provide an information service on health, food and nutrition to health and other professionals working at the local level;
12. assist in monitoring and evaluation of various activities in preventive health care conducted by the DMO's office;
13. liaise with other district health authorities and various local authorities in the implementation of various community nutrition activities;
14. supervise the work of other members of staff and student on placements as required;
15. evaluate own and other health staff's professional competence to detect needs for further training;
16. report to universities and other institutions of higher training on competence needed in community nutrition work;
17. keep up to date on scientific research findings and related developments;
18. liaise with colleagues on technical and job-related issues; and
19. review this Job Description each year and suggest improvements if required.

Additional functions and responsibilities may be added to this job description by mutual agreement between the DMO's Office and the incumbent.

EXERCISE 1.3

What did you think of O.K. Piano's job description? Write a job description for your own post according to the format used in this chapter.

A large, empty rectangular box with a thin black border, intended for the student to write their own job description. The box occupies most of the page's vertical space.

2. WHERE DO YOU START?

After having studied this chapter and some reference documents (Beghin et al. 1991, Jelliffe and Jelliffe 1989, Mager 1984), you should be able to:

- *describe the factors which are related to the food and nutritional situation of the community;*
- *rank by order of priority the nutritional problems in the community and analyse their causes;*
- *describe various target groups in the community in terms of variables such as health status, age and sex, socioeconomic status, cultural and ethnic background, occupation and education;*
- *identify the elements of the system that may support community nutrition work and list the actors (organizations and individuals) that are users of the services of nutrition workers or work in nutritionrelated areas.*

Nutopia: episode 2

With the agreement of the DMO, O.K. Piano decided to close down her services for a week and use the time to make an initial situation analysis. In particular, she needed to place her work within the framework of the national food and nutrition policy and the national health policy. She had to collect the policy documents, identify the overall goals of the policies and analyze their goals. Further, she realized that she had to make quite a comprehensive analysis of the nutrition and health situation of Nutopia. This could then form the basis for the formulation of a food and nutrition policy for the district, and for the planning of programmes and activities.

Identifying overall food and nutrition goals

O.K. Pianos' experiences can provide an important lesson for most professionals working with nutritional problems: such people should have time to plan properly to avoid drowning in a flood of unconnected tasks. Further, when objectives are missing or poorly formulated, work is poorly planned, and difficult to manage and evaluate.

The first step in tackling this problem is to get a thorough understanding of the food and nutrition situation in the area. This should then be used to formulate coherent strategies for achieving the goals that have been set for the area.

Most countries and many districts within a country have policies that address problems related to their food, nutrition and health situation. Such policies may not necessarily have specific nutritional goals, but most have some sort of dietary guidelines. If your country does not have specific food and nutrition goals applicable to local conditions, you can analyze national and local plans in areas closely related to nutrition (such as health, food production and education) to identify the overall food and nutrition goals. You should obtain copies of documents on the relevant policies for the following exercise.

Exercise 2.1

Review national or regional plans to identify their overall goals related to the food, nutrition and health situation.

Overall goals for food and nutrition	
1	
2	
3	
4	
5	
6	
7	
8	

Assessing national goals

Look critically at the overall goals you have identified. Do they reflect what you think should be the main priorities in nutrition? Do they describe an ideal or an optimal situation?

What is the purpose of defining an ideal or an optimum? One good answer is that nutritionists often have to define overall goals and objectives that reflect certain visions for the future and thus guide community nutrition work. Nutritionists therefore need a basis for setting such goals and corresponding criteria to assess them. Such criteria can help you make a situation analysis and carry out subsequent work.

It may not be possible to identify a basis for goal-setting that suits all kinds of communities equally well. Four major considerations have been proposed for use in formulating goals and objectives for community nutrition work (Eide et al. 1986).

The nutritional adequacy and safety of the diet must be taken into account. In other words, is the diet nutritionally adequate (in terms of nutrients and energy) and safe (with regard to bacteria, additives, chemical residues in cereals, fruits and vegetables from spraying, residues of hormones in meat from animal breeding, etc.). Nutritionists have traditionally considered this criterion the most important.

Cultural acceptability and social importance is a second central consideration. The food culture need careful consideration; it includes the types of food and meals people eat, what they consider to be food and high-status food, where they eat and with whom, the feeling of wellbeing and security, notions of the relationship between food and health.

The third consideration is *viable food procurement*. People need many things in addition to food. Nutritionists should therefore try not to impose strategies that conflict with the community members desire to fulfil their other basic needs, whether material or non-material. This aspect thus deals with how people procure their food. It has to do with their dignity, their need to participate in matters that affect them, and their self-reliance.

The sustainability of the food base is the fourth consideration. The various foods that are part of people's food culture and that nutritionists recommend in their campaigns must be available, and on a *sustainable basis*. This criterion also relates to people's ability to sustain a nutritionally adequate and cultural acceptable food base in a crisis such as natural disaster, ecological degradation and pollution, unemployment, the loss of a family member or breadwinner, or loss of social network.

A set of goals that does not take account of all these criteria will seldom be reached. Such deficient goals do not give proper guidance for situation analysis and the planning, implementation and evaluation of activities.

Overall goal	Nutritional adequacy/safe	Cultural acceptability	Viable procurement	Sustainable food base
1				
2				
3				
4				
5				
6				
7				
8				
..				

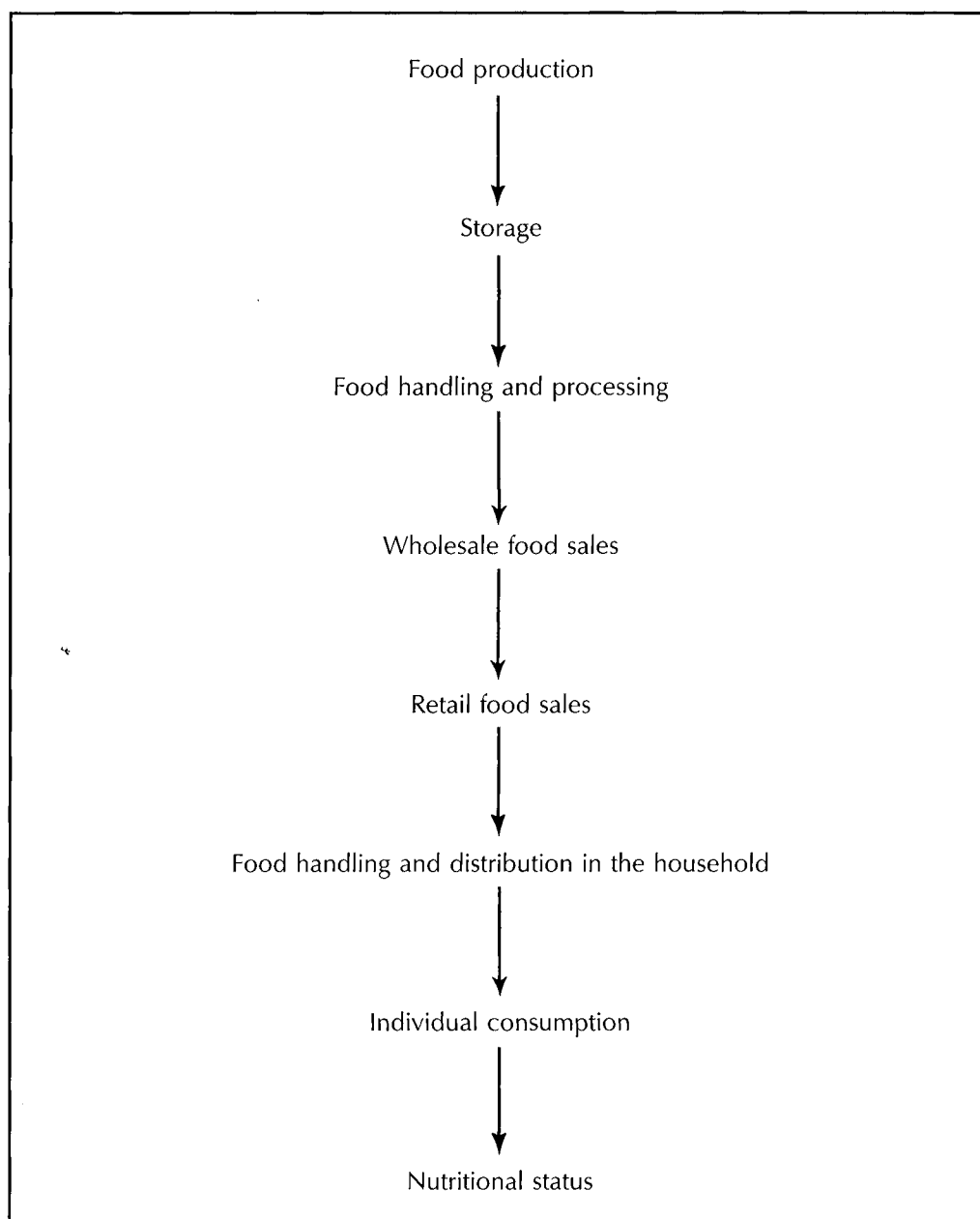
Exercise 2.2

Test the overall goals that you listed in exercise 2.1 (by writing yes or no in the space provided) as to whether they take account of the four above-mentioned criteria. If the goals do not take account of all four, you may have to modify them.

A food chain – a suggested organizing concept

A problem analysis will show that nutrition is linked to so many and complex problems that you may feel overwhelmed and helpless. You will need analytical tools useful in setting priorities. These should be simple and give an overview of the situation. Such tools must be both comprehensive and flexible enough to include most of the important aspects of the food, nutrition and health situation in the area. Although many different approaches may be taken, in the initial analysis you may find a food chain a useful organizing concept in a systematic approach. Figure 2.1 shows a food chain that can be applied at various levels.

Figure 2.1 A food chain



The food chain in your area

Exercise 2.3

Identify the various components of the food chain as you see it in your community. Include nutritional status as the endpoint of the chain.

Analyzing food, nutrition and related health problems

After identifying the food chain in your community, you must analyze it in the light of, for example, the socioeconomic and political context, agricultural policies, and the power and impact of market forces. A number of factors may be important in determining how households procure their food and what decides individual food consumption, including: perceptions of food, values, ideology and religion. In addition, several health and sanitation factors influence the link between individual food consumption and nutritional status.

You have now identified elements of a food chain in the community where you work. The next step in a systematic approach is to identify problems and needs related to the food chain, using your experience and the results of research. If you have not done so already, obtain all relevant research reports and statistics that can tell you something about the local food, nutrition and health situation. If you have to do a detailed situation analysis and do not have basic skills needed in research methodology, you will have to consult textbooks addressing such issues.

Exercise 2.4

Identify as many problems or needs² as possible in each link of your food chain, and indicate their priority (1 for the highest, 2 for the second highest, etc.). If the space is inadequate, continue the list on a separate piece of paper.

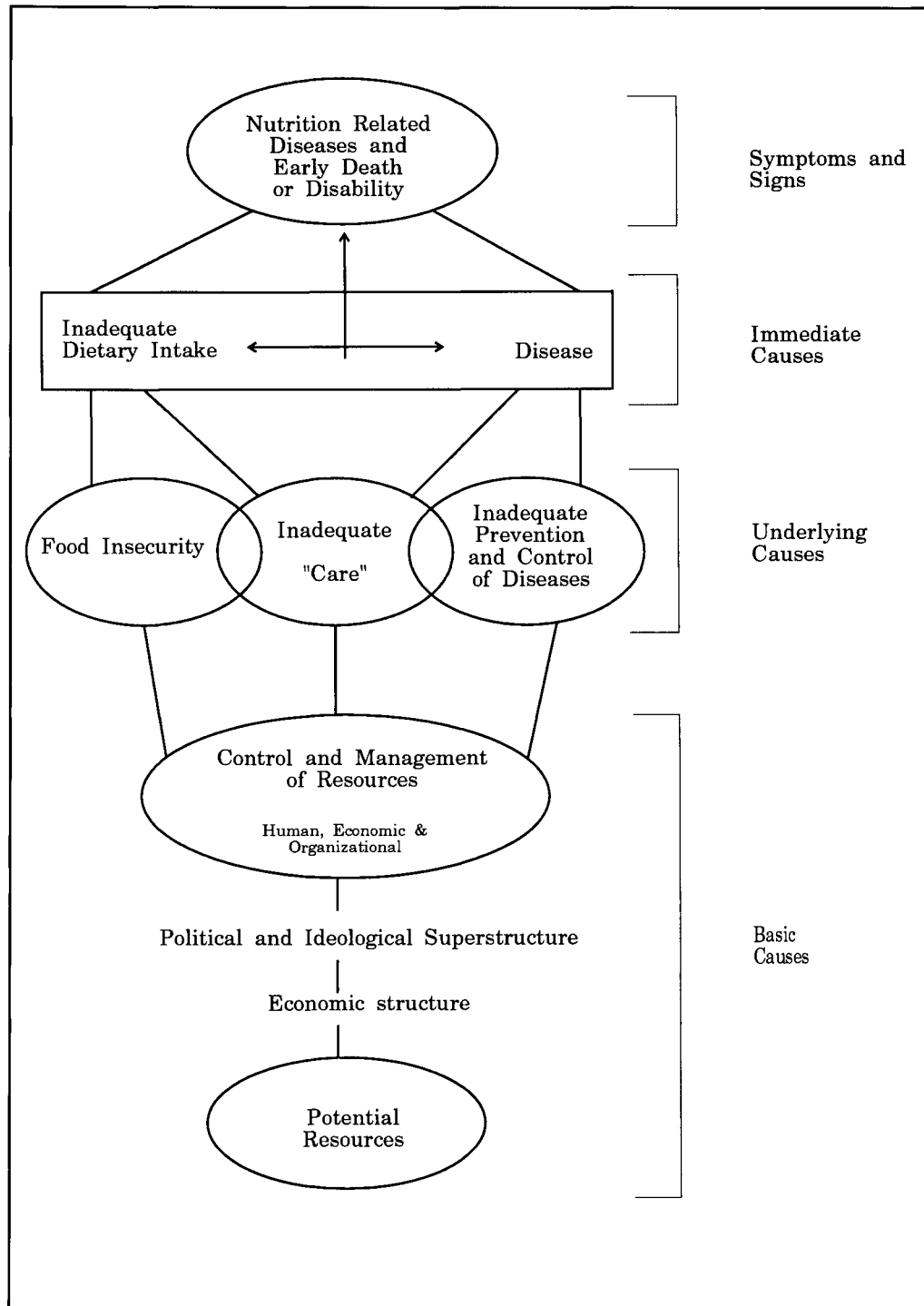
The food chain	Identified problems/needs	Priority

² For the identification of indicators and methods see Beghin et al. (1991), and Maxwell and Frankenberger (1992).

³ For a discussion of causal models see Begin et al. (1991), Jonsson (1988), Jonsson and Toole (1991) and UNICEF (1992).

A causal analysis³ of the problems of highest priority can be useful. It can help you gain the understanding that you need of the relationships between the various factors that affect nutrition and the causes of nutrition-related health problems (Figure 2.2).

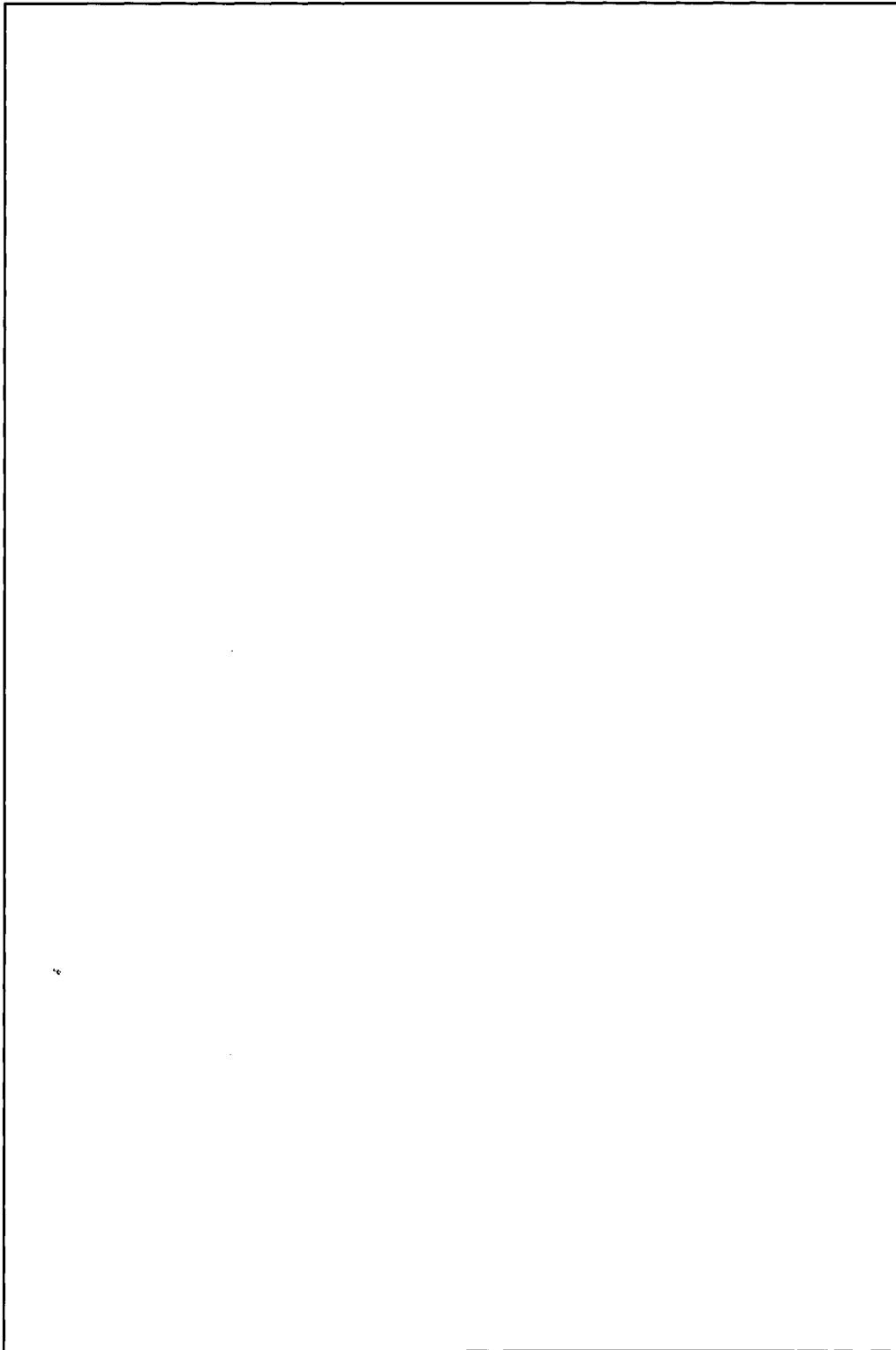
Figure 2.2
Various causes of nutrition-related problems



Adapted from UNICEF (1992) and Jonsson and Toole (1991)

Exercise 2.5

Make a causal analysis of the problems you have identified as having the highest priority.

A large, empty rectangular box with a thin black border, intended for the student to write their causal analysis of the highest priority problems.

Having done so, do you wish to reconsider and modify your order of priorities? Discuss your priorities and analysis with your colleagues.

When you establish various activity groups in your community, discuss priorities and causal linkages with them.

Identifying actors in the food chain

Actors are the people and organizations that work in areas that affect the food and nutrition situation; some are active users of the services of nutrition workers.

People in community nutrition must deal with many actors of different kinds, including members of households or organizations in the public or private sector, and decision-makers at various levels. Some will draw on the services of community nutrition workers on an ad hoc basis while others are more regular users. Actors who work in areas related to nutrition may be part of interdisciplinary groups in which nutritionists participate. Some actors may be found within specialized organizations dealing with various links in the food chain.

Exercise 2.6

For each of the high-priority nutrition problems that you listed in exercise 2.4, identify the relevant actors and list them as providers or users of nutrition-related services. If you have not yet chosen a high-priority problem, use the following two: (a) increased content of pollutants in food and drink and (b) increased fear among the population for food poisoning.

High-priority problem/need	Actors	
	Providers	Users

There are usually more actors than you would expect. Compare your list with that on the next page, and draw your own conclusions.

Exercise 2.7

Now, consider the list of actors below. If you have used the sample problems, underline all the actors you listed in the preceding exercise; put in brackets any that you omitted. If you used other problems, analyze the list below and see if the actors proposed are relevant for your community. If not, replace them with those that are missing.

High-priority problem/need	Actors	
	Providers	Users
Increased content of pollutants in food and drinks	Food/water analysts or controllers Toxicologists Veterinarians Chemists Specialists in purification technology Producers of purification equipment Researchers Laboratories Local health authorities Hospital staff: -physicians -dietitians -clinical nutritionists Nutritionists Nongovernmental organizations Health educators Politicians Trade unions Consultants	Agricultural sector Health institutions Mass media Primary and secondary schools Institutions for higher training Individual consumers Policy-makers Food industry Legal bodies Consumer organizations Bureau of standards Quality controllers Food technologists Primary health care worker
Increased fear in the population of food poisoning	Health/nutrition educators Health authorities Psychiatrists/psychologists Physicians (general practitioners) Marketing experts Journalists Toxicologists Food quality controllers Behaviorists	Schools Athletic clubs Mass media Food industry Primary food producers Marketing experts Individual consumers Parents Policy makers Institutions for higher training Primary health care workers Consumer organizations Wholesalers of foods Retailers of food

Identifying actors' aims and interests

To influence various actors in the food chain (such as the food industry, restaurants and catering, and politicians), you must know something about their aims. You should find the answers to a number of questions. What are the actors' aims and strategies? What are their priorities? How do they think? What is their time schedule? Without such information it will be very difficult to formulate effective strategies to address these groups.

In addition, actors' interests are very likely to conflict from time to time. Nutrition touches on many different professional disciplines and problem areas such as health and disease, food production and processing, communication and information, transport, food subsidy, pricing policy and social security policy. Naturally, serious conflicts may arise, between and within the groups involved.

The food targets based on nutrient goals may conflict with the profit goals of the parts of the food industry that wish to use cheap fat and sugar in food processing, or the modern agricultural policies. The health ministry may have different views on resource utilization than the finance and agriculture ministries. The producers and processors of meat may compete for market shares with those of fish. In remote areas with difficult transport and low production of fruit and vegetables, consumers want more cheap and good-quality fruit and vegetables, as recommended by nutritionists. Retailers, however, may not be willing to pay for fast transport and better storage facilities without increasing their prices or being subsidized by the government. These are only a few examples of common conflicts.

Exercise 2.8

Identify the overall goals and the strategies of each group in the food chain in your community.

Actors	Goals	Strategies

Exercise 2.9

List potential conflicts of interest that could arise between actors in your community in the pursuit of the overall food and nutrition goals that you identified earlier.

Goal	Actors	Possible conflicts
1		
2		
3		
4		
5		
6		
7		
8		

Describing target groups

All groups of actors are potential target groups for nutrition campaigns. Further analysis is therefore needed to formulate strategies. For example, telling people things they already know is a waste of motivation, time and money. It is equally wasteful to formulate strategies that are unrealistic. A good description of the target group of a campaign may help in formulating sound strategies. Members of the target group must be involved in producing the description; their task includes assigning priority to the problems that need to be addressed.

A weakness in many nutrition campaigns is that they consider the population to be a homogeneous group. Many campaigns therefore fail or have limited effect. Populations have to be classified in subgroups, usually according to criteria such as health, age and sex, socioeconomic background, culture, ethnic background, geographical location, occupation and education. A variety of characteristics can be described, such as a subgroup's diet, ability to change, interests, biases, experiences, goals and strategies. The complexity of your community and the type and seriousness of the nutritional and health problems will determine which subgroups are the most important target groups.

The selection of variables to use in a target group description will depend on your location on the food chain and the type of actors you are dealing with. In dealing with people in the food industry, for example, you may choose to focus on their goals, strategies, ability to change, interests, biases and experiences. In dealing with taxi drivers in a busy city, however, you may add a focus on their disease pattern, blood pressure, cholesterol levels, dietary pattern and nutrient profile, meal frequency, arrangements and facilities for regular meals, level of physical activity, smoking habits, education, income, and potential to improve their working environment.

Obviously, making such a description requires research skills. Remember that detailed studies, which require a lot of time, material resources and skilled personnel, are not always necessary. You may be content with a few details and a simple description. Sometimes a simple description, which can give you some understanding of and ideas for your target group, is better than none at all. Involving the target group in the analysis will provide more details, and improve its relevance to the community and reliability in describing real needs.

Exercise 2.10

Describe each of the most important actors that you have identified in the food chain or linked to a high-priority problem.

Actors	Description

Support systems for community nutrition work

SYSTEM

A system is often defined as a set of components or elements, interacting to achieve a common goal.

SUPPORT SYSTEM

A support system is an institution, organization, administrative structure or other structure in the community that facilitates the successful implementation of nutrition work.

HEALTH SYSTEM

A health system is the complex of interrelated elements that contribute to health in homes, educational institutions, workplaces, public places, and communities, as well as in the psychosocial environment and the health and related sectors. A health system is usually organized at various levels, starting at the most peripheral level, also known as the community level or the primary level of health care, and proceeding through the intermediate (district, regional or provincial) to the central level (WHO 1984).

Any action programme intended to improve the food and nutrition situation in a community will need support from many sectors and systems. The national food, nutrition and health policies provides the scope for what can be done. The political system can make crucial decisions on the implementation of action programmes.

The system that has administrative responsibilities and structures for food, and decisionmaking power, is important for nutrition work at various levels. It can either support or constrain initiation and implementation.

A good information base, designed to meet users' needs, is vital for proper policy and administrative decisions. It is equally important for the formulation of programmes or more limited activities.

The flow of information between various users is often far from ideal. A proper communication system between the sectors involved is important both to ensure access to the data needed for decisions and to avoid unnecessary overlap and duplication of work. Resource utilization may thus be improved. The information base and communication system can be combined in a system for nutrition surveillance (Mason et al. 1984).

The infrastructure in many countries is deficient. This includes transport, telecommunication, water supply, waste disposal, and other sectors that are essential to the function of any community.

The legal system has proved to be a useful support in many important nutritional issues. Examples are the work of Codex Alimentarius Commission, the legally regulated fortification of foods, regulations against food adulteration and additives, regulations on food labelling, and help to refugees and displaced people provided for in the international humanitarian law.

Many more systems could be mentioned, but only two are added here, namely the health system and the educational system. This latter includes education and training from the primary level to university. A well functioning educational system is important because it is a prerequisite for the provision of personnel with the competence in nutrition needed in the other support systems, and thus also a prerequisite for formulation and implementation of national or community food and nutrition policies.

In summary, the following are some (potential) support systems for community nutrition work:

- the political system;
- the administrative system;
- the data gathering and communication system (or nutrition surveillance system);
- the infrastructure, particularly transport and food business;
- the legal system;
- the health system;
- the educational system.

Unfortunately, in practice many of these systems constrain rather than support nutrition work. Looking at their potential support, however, leads to a consideration of their positive functions.

Finally, it should be mentioned that a programme that involves the community in the process of nutrition work from the start has a greater chance of securing its strong support.

Exercise 2.11

Make a list of support systems for community nutrition work in your community. Indicate where nutritionists are working or where you think they are needed.

Support system	Use or need for nutrition competence

Summing up

After having studied this chapter and the reference documents mentioned, and collected other needed information, you have now a clear picture of the food and nutrition situation of your community, including:

- an overview of regional or national plans (particular their goals and objectives) for food and nutrition;
- a panorama of diseases and problems related to food and nutrition;
- the problems that need most urgently to be solved;
- an overview of the indicators and methods used to describe actors in the food chain;
- the factors that contribute to nutrition-related problems of all kinds and the level at which they operate (national, regional, local, household and individual);
- a description of the various actors and target groups; and
- a list of the systems that support nutrition work.

3. WHICH PROJECTS AND ACTIVITIES?

Objectives

After having studied this chapter and some reference documents (Andersen et al. 1987, Green et al. 1980, Hollis 1986, Israel et al. 1987, Oshaug et al. 1988), you should be able to:

- *list the factors that influence the formulation of goals and objectives;*
- *formulate goals and objectives for community nutrition programmes and activities;*
- *list the qualities of behavioral objectives;*
- *list and describe at least six different types of strategy in community nutrition work;*
- *list your colleagues' possible reactions to the proposed strategies, and devise ways to overcome those that are negative;*
- *make a resource analysis and prepare a budget for community nutrition activities; and*
- *prepare a time schedule for implementation of projects and activities.*

Nutopia: episode 3

After having done the situation analysis, O.K. Piano embarked on the task of planning her own activities. She found this very difficult because she had no earlier experience and no formal training in formulating goals, objectives and strategies. Neither did she have any experience in assessing the resources available and those that would be required for planned activities. Further, she had to prepare a budget and a realistic timetable that the DMO would accept. She felt he really could use some help...

USUAL PRACTICE IN PLANNING

Total time available
- Time for daily routine work

= Time available for planning

IDEAL PRACTICE IN PLANNING

Total time available
- Time for planning

= Time available for daily work

Formulating goals and objectives

Definitions

At this point in the process, you can plan activities. You have probably had many ideas. A systematic approach to an action programme requires that you now begin to identify the ultimate results expected. These should be explicitly formulated as the goals of the action programme. Goals are broadly stated, long-term expectations, often expressed in very simple and general terms.

When you formulate goals for your action programme, you have to take into consideration the overall goals of the national or local food and nutrition policy, as well as the nutrition and health needs of the community. You will thus follow up the work you did in previous chapters. For example, goals for a community nutrition programme could be to improve the nutrition situation for the local population and to make nutritionally desirable food available for retail.

Having established goals, you must next clearly spell out what must be done to achieve them. These objectives can subsequently be transformed into tasks of varying specificity. For example, if the goal is to reduce the rate of premature deaths due to diet-related diseases, the role of nutrition in these deaths must be clarified as far as possible, and objectives must be set to address the causes. You may have to decide whether to target high-risk groups or the whole population. In other words, objectives address the various parts of the goals.

The specificity of general objectives depends largely on the nature of the goal. A broad goal has broad general objectives. The objectives for the goal of improving the nutritional situation of the local population, for example, could include:

- reducing cardiovascular diseases;
- reducing fat and salt consumption in farmers;
- increasing the fibre content of the diet of factory workers;
- increasing the nutrient density of the diet of the infants and preschool children of a vegan community;
- increasing the awareness of the public of the benefits of lower salt intake;
and
- reducing the incidence of diet-related disease due to high alcohol consumption in unemployed men.

These objectives vary in specificity. Some include target groups, while others are only general statements.

Goals and general objectives should address the main nutritional problems of the community, therefore

NEVER FORGET RELEVANCE!

Objectives also should be achievable. You will probably have to refine or adjust your objectives as your work proceeds.

Formulation

Formulating goals and general objectives requires that a number of factors be addressed. So far, the following have been discussed:

- the overall goal of national or local food and nutrition policy;
- food, nutrition and related health problems, including the needs and priorities identified by the community;
- the skills and interests of the community nutrition worker;
- the actors in the food chain, and their agenda and conflicting interests;
- target group description; and
- support systems.

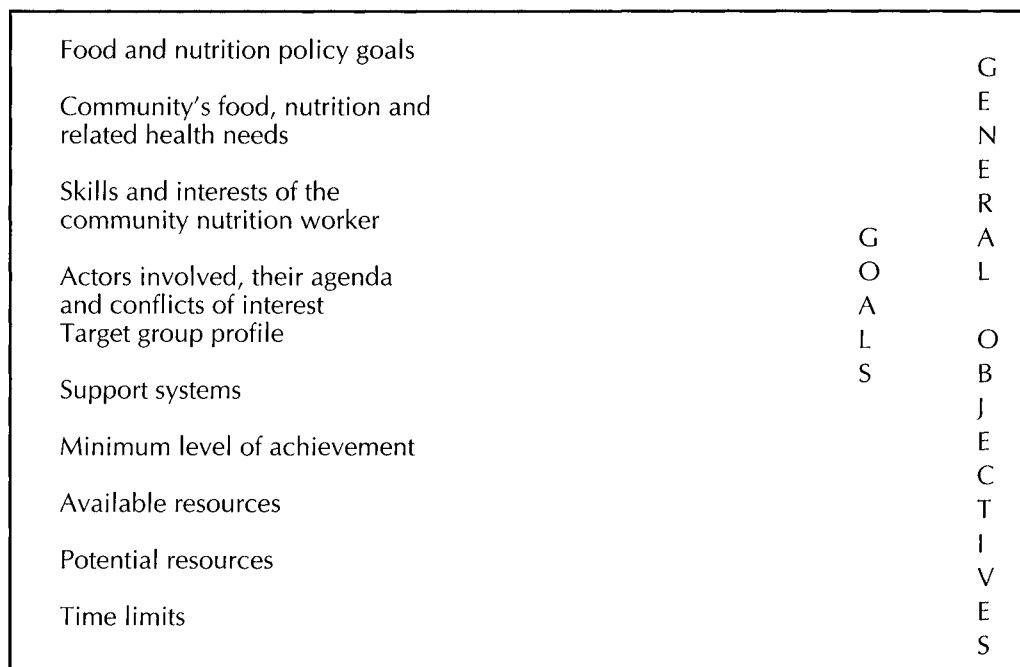
Four additional questions must be answered:

- What is the minimum level of achievement that would satisfy you at the end of the programme?
- What are the immediately available resources (human, material, finance, etc.)?
- What potential resources for the programme exist in the community?
- What is the time limit for the implementation of the programme?

Thus, a number of factors will influence the formulation of realistic goals and general objectives. Some are illustrated in figure 3.1

Fig. 3.1

Influences on the formulation of goals and general objectives in community nutrition work⁶



⁶ Adapted from Oshaug and Sedere (1987)

Exercise 3.1

Define a set of goals for your community nutrition programme. Take account of all the factors discussed above.

Goals of the programme
1.
2.
3.
4.
5.
6.
7.
8.

Goal	Nutritional adequacy and safety	Cultural acceptability	Viable procurement	Sustainable food base
1				
2				
3				
4				
5				
6				
7				
8				

Exercise 3.2
 Test your goals (by writing yes or no in the space provided) as to whether they take account of the four major considerations identified in Chapter 2.

Exercise 3.3

For each defined goal, write down the general objectives that you think will cover all its aspects. If necessary, continue the list on a separate piece of paper

Goal	General objectives
1	1.1 1.2 1.3 1.4
2	2.1 2.2 2.3 2.4

Objective	Relevance	Feasibility
1.1		
1.2		
1.3		
1.4		
1.5		

Exercise 3.4

It may be surprising to find that an objective can sometimes turn out to be irrelevant or unrealistic. Test each objective for relevance (high/low) and feasibility (good/fair/bad).

Formulating specific objectives⁷

Once the general objectives have been identified and spelled out, the next, often difficult step is to formulate specific objectives. This will help you to know exactly what is expected and how, where, and under what conditions results will be achieved. It will also be helpful in implementation, and should improve both the process and the outcome of an action programme. The formulation of objectives is an important tool in planning and evaluation.

The content of specific objectives is much debated in the literature. The following elements are suggested:

- (1) the expected change (e.g. behavioral, material, nutritional status);
- (2) the conditions under which the expected change is to take place, including, for example, the time, target group and strategies or activities used; and
- (3) the extent of the expected change⁸ that will satisfy the objectives.

Including strategies or activities in the specific objectives will make formulating them more complex. People experienced in formulating objectives will benefit from this practice, but novices will do better to deal with strategies separately.

Formulating specific objectives with sufficient precision requires a detailed situation analysis and assessment of resources. Understanding the circumstances in which the action is to be implemented is essential to the establishment of realistic objectives. The following are two examples of specific objectives that are derived from a general objective and include the three elements suggested above:

- to conduct a campaign (2) among adults aged over 20 years (2) to reduce fat consumption (1) to a level below 30% of total energy intake (3) within a period of five years (2) by providing public education (2), by making available low-fat milk and milk products in wholesale and retail markets (2), and by making available good quality fruit and vegetables for consumption at local level (2); and
- to implement an information campaign (2) to reduce dental caries (1) by 20% in all schoolchildren (3) aged less than 12 years within a period of four years (2) by motivating (2) parents, teachers, primary health care workers and schoolchildren (2) to follow a healthy diet (2), to increase consumption of starchy food (2), to reduce the consumption of sugar and refined food (2), to clean their teeth after meals (2), and to visit a dental practitioner regularly (2).

Goals and objectives must be consistent. Specific objectives should be derived from general objectives and these should be derived from the goals (Fig. 3.2).

A set of realistic objectives may deviate from what you as community nutrition workers see as an ideal situation. Unfortunately, reality requires continued change of priority, and plans should take account of the limits on resources and in contextual factors (Figure 3.3).

⁷ Adapted from Oshaug and Sedere (1987).

⁸ This is often expressed as «the minimum level of performance/achievement/change» or as a criterion. Some nutrition literature uses the concept of the target; this will correspond to an objective that includes such a criterion.

Figure 3.2
Relationship between goals, and general and specific objectives

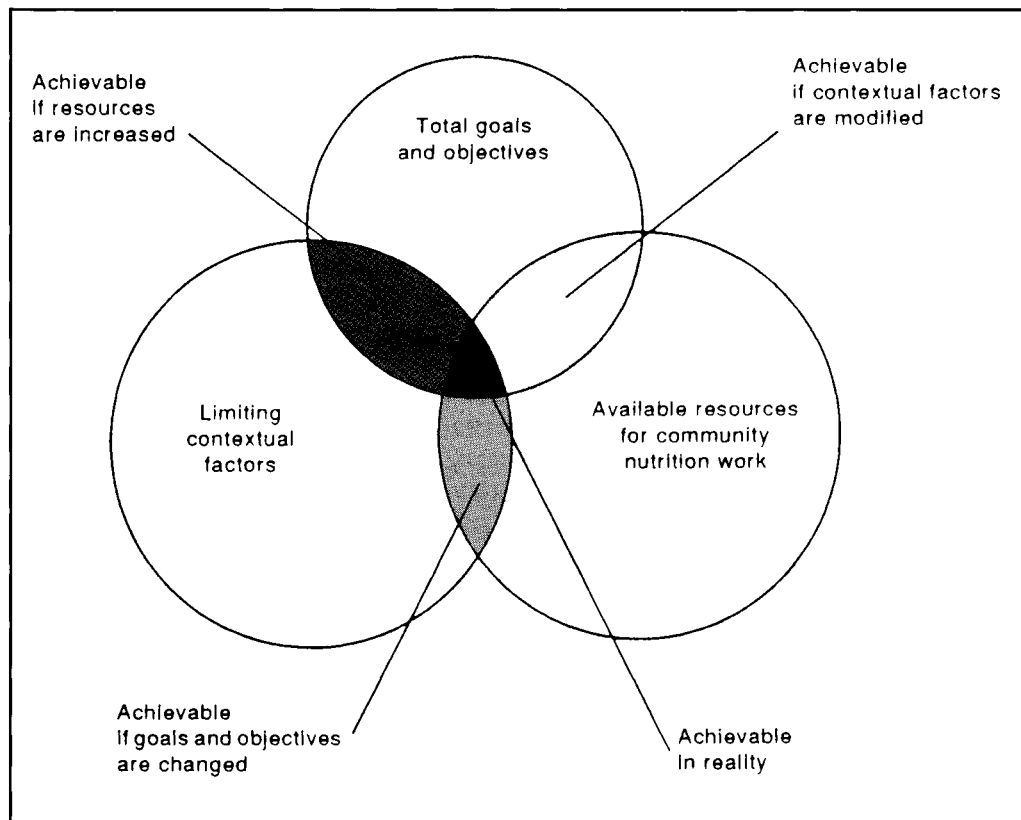
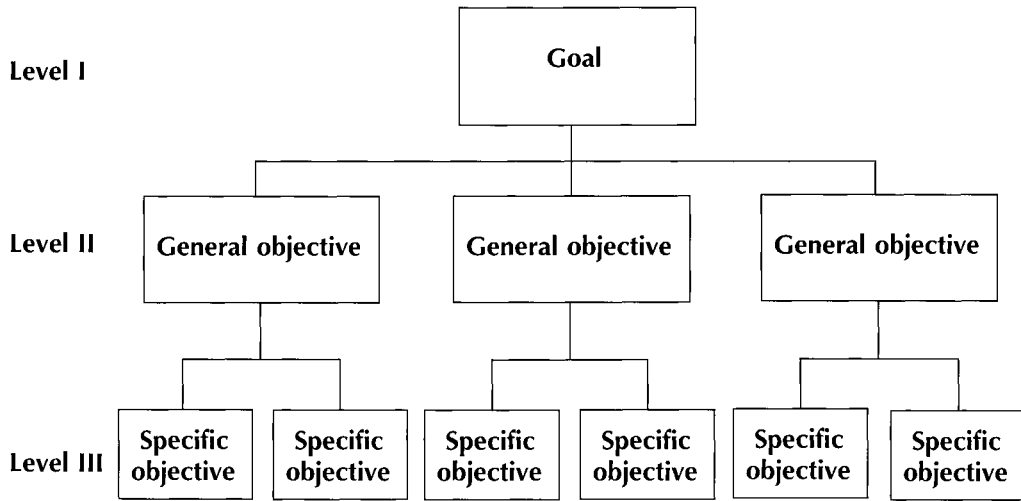


Figure 3.3
The selection of realistic goals and objectives

Exercise 3.5

List specific objectives derived from your general objectives. Be sure that you included the three elements suggested above. If necessary, continue the list on a separate piece of paper.

General objective	Specific objectives
1.1	1.1.1 1.1.2 1.1.3
1.2	1.2.1 1.2.2 1.2.3
1.3	1.3.1 1.3.2 1.3.3

Exercise 3.6

Review the objectives to identify those that are opposed (-) or that support each other (+).

Objectives	1	2	3	4	5	6	7	8	9	10	11
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											

If you find opposed objectives, reformulate them to be mutually supportive and modify your programme accordingly.

Formulating strategies and activities⁹

Once the objectives are formulated, you should start to identify and develop strategies and activities for the action programme.

The terms strategy, plan, programme and policy are often confused. They can be seen as Chinese boxes, of which a policy would be the biggest. It might contain a strategy box. This would contain, as boxes of decreasing size, programmes, projects and activities.

An action programme can be seen as a strategy adopted to reach general objectives and goals. Strategies are often identified in the making of a situation analysis. In addition, the specific objectives may reflect the strategies adopted in the programme.

Community nutrition problems are always complex, and several activities will be required to deal with everything involved. In the literature, these activities are often referred to as intervention programmes or simply interventions. The following definition is suggested:

a strategy is composed of an action programme and its many activities, each of which is closely linked to a specific objective, while being an integral part of the total strategy.

⁹ Adapted from Oshaug and Sedere (1987).

Different strategies can always be used to solve a social problem. People in community nutrition often forget to explore alternative or complementary strategies when planning programmes in communities. Different options should be examined in the light of expected outcomes, by such means as assessing available and potential resources.

Community nutritionists prepared the following examples of strategies and activities.

The objective was to reduce the sodium intake of Nutopia by 20% within 5 years; the strategies were:

- a public education campaign to increase awareness of the possible consequences of excessive sodium intake, to provide information on low-sodium home food processing and the use of table salt, to encourage the avoidance of sodium containing additives (baking powder, seasoning preparations, etc), and to increase awareness of the need for more fruits, vegetables, cereals and other low-sodium foods in the diet;
- increase availability on the market of foodstuffs (such as bread and other bakery products, dairy products, meat and canned products, baby food) low in sodium;
- increase availability on the market of sodium-restricted or sodium-free salt substitutes;
- increase availability of low-sodium dishes in mass catering.

Strategies may be simple or very complex. Most strategies in community nutrition work focus on the following topics:

- (a) food and nutrition policy formulation
- (b) food legislation, regulation and control
- (c) food availability
- (d) food engineering
- (e) training, education and communication.

Food and nutrition policy formulation (the overall strategy)

The formulation of a food and nutrition policy that includes many different action programmes and uses various means to achieve overall goals is in itself a strategy. It has been maintained that a nutrition policy needs a proper data or knowledge base and objectives as a foundation, a political mandate and political support for implementation, and a responsible secretariat with expert support (Helsing 1986). The various means selected to implement such a policy should reflect the multifaceted problems related to food and nutrition, and could be said to constitute an overall strategy.

A nutrition policy is a food policy with explicit health objectives.

A strategy is composed of an action programme and its many activities, and uses various means to achieve specified goals or objectives.

Means are efforts, activities or interventions that use certain methods, to achieve a specified goal or objective.

Food legislation, regulation and control (Utilizing the legal system)

Food legislation, regulation and control constitute one of the earliest strategies in the struggle to protect people from food adulteration, food poisoning and dangerous additives (Burnett 1979). Today, most countries in the world have a system for the systematic control of the quality and hygiene of agricultural products and food industry products, food storage, food wholesalers and retailers, and (usually) mass catering.

The Codex Alimentarius Commission is the body that tries to coordinate legislative work at the international level.

The increasing use of the practice of labelling food products is important for the consumer and the community nutrition worker. Food manufacturers use labeling not only to inform the consumer but to promote their products. Food labeling is hotly debated in many countries and is open to abuse by manufacturers in their marketing efforts. Manufacturers often try to convince the consumer that a product labelled according to regulations is therefore a healthy one. This practice can trigger «labeling hysteria», in both consumers and manufacturers.

Manufacturers and legislators should not be allowed to dominate this area. Nutritionists and others working on food and nutrition issues should play an active role, along with consumers' organizations. Community nutrition workers should use labelling as an important channel for informing the consumer, and for controlling or possibly cooperating with the food processing and manufacturing industry.

In the wake of the increasing ecological disturbances all over the world, community nutrition workers must pay increasing attention to pollution and toxicological aspects of nutrition in the community¹⁰. Demand will probably increase for more «pure» products (without pesticides, additives or hormone residues in meat and milk products, for example), and low-fat, high-fiber products. The legal system may thus be an even stronger collaborator in the future.

Food availability

As shown by the history of nutrition information campaigns in various parts of the world, the people involved in such campaign are often so preoccupied with the

¹⁰ The Chernobyl accident, for example, deposited radionuclids over a vast area. Are workers on nutrition and food issues prepared to deal with a frightened population in such a situation?

message they want to deliver (its scientific correctness and the figures and illustrations to be used etc.) that they forget about whether the recommended products are available. Consequently, too many campaigns have no effect.

Ensuring local availability at affordable prices must precede advocating increased consumption of, for example, vegetables and fruit or skimmed or low-fat milk. This task includes setting both long-term and short-term objectives on food availability, and may often be more difficult than expected. It involves many complex issues such as the attitude of farmers (if it is possible to grow more food locally), wholesalers and retailers, and difficulties with the logistics infrastructure and economics (if transport and storage are involved). Political support at a fairly high level may be required, and securing it usually takes a lot of work and time¹¹. Food availability will increase in importance in the future, particularly as the process of urbanization continues and the rural districts become less densely populated. This process may change the nutrition situation for the people who leave and those who remain.

Special strategies may be adopted to provide meals to elderly people in institutions and other people who cannot prepare meals for themselves. Many of the recipients of these meals depend entirely on the nutritional knowledge and competence of the people who prepare them; these range from the food engineer in the manufacturing industry to the cook who finally composes and cooks the meals.

The role of mass catering (in institutions, restaurants and hotels) will probably increase. Thus, a nutritionist who works through or with the people involved can help to improve the nutritional quality of the diet provided.

Food engineering

Modern food technology has great potential for changing the composition of food – for good or ill. Food engineering will probably increase in importance. New technology such as microwave oven is now in widespread use in many countries, and will increase the use of processed foods.

Training, education and communication

Education is perhaps the most commonly used strategy in community nutrition work today (Gussow and Contento 1984, Israel 1987). Nutrition training has increased in momentum¹², and professionals working in community nutrition repeatedly face the challenge of how to best communicate their messages.

There are many theories of education and communication. In community nutrition work it is important to have tools that are simple, manageable and effective. A simple approach for a communication strategy requires answers to four questions (Oshaug and Sedere 1987):

- Who will we speak to?
- What are their ideas today?
- What ideas do we want them to have?
- What arguments do we use to fill the gap between the second and third question?

When you have answered these in detail and taken care to avoid common mistakes (see below), you will have a good basis for a communication strategy.

¹¹ Here you will probably need skills in lobbying without losing your job.

¹² The issue of nutrition training is more fully discussed by Oshaug et al. 1993.

It is never possible to convey as many messages as you would like. The most important message must be identified and singled out for delivery. Proper objectives will facilitate this task.

Here are four mistakes to avoid in a nutrition information campaign:

- Don't assume that everybody is interested in what you have to say.
- Don't say more than one thing at a time.
- Don't lie (but dramatize the truth).
- Don't overestimate the power of education.

NUTRITION TRAINING

Nutrition training (Aylward 1972) comprises academic and practical instruction in nutrition, dietetics and food science and usually includes the scientific, economic and social aspects of the subject. Such training should be community and problem based, centered on the student, continuously evaluated, and should help students to develop and apply problem-solving skills.

NUTRITION EDUCATION

Nutrition education (Aylward 1972) is education of the public aimed at a general improvement of nutritional status, the promotion of adequate food habits, elimination of unsatisfactory dietary practices, the introduction of better food hygiene or more effective use of food resources.

NUTRITION COMMUNICATION

Nutrition communication (Israel 1987) is the transmission of messages on nutrition between community nutrition workers and the public so as to raise awareness of nutritional problems, reinforce parallel efforts carried out by community nutrition workers and promote changes in behavior related to nutrition.

Strategy formulation – conclusions

The food chain approach discussed earlier may be a useful tool in the selection of relevant strategies at different levels to reach goals and objectives. It can help you to aim particular activities at various actors or target groups, although these activities are not necessarily carried out by nutritionists or health personnel. The food chain approach may also facilitate the prediction of potential conflicts of interest in different strategies. When establishing discussion groups in the community, remember to include a discussion of activities relevant at different levels of the food chain; together these can constitute a strategy.

Exercise 3.7

For each general objective, identify alternative strategies (with activities) that could be implemented in your community. In addition, rate their practicability (very good, good, fair, poor).

General objective	Strategy and activities	Practicability
1.1		
1.2		
1.3		

Exercise 3.8

Draw up a list of possible negative reactions to the proposed strategies, and how you will overcome them.

Possible negative reaction	Sources of reaction	How to overcome the reaction

Assessing resources

Material resources

Having established objectives at several levels, you have now a fair idea of the scope of your programme. As already mentioned, however, objectives cannot be defined as if resources were unlimited. You must assess the available and potential resources to see whether your objectives are feasible and realistic.

Exercise 3.9

Make a rough estimate of the available material resources and those that are needed. You may include additional resources you expect to find.

General objective	Material resources		
	Needed	Available	Potential
1.1			
1.2			
1.3			

Human resources

Without qualified personnel to carry out a programme or a project¹³, the results will seldom be good. Clear objectives and strategies should give a good idea of the type and number of personnel needed.

You may not need specially trained people, but work mainly through key people or groups in the local community, perhaps even at no additional cost. Through such people you may obtain a multiplier effect, initiating a process through which the people of the community develop their competence through training and project implementation (learning by doing). As a result, they may become able to carry out activities with minimal support from experts in community nutrition.

After identifying the professional personnel you need for short- or long-term assignments, you can make contact with them and discuss the possibility of participation in your activities.

Exercise 3.10

For each general objective, make an estimate of personnel needed, identify those in your professional environment who can be used and try to locate professional and nonprofessional personnel in the community who may be important actors.

General objective	Personnel		
	Needed	Available	Potential
1.1			
1.2			
1.3			

Now take a fresh look at your objectives and strategies. Do they need to be modified in view of the resource assessment?

¹³ The distinction between these two terms is not always clear.

Working out a budget

The decisions that community nutrition workers must make about budgeting and costs are both fundamental and difficult. Usually what is needed must be a balance with what can realistically be attained. This may be very frustrating, particularly when budget constraints force the setting of priorities that conflict with professional and ethical principles. In such cases, it is important to look for opportunities and not be paralyzed by the limitations.

Sometimes resources will be allocated for community nutrition work within the frame of the total budget for a larger area, such as the budget for preventive health care of the district medical officer's office. The allocation of funds to community nutrition work may be a function of the overall health policy within the office, but may also be a question of the cleverest marketing of projects and activities. Another situation arises when community nutrition work constitutes a project or even a total programme outside or with weak links to the formal structure. Such a project or programme may cover a small section of a community or a whole municipality, county or district. In such circumstances, your project must be able to stand on its own, and you may have to attract the interest of funding agencies and sponsors. In any case, your budget must correspond to your planned activities. You should not do much planning of activities, projects or programmes that have little chance of being financed.

It is always frustrating to discover a failure to budget for the expenses of activities or equipment crucial to the successful implementation of a project or programme. What needs to be included in a budget will vary considerably between programmes, according to the support the programme can get, the number of professionals involved, the size of the area and the target group to be covered, the complexity of the programme, the time frame, etc. One way to facilitate this work is to hold a brainstorming session with colleagues to record every possible need. Then the requirements can be organized into categories. The following are examples of such categories of requirements that may have to be included in a budget:

- personnel expenses, such as salaries, social security and insurance, and per diem;
- the purchase of equipment;
- the expenses of providing facilities for the secretariat, such as office, telephone, t lex/telex, copying machine, typewriters, personal computers with word processing and other software, and furniture;
- the running costs of secretariat (sometimes covered by a standard calculation of overhead);
- transport expenses, including car rental or purchase, petrol, repairs and other travel expenses such as tickets;
- special expenses related to activities, such as research or fact-finding missions, material for information campaigns (questionnaires, posters, brochures, booklets, etc.) and mailing expenses;
- monitoring and evaluation expenses;
- expenses related to giving feedback to the community, special target groups, the authorities, the mass media, the professional community, etc.

It is always difficult to think of all the expenses that will arise in community nutrition work. There will inevitably be surprises and unplanned disturbances, such as

changes of plan, adjustments of salaries during the programme period, inflation and important expenses that simply have been forgotten. It is therefore wise to make provision for increases in salaries, and always allot 10% of the total budget for unforeseen expenses.

An accounting system should tell how much is spent and how much is left. Looking into the management of money will be an important prerequisite for anyone who is managing nutrition-related projects.

Scheduling

A time frame has already been discussed in relation to the formulation of specific objectives. The timing of activities, however, is also important. Others besides you will perhaps be responsible for certain activities. The more people involved, the more complex management will be. You will therefore need an overview of or schedule for your programme.

Figure 3.4 is an example of such a schedule, in which the different tasks, responsible person(s) and duration can be specified. Making a schedule will put you in a better position to monitor the various activities of the programme. It will remind you of when to start preparations for certain activities, and can inform your superiors or colleagues about your plans, etc.

Figure 3.5 provides a form that you can use to summarize your plans for community nutrition work. O.K. Piano made a large version of this chart and displayed it on the wall of her office.

Figure 3.4

An example of a time schedule

Activities	Responsible	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Prepare a questionnaire for a nutrition survey	A & B & statistician	■					
Test the questionnaire	B & C	■					
Modify questionnaire if needed	A & B	■					
Carry out nutrition survey	A & B with help of C, D & E		■				
Analysis of data	A & B & a data analysis expert			■			
Report writing	A & B				■		
Feedback to the local community	A, B & C					■	
Press conference	A, B, G						■

Exercise 3.11

Draw up a schedule for your activities, specifying activities, the person(s) responsible, and the duration.

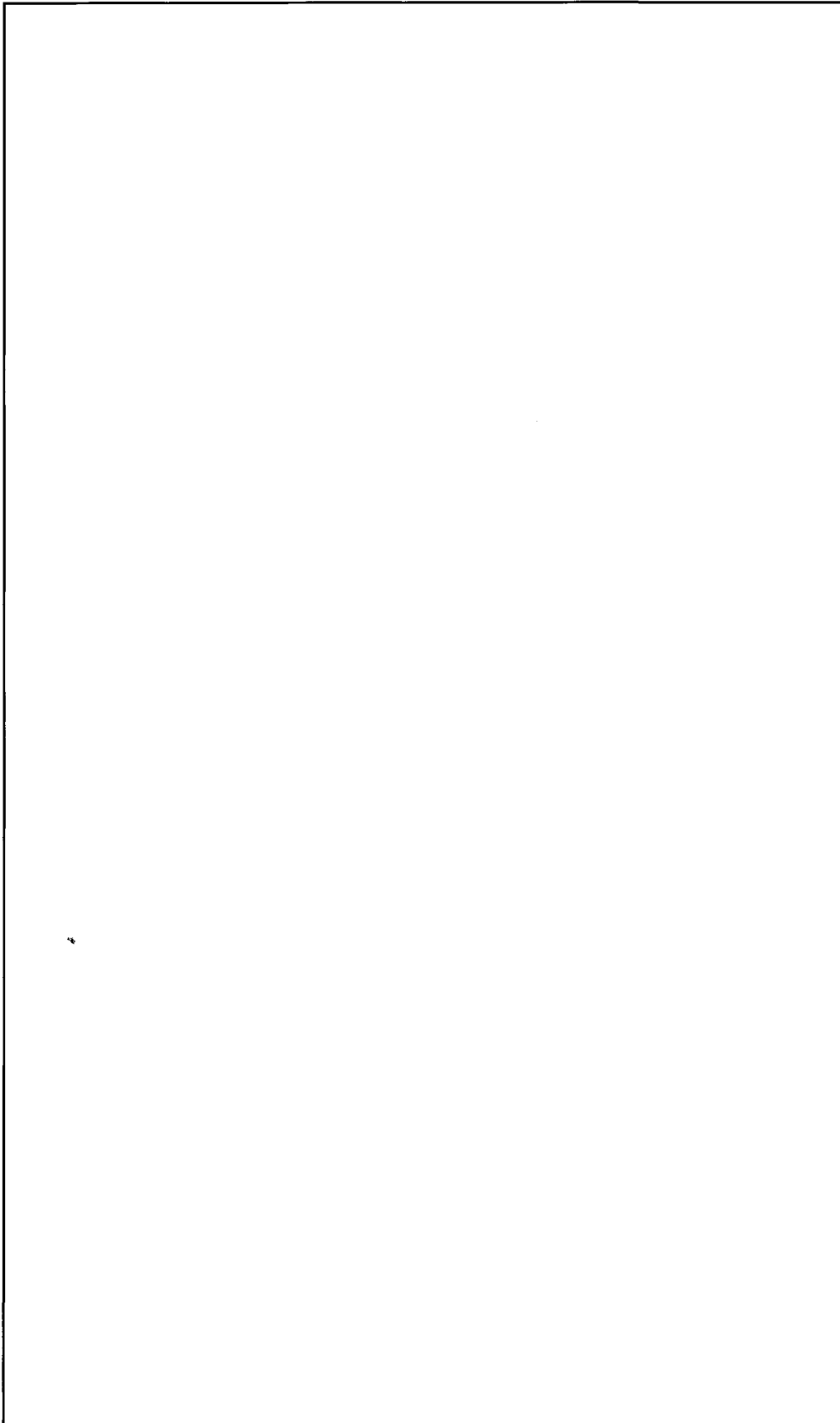
A large, empty rectangular box with a thin black border, intended for the student to draw up a schedule for their activities. The box is currently blank.

Figure 3.5

A summary of related components of a plan for projects in community nutrition work (O.K. Piano used the office wall to display this chart).

NUTRITION MAP											
FOOD CHAIN	PROBLEMS/NEEDS	ACTORS INVOLVED	PROJECT OBJECTIVES	STRATEGIES/ACTIVITIES	POSSIBLE CONFLICTS	MATERIAL RESOURCES		RESPONSIBLE FOR IMPLEMENTATION	DATE FOR IMPLEMENTATION	SPECIAL OBSERVATIONS	OTHER
						NEEDED	AVAILABLE				

SUPPORT SYSTEM						
POLITICAL SYSTEM	ADMINISTRATIVE SYSTEM	GENERAL INFRASTRUCTURE	LEGAL SYSTEM	HEALTH SYSTEM	EDUCATIONAL SYSTEM	NUTRITION SURVEILLANCE
						OTHER

4. WHAT HAS BEEN ACHIEVED?²²

Objectives

After having studied this chapter and some reference documents (Andersen et al. 1987, McMahon et al. 1980, Oshaug et al. 1988, Patton 1980, Romiszowski 1984), you should be able to:

- *define the principal purposes of evaluation;*
- *identify contextual factors that may lead to the failure of your programme or activities, and propose strategies to overcome them;*
- *construct a questionnaire for the evaluation of your programme plan;*
- *evaluate your own competence as a community nutrition worker;*
- *plan the evaluation of the process of implementing your programme; and*
- *plan the evaluation of the outcome of your programme.*

Nutopia: episode 4

When formulating her objectives, O.K. Piano realized that evaluation should be part of the planning of the programme. She had previously thought that evaluation was something one thought of and did when all activities were finished. Facing this task in the planning phase, she was not sure how to approach such a nebulous topic. It had only been very briefly touched on in her university training.

Evaluation – Concepts and Jargon

Despite much talk about the importance of evaluation in all types of programme, few attempts were made to define it and to incorporate it in the planning process for nutrition relevant work. In recent years, however, a stronger focus on the substance of evaluation has led to many publications²³ from different disciplines on the evaluation of project work, education and training; nutrition still lags behind in this respect.

Drawing on the large and often obscure literature on evaluation, the author has tried to simplify the theory and jargon so that evaluation can support and strengthen community nutrition work. The first task for the community nutrition worker is to address some key questions. They are important in the evaluation of any programme, project or activity.

²² Adapted from Oshaug and Sedere (1987).

²³ For further discussion see House (1986) and Rossi et al. (1979).

Why evaluate?

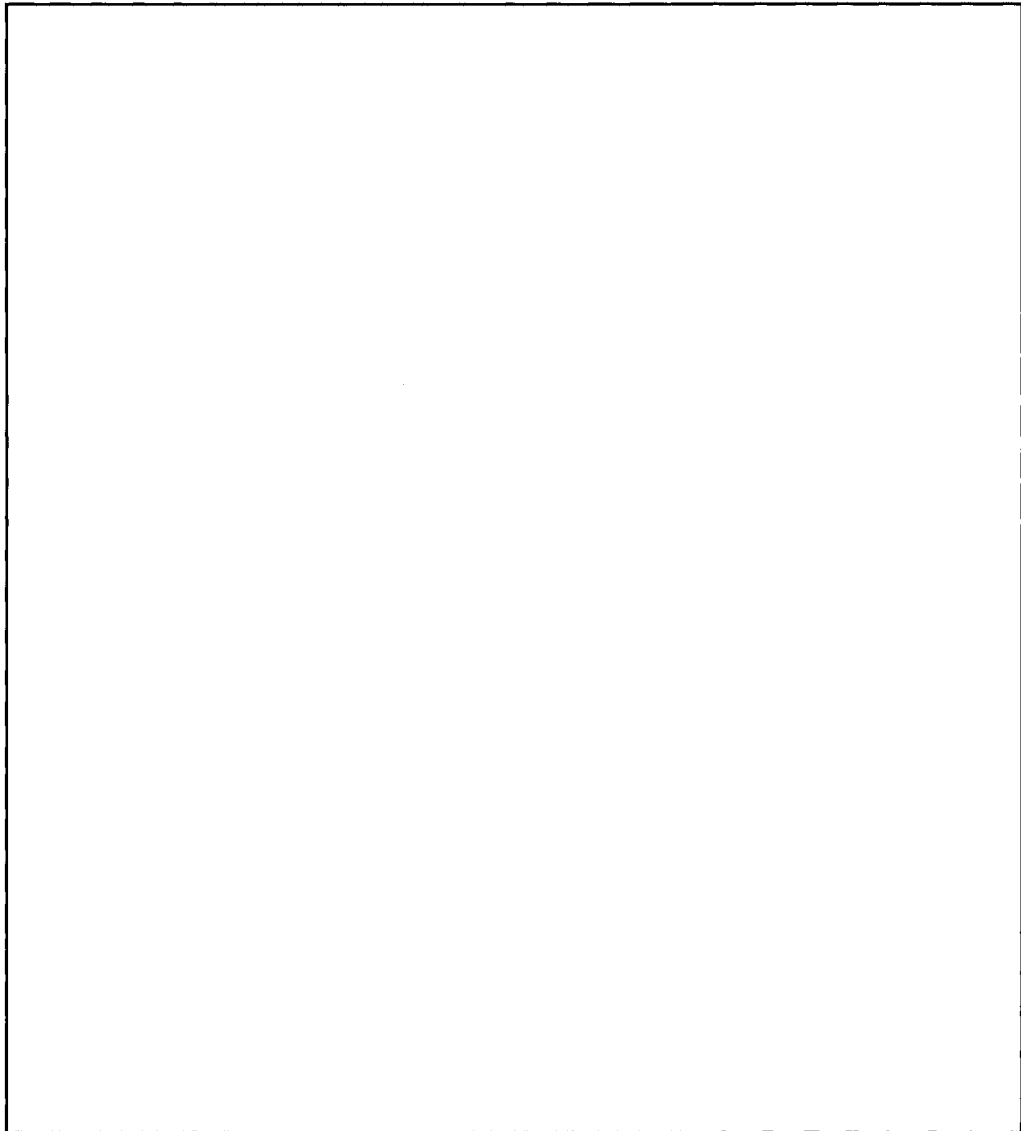
The first question is: why evaluate? This leads to a number of others.

- Do you want to ensure that staff are doing their jobs?
- Do you want to know if the identified resources are appropriate?
- Do you want a tool that can tell if the process is going in the right direction and, if not, enable staff to adjust their activities?
- Do you want only to know if the objectives have been achieved?
- Do you need data to convince funding agencies or employers of the value of the work done?

You will need to clarify these questions for yourself before you start planning your evaluation system.

Exercise 4.1

List your reasons for wanting to evaluate your activities



How is evaluation defined?

The literature gives many definitions of evaluation. Each depends on the philosophy of the evaluator, or in other words, what function evaluation is considered to have.

Evaluation is often defined as an assessment of a programme's impact that takes place after the activities have been completed.

Here a broader definition is used.

The evaluation of a programme is a systematic collection and delineation and use of information to judge the correctness of the situation analysis, critically assess the resources and strategies selected, to provide feedback on the process of implementation and to measure the effectiveness and the impact of an action programme.

This definition shows that evaluation:

- is an essential tool for all community nutrition activities, and should be planned at the same time as the programme to be evaluated;
- should take place at every stage of planning, including the stage of problem analysis, and implementation;
- includes not only collection of objective data or measurements, but also their analysis and interpretation for the purpose of making judgement and decisions.

In addition, the community – through key people or groups – should always be involved in the evaluation of a programme.

What are the functions of evaluation?

Evaluation has two main functions: «formative» and «summative». Formative evaluation is used to improve and develop activities of programs (and materials and people involved) as they are carried out, and is therefore continuous. Summative evaluation measures the outcome of an activity or set of activities. It is used to ensure accountability, to increase awareness of achieved results and for public relations purposes.

What methods should be used?

Evaluation can be simple or complex. The methods chosen depend on the evaluator's competence and aims. Experimental and quasi-experimental designs have been discussed often, but such rigorous designs have been criticized. In evaluating community nutrition projects or activities, you should feel free to look at various options, aiming at the simplest system that works and seeking the best method or set of methods for answering the questions that interests you. Having chosen a type of evaluation and the questions and indicators to use, you will be better able to decide between, for example, quantitative or qualitative methods, questionnaires, guides, general interviews and key informant interviews, and participant observation.

Who should evaluate?

In deciding who should perform the evaluation, the first distinction to be made is between internal and external evaluators. An internal evaluator is usually a part of the project or programme concerned and reports directly to its managers. The internal evaluator's objectivity and external credibility are often (usually right) said to be lower than those of an external evaluator. Because external evaluators are not directly involved or employed in the projects or programs they examine, they enjoys more independence.

The second distinction is between what can be called the professional and the amateur evaluators. This distinction reflects differences in training and expertise, not a value judgement of the quality of an evaluation. Evaluation is the focus of the professional evaluator's training and work. The professional training of an amateur evaluator (such as O.K. Piano), however, usually focuses on other topics and evaluation is only a part of her or his job.

The amateur is normally less skilled in evaluation than the professional. Nevertheless, he or she might have a better understanding of a project's evaluation needs, be able to develop better rapport with the staff and will be able to use the information and results of the evaluation faster (often directly).

Here the focus is on internal evaluation done by project personnel, usually an amateur evaluator, and often the person(s) in charge of community nutrition work.

What should be done with the findings?

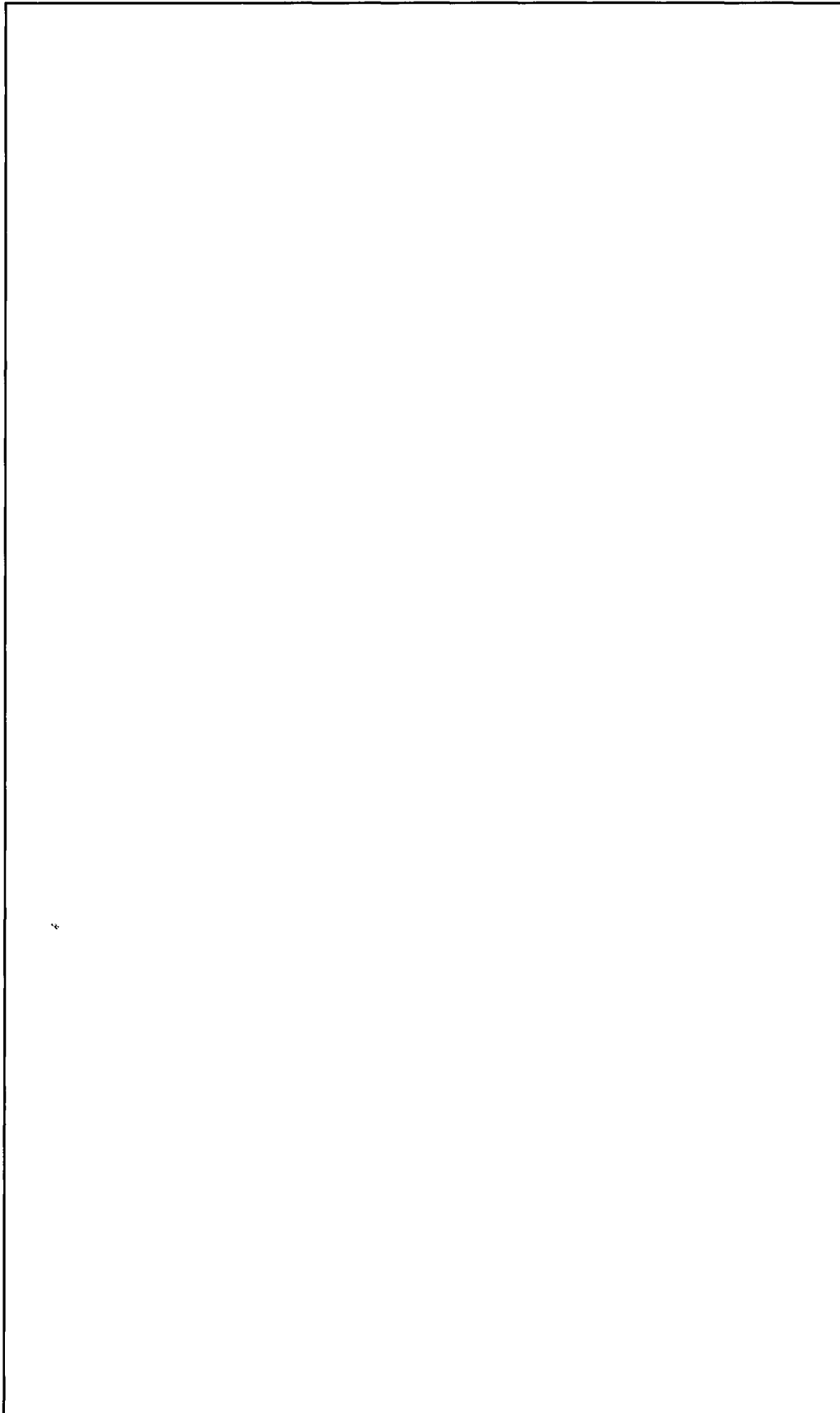
The use to which evaluation findings should be put should be determined by the answers to such questions as:

- Should the results of the evaluation be kept for internal use only?
- If not, who outside the project should have access to the information?
- Can the data be used in press releases, to promote the model used or increase awareness of the results?
- Should the data be used to give feedback to the target population?

All these questions are closely linked to the first major question above (Why evaluate?).

Exercise 4.2

Describe briefly how you will use the results of the evaluation.



Formulating an evaluation system

Several models are used in evaluation theory. In the systematic approach suggested here, four types of evaluation can be used to assess a programme:

- context evaluation in the first, analytical phase
- input evaluation in the preparation for action
- process evaluation during implementation
- outcome evaluation after implementation.

The first three types are formative, the fourth is normally summative, but can also be formative.

Context evaluation

Context evaluation ensure that past experience is brought into the process of planning. It focus on the initial decisions in community nutrition work, such as the selection of high priority problems. Usually, most of the information needed has already been collected during the situation analysis. If the available information is not sufficient, data from a sample or pilot project, or anecdotal data may be collected to give better understanding of the problem. Context evaluation is normally carried out to refine objectives and strategies, and make sure that they are useful in solving problems in the community.

Context evaluation can also be used to analyze contextual factors that may not have been directly addressed in the objectives but have a bearing on implementation. These factors include the religion, race and ethnic background and sex of people in the community, and general economic, political and environmental issues. Such an evaluation can focus on factors that may impede a programme, and thereby enable staff to plan how to cope with them.

Factors	Strategies

Exercise 4.3
Identify contextual factors in your community that may impede your programme. Indicate strategies that you may use to cope with them.

Input evaluation

Input evaluation is an important part of the preparation for action. It takes a critical look at the adequacy and appropriateness of the resources available to carry out the programme. A programme can be said to have four types of input:

- the programme plan;
- material resources;
- human resources such as nutritionists/dietitians (including you), teachers, medical personnel, instructors at factories, cooks and other catering personnel, and others (specify their level of training and preparedness to take part in the programme);
- time, particularly that allocated for the initial phase, evaluation, feedback and follow-up.

At this point, the main concern is the quality of the inputs, that is, the likelihood that they will help or hinder the implementation of the programme.

First, look at the programme plan. Some of the activities planned may conflict, owing to conflicts between objectives (see Exercise 3.6), competition for scarce resources or other reasons. Use the Exercise 4.4 as an initial test of your programme. You may construct further evaluation instruments to evaluate all the types of input mentioned above.

Exercise 4.4

Use the following questionnaire to evaluate your programme plan. Answer only the questions relevant for your programme. Add and answer any other that should be asked but are not included.

Key questions	Answers		
	Yes	Partly	No
1. Have you formulated goals and objectives in the plan?			
2. If so, are these based on a detailed situation analysis?			
3. Have you tested the objectives for: – relevance? – feasibility?			
4. Have you identified actors at different levels of the food chain?			
5. Does the plan have details of strategies and activities?			
6. Have you tested the strategies and activities for practicability?			
7. Have you identified possible conflicts between different actors?			

Exercise 4.4 cont.

Key questions	Answers		
	Yes	Partly	No
8. Have you identified ways of coping with these conflicts?			
9. Are you using professionals other than nutritionists in the programme?			
10. If so, have you prepared guidelines and information for them?			
11. Have you involved target groups at the planning of the programme?			
12. Do you know that the target group will agree with priorities set and activities planned?			
13. Have you planned to involve the target group in the implementation of the programme?			
14. Does the programme plan contain a description of potential support systems?			
15. Does the plan include details of resources available for use in the programme?			
16. Have you considered ways of getting additional resources?			
17. Does the plan include evaluation instruments?			
18. Have you considered the sequence in which the activities should be implemented?			
19. Does the plan include a specified schedule?			
20. Does the plan include feedback to the local community, the target group, authorities and others?			

Consider your answers, particular the negative ones. Will the gaps revealed prevent successful implementation? Should you modify your plan?

Assessment of your competence

You are a very important human resource for your programme. You should therefore evaluate your own competence, as well as that of other community nutrition professionals involved in the programme.

The community nutrition worker needs to be competent in at least four areas:

- situation analysis
- the planning programs and activities
- the implementation and management of activities
- evaluation and feedback.

Unfortunately very few higher training programs in nutrition properly cover all these areas. Most people, however, do the bulk of their learning outside formal training institutions. It is useful to have some tools with which to identify your weaknesses and strengths in community nutrition work. Then you can develop new skills through, for example, further training programs or independent study. Use Exercise 4.5 to evaluate your skills and encourage other people working in community nutrition to do so, too.

Exercise 4.5

Evaluate your skills as a community nutrition worker. Such an evaluation will highlight your weak points as well as your strengths, thus helping you to identify needs for further competence building.

Instructions

1. Assess the importance of each item included in the following form²⁴ to your role as a community nutrition worker (as delineated by your job description). Delete irrelevant and add missing items. If necessary, discuss the items with colleagues or your employer.
2. Assemble a group of nutritionists or other people working in community nutrition and evaluate the importance of each item in the table according to the following scale. Enter the score for each item in column A of the form.

Award 5 points if mastery of the skill is essential to the performance of some of the tasks in the job description.

Award 4 points if it is difficult to perform some tasks satisfactorily without mastery of the skill.

Award 3 points if it is desirable to have a mastery of the skill, to guarantee satisfactory job performance.

Award 2 points if the job can be performed satisfactorily with only reasonable mastery of the skill.

Award 1 point if a general notion about the item is desirable, but the job may be performed satisfactorily with very little mastery.

Award 0 points if the skill is not relevant to your job. You may eliminate this item from the form, if you have not already done so.

3. Now you can assess your competence in each relevant item. Use the following six-point scale. Enter the score for each item in column B of the form.

Award 5 points if you are an expert, with up-to-date knowledge and considerable experience in using the skill in your work.

Award 4 points if you are very well informed about the item (although not a fully up-to-date expert) and you have much experience.

²⁴ Adapted from Romiszowski (1984).

Award 3 points if you are reasonably well informed about the item and you have some (perhaps slight or not comprehensive) experience.

Award 2 points if you have a certain amount of knowledge about the item, but very little or no experience.

Award 1 point if you have a certain amount of knowledge about the item, but no experience and, as a result you do not feel secure about applying what you know. (You can probably do so with assistance and feedback from more experienced colleagues.)

Award 0 points if you have heard or read something about the item, but have never really studied it or used it in your work.

4. You have now two scores for each item: its importance to effective job performance and your current competence. For each item, subtract the score in column A from that in column B. A positive result shows that your competence is greater than the job requires, and a negative result shows that it is below the job requirement.

Exercise 4.5 (contd)

Skills: area and item	A	B	B-A
Situation analysis			
1. Making a job analysis and description			
2. Formulating a professional profile of a community worker			
3. Analyzing the overall food and nutrition problems and goals of the country			
4. Identifying the food chain of the country or community			
5. Identifying and analyzing the food, nutrition and related health problems of the community: <ul style="list-style-type: none"> ● identifying information and data sources ● constructing questionnaires ● carrying out dietary surveys ● carrying out anthropometric studies ● carrying out socioeconomic studies, including collecting qualitative data ● carrying out studies on food culture ● involving community members in identifying and analyzing problems 			
6. Making a causal analysis of community nutrition problems			
7. Identifying actors in the food chain			

Exercise 4.5 (contd)

Skills: area and item	A	B	B-A
Situation analysis			
<ul style="list-style-type: none"> 8. Analyzing conflicts between actors in the food chain 9. Describing the profile of a target group in the community 10. Identifying support systems for community nutrition work 11. Identifying sources of funding 			
Planning programs and activities			
<ul style="list-style-type: none"> 1. Identifying and formulating goals, general objectives and specific objectives 2. Formulating objectives that meet certain criteria 3. Assessing the human and material resources needed and available for the programme 4. Seeking potential resources (funding agencies, public funds, professionals available for short-term and long-term jobs, etc.) 5. Formulating strategies for implementation of programs 6. Developing instructional material and guidelines for other professionals to be involved in implementation 7. Developing materials for professionals and promotional campaigns at all levels 8. Constructing time schedules (diagrams) for programme implementation 9. Planning follow-up activities 10. Working out budgets 11. Developing an evaluation system 			

Exercise 4.5 (contd)

Skills: area and item	A	B	B-A
Implementing programs and activities			
<ol style="list-style-type: none"> 1. Managing programs by objectives (using objectives systematically in implementation and management of activities) 2. Conducting practical demonstrations 3. Participating as a member of an interdisciplinary group doing community nutrition work, and other work with possible impact on nutrition 4. Conducting and managing interdisciplinary research and training groups 5. Conducting and motivating group discussions in the community, at schools, in factories, etc. 6. Implementing and managing promotional campaigns aimed at various target groups, using medias such as pamphlets, radio, television and news papers 7. Keeping accounts on the programme income and expenses 8. Implementing and analyzing the results of process evaluation 9. Motivating and managing the personnel involved in the programme 10. Providing, on demand, information and consultation to other professionals implementing programs 			

Exercise 4.5 (contd)

Skills: area and item	A	B	B-A
Evaluation and feedback			
<ol style="list-style-type: none"> 1. Formulating an evaluation system 2. Integrating evaluation in all phases of the programme 3. Constructing evaluation instruments (questionnaires, attitude rating scales, frequency lists, etc.) 4. Testing the relevance of the programme to the food, nutrition and health problems of the community 5. Evaluating human and material resources 6. Calculating cost-effectiveness of the programme 7. Evaluating changes in knowledge and attitudes in target groups 8. Evaluating changes in food consumption or other behavioral changes related to nutrition and health in the target groups 9. Providing feedback to team and the target population on the results of activities 10. Informing organizations, authorities, funding agencies, etc. about results (positive and negative) of the programme and future plans 11. Using various mass media to disseminate the results, including press conferences, press release, articles in scientific journals and public magazines, interviews on local radio, etc. 12. Presenting the data in an easily assimilated form for the target groups 			

Process evaluation

Process evaluation is a tool for monitoring progress. It indicates, while your strategies and activities are implemented, whether they are likely to generate the expected results. Process evaluation should also indicate whether the work is done on time. If the activities do not meet expectations, they may be changed or even stopped. It is much better to change a programme during implementation than await a retrospective analysis to find out where it went wrong and who was responsible for the failure – when it is too late.

The nature of the process evaluation depends on the problem and the programme involved. Some problems and programs demand daily evaluation or immediate data collection, while others need only occasional checking. Several factors should be considered when planning a process evaluation, such as: objectives; strategies and activities; scheduling; actors; resources.

The objectives of the programme will spell out the end result or short-term achievements on the way to the goal. Well formulated objectives are essential for process evaluation. So are the strategies and activities selected.

Because the completion of one activity may be a prerequisite for the start of another, it is essential to draw up a clear schedule for the programme. One programme can have several objectives with different schedules for achievement.

In addition, you should have a clear picture of all the programme staff and their responsibilities for initiating and implementing activities. Several questions about actors can be asked in process evaluation. For example, if an activity goes wrong, who is creating problems? Are the people involved in implementation acting as expected? What can be corrected and how can this be done?

Finally, the implementation of activities requires timely availability of resources. The use must be coordinated to avoid extra cost and maximize the benefits. Process evaluation can facilitate this.

When planning a process evaluation you will need to decide what indicators to use. This choice depends heavily on factors such as the nature and complexity of the programme, the context in which it is implemented, the people involved in the implementation, and the duration and target group of the programme.

One of the objectives might be to increase the local availability of, for example, high-quality fruits and vegetables, low-fat dairy products (in rich societies where too much fat is eaten) or cheap fat and foods high in fat (in a poor society in which too little fat is eaten). In this case the indicator may simply be the availability of the products. A long-term objective (to be reached in, say, 15 years) in a rich society would be to change the attitudes and practices of food manufacturers, so as to decrease the fat, sugar and salt content of manufactured food products. This would require a very different approach to process evaluation, although the availability of products low in fat, sugar and salt would be one indicator.

It is important not to use too complex an instrument when collecting information to judge a process and decide on adjustments. Exercise 4.6 gives an example of a simple instrument for monitoring a project. It has the advantage of collecting all the information on one sheet of paper, giving a good overview of the situation.

Exercise 4.6

Use this form to monitor a community nutrition project in which you are involved. First reproduce the form on a larger (A3) sheet of paper.

Objectives	Activities	Date activities were:			Status of activities				Special problems	remarks
		started	scheduled for completion	evaluated	completed	unfinished	on schedule	delayed		

Problems			
Description	Causes	Consequences	Suggested changes or action

Outcome evaluation

Outcome evaluation is performed on the completion of a programme to assess the extent its objectives and overall goal have been achieved. It therefore receives the most attention from the people who plan and implement community nutrition programs.

Outcome evaluation begins with assessing the effect of a programme, by examining whether or to what extent the expected effects have taken place. For example, a campaign was carried out to reduce dental caries among schoolchildren aged 10-12 years by 40% within two years. At the end of this period, an evaluation was made of the prevalence of caries in the target group, to see whether the target had been reached. This is called effect evaluation; it measures outcomes directly related to the specified objective.

In addition, every social action programme has indirect effects on society. These can include an immediate distribution effect on people outside the target group or a long-term effect on behavior in the community. The examination of such effects is often called impact evaluation. In the example above, although the campaign was directed at schoolchildren aged 10-12 years, it may also have affected the children's siblings and parents. This effect goes beyond the specified objective.

Impact evaluation is thus more complex than effect evaluation. It is often difficult to show that the impact is due only to the campaign. In addition, impact assessment requires more sophisticated evaluation designs. Community nutrition workers are therefore normally concerned mainly with effect evaluation.

A group of community nutritionists at a workshop was requested to list the most important considerations in effect evaluation. Their work can be summarized in the following questions.

- What were the general and specific objectives of the programme and what indicators are needed to make judgments on each of the expected outcomes?
- What data are required for the indicators?
- If the necessary data are not available, how could they be collected? What are the best approaches? Can any anecdotal data be obtained from records? What additional information or cross-checking is needed to ensure reliability of the data? How can their validity be examined?
- Is the sample representative? Is it biased? Does it allow for variations over time?
- How should the data be analyzed? Is the analysis simple? Is extra help needed? Would a computer or manual methods be used (the use of computer analysis must be planned at an early stage)?
- How should judgments be made? What criteria will be employed? Are they valid and relevant? Are they realistic? Are they acceptable to people outside the programme?
- How are the findings to be reported? Should a report be written?

It is often best to use a standard procedure to disseminate the findings. This will help others to carry out better context evaluations and refine the objectives and strategies of new programs.

Remember that a simple evaluation system is better than a complex one, which demands more control and more rigid conditions. This does not necessarily rule out evaluation in the form of research. In evaluating community-oriented projects, however, it is imperative to be simple and systematic, as it is impossible to control for social variables, particularly when a project has a long duration.

Regular reporting in the process evaluation (using instruments such as in Exercise 4.6 and the regular collection of qualitative data) will construct a firm basis for analyzing why some objectives were achieved and others were not. Through key people and groups, the community should be involved in the evaluation of action programs.

REFERENCES

- Andersen, E.S., Grude, K.V., Haug, T. and Turner, J.R. (1987) Goal directed project management. Kogan Page, London.
- Aylward, F. (1972) Food and nutrition education and training. UNESCO, Paris, E.D/W. S/353.
- Beghin, I., Cap, M. and Dujardin, B. (1991) Guide to comprehensive evaluation of the nutritional aspects of projects and programs. Antwerp, Nutrition Unit, Institute of Tropical Medicine.
- Burnett, J. (1979) Plenty & Want. A social history diet in England from 1915 to the present day. Second edition. Scholar Press, London.
- Eide, W.B., Holmboe-Ottesen, G., Oshaug, A., Perera, D., Tilakarane, S. and Wandel, M. (1986) Introducing nutritional considerations into rural development programs with focus on agriculture. Report no. 2. Towards practice. Institute for Nutrition Research, University of Oslo.
- Green, L.W., Kreuter, M.W., Deeds, S.G. and Partridge, K.B. (1980) Health education planning. A diagnostic approach. Mayfield Publ. Co., Palo Alto.
- Gussow, J.D. and Contento, I. (1984) Nutrition education in a changing world. A conceptualization and selective review. *World Rev. Nutr. Diet.*, 44: 1-56.
- Helsing, E. (1986) Nutrition policies in Europe – some reflections. Paper given at the Symposium on the 50th anniversary of the Institute of Nutrition, Rome. World Health Organization, Regional Office of Europe, Copenhagen.
- Hollis, C. (ed.) (1986) Using communication to solve nutrition problems. Education Development Center, Inc., Newton, Massachusetts.
- House, E.R. (ed.) (1986) New Directions in Educational Evaluation. The Falmer Press, London.
- Israel, R.C., Foote, D. and Tognetti, J. (1987) Operational guidelines for social marketing projects in public health and nutrition. Nutrition Education Series, issue 14. UNESCO, Paris. ED-87/WS/52.
- Jelliffe, D.B. and Jelliffe, E.F.P. (1989) Community Nutritional Assessment. With Special Reference to Less Technically Developed Countries. Oxford University Press, Oxford.
- Jonsson, U. (1988) A conceptual approach to the understanding and explanation of hunger and malnutrition in society. In *Hunger and Society*. Vol. 1. An understanding of the causes. Eds. Latham, Bondestam, Chorlton and Jonsson. Cornell International Nutrition Monograph Series. Number 17 (1988). Division of Nutritional Sciences. Cornell University, Ithaca.
- Jonsson, U. and Toole, D. (1991) Conceptual analysis of resources and resource control in relation to malnutrition, disease and mortality. Internal Paper, UNICEF, New York.
- Mager, R.F. (1984) Goal analysis. Second edition. David S. Lake Publishers, Belmont, California.
- Mason, J.B., Habicht, J.-P., Tabatabai, H. and Valverde, V. (1984) Nutrition surveillance. World Health Organization, Geneva.
- Maxwell, S. and Frankenberger, T.A. (1992) Household food security. Concepts,

indicators, measurements. A technical review. UNICEF, New York and IFAD, Rome.

McMahon, R., Barton, E., and Piot, M. (1980) On being in charge. A guide for middle-level management in primary health care. World Health Organization, Geneva.

Oshaug, A., Benbouzid, D. and Guilbert, J.-J. (1993) Educational Handbook for Nutrition Trainers. How to increase your skills and make it easier for students to learn. World Health Organization, Geneva; WHO Collaborating Centre, Nordic School of Nutrition, University of Oslo, Oslo.

Oshaug, A. and Sedere, M.U. (1987) Community nutrition work – a systematic approach. Report on a WHO workshop. World Health Organization, Regional office for Europe, Copenhagen.

Patton, M.Q. (1980) Qualitative evaluation methods. Sage Publications, London.

Romiszowski, A.J. (1981) Designing instructional systems: Decision making in course planning and curriculum design. Kogan Page, London.

Romiszowski, A.J. (1984) Producing instructional systems: Lesson planning for individualized and group learning activities. Kogan Page, London.

Rossi, P.H., Freeman, H.E. and Wright, S.R. (1979) Evaluation: A Systematic Approach. Sage, Beverly Hills, California.

Sedere, M.U. (1985) Feasibility studies and project proposals: Report on a workshop. Kandy, Plan International Sri Lanka.

UNICEF (1992) Strategy for improved nutrition of children and women in developing countries. A UNICEF Policy Review. UNICEF, New York.

WHO (1984) Glossary terms used in the «Health for All» Series No 1-8. World Health Organization, Geneva.

INDEX

- action 12, 35, 39, 45, 48, 50, 67
- activities 11, 13, 16, 21, 38, 39, 45, 48, 50, 52, 53, 57, 61, 63, 67, 71, 72, 74, 75
- actors 12, 19, 28, 29, 31, 32, 37, 40, 67, 70, 74
- actors' aims 30
- administrative system 35, 60
- aims 63
- amateur evaluation 64
- analysis 11, 12, 32, 38, 58

- budget 38, 57, 71

- causal analysis 27, 70
- causal models 25
- communication 49, 51, 52
- communication channels 7
- communication system 35
- competence 68
- conflicts 30, 31, 67
- context evaluation 66
- criteria 21, 22, 32, 45, 71
- cultural acceptability 21, 22, 42

- decisionmaking 11, 35
- dietary guidelines 16, 19

- education 7, 49, 51, 52, 61
- educational system 35, 60
- effect evaluation 76
- evaluation 7, 11, 16, 17, 21, 45, 57, 61, 62, 63, 64, 65, 66, 68, 69, 72, 73, 75
- evaluation instruments 6, 68, 73
- evaluation system 6, 16, 66, 71, 73
- external credibility 64
- external evaluator 64

- feasibility 44, 55, 67
- feedback 7, 68, 73, 73
- food chain 23, 24, 25, 28, 30, 32, 33, 40, 52, 60, 70, 71
- food engineering 51
- food industry 16
- food labeling 50
- formative evaluation 63, 66
- functions 10, 11, 12, 13, 16, 17

- goal 19, 20, 21, 22, 30, 31, 32, 34, 37, 38, 39, 40, 41, 42, 43, 45, 46, 48, 49, 50, 52, 67, 70, 71, 74, 76

- health planning 6
- health system 34, 35, 60
- human resources 56, 67, 68

- impact 63, 72
- impact evaluation 76
- implementation 11, 21, 34, 35, 38, 45, 68, 71, 72
- indicators 25
- infrastructure 35, 51, 60
- input evaluation 66, 67

instrument 74
 internal evaluation 64

job analysis 6, 10, 11, 12, 15
 job description 6, 7, 8, 10, 11, 12, 13, 15, 16, 17, 18
 job performance 15

legal system 35, 50, 60
 lines of responsibility 16

management 16, 68, 72
 management by objectives 6
 material resources 55, 67
 means 49, 50
 monitoring 17, 57, 74, 75

nutrition education 13, 16
 nutrition planning 6
 nutrition policy 13, 16, 19, 35, 49, 50
 nutrition surveillance 35, 60
 nutritional adequacy 21, 22, 42

objectives 6, 7, 10, 16, 19, 21, 37, 38, 39, 40, 43, 44, 45, 46, 47, 48, 50, 52, 53, 55, 56,
 58, 61, 62, 66, 67, 71, 72, 74, 75, 76
 organizational diagram 10, 14
 organizing concept 23
 outcome evaluation 63, 66, 76

pitfalls 7, 8
 plan 37, 58, 60, 67, 68, 73
 planning 11, 16, 21, 38, 45, 68, 71
 political system 35, 60
 practicability 53, 67
 principles 7
 problem analysis 23
 problemsolving skills 16
 process evaluation 66, 74
 professional evaluator 64
 professional profile 70

questionnaire 61, 67

realistic 55, 76
 relevance 11, 32, 39, 44, 67, 73
 reliability 32, 76
 resources 7, 13, 40, 45, 46, 55, 62, 67, 68, 71, 73, 74

schedule 38, 58, 59, 71, 74, 75
 self-evaluation 13
 situation analysis 16, 21, 25, 45, 48, 67, 68, 70, 71
 skills 11, 25, 32, 40, 51, 69, 70, 71, 72, 73
 social marketing 6
 strategies 16, 19, 21, 30, 32, 38, 45, 48, 49, 50, 51, 52, 53, 54, 56, 66, 67, 71, 74
 summative evaluation 63, 66
 support systems 13, 34, 35, 36, 40, 60, 68, 71
 sustainability 21, 42
 sustainable food base 22
 system 11, 34

target groups 32, 37, 39, 40, 57, 68, 73

tasks 10, 11, 39

time frame 57

time limit 40

training 49, 51, 52, 61, 69

validity 76

viable procurement 21, 22, 42

NOTES:

NOTES: