

Planning, Managing & Leading Public Nutrition¹

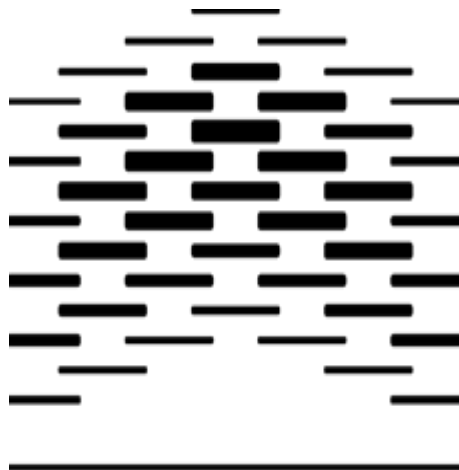
Manual for persons involved in public (health) nutrition

Editor

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¹See also: The Lancet, 365 (20), 1899-1909

(<http://www.who.int/hac/techguidance/training/predeployment/Public%2520health%2520nutrition%2520in%2520complex%2520emergencies.pdf>); and WPHNA, June/July 2013.

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The participants on the workshops were acknowledged, but don't have any responsibility for mistakes, wrongspellings or any other mistake done in producing this new issue. That rests with the author A. Oshaug.

This version of the book would be recognised by many; some parts are the same or similar to the pervious edition and some parts are rewritten or completely new; it has lacks and limitation, and thus needs more to dive into.

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Introduction

Objectives of the book

When you have studied this book and the references given you should be able to:

- Undertake a job analysis and with a job description for a public nutritionist;
- Plan and lead programmes and activities for public nutrition;
- Plan an evaluation system; and
- Construct evaluation instruments.

These skills will be based on measurable increases in knowledge of:

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

For whom is this book intended?

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

The approach suggested reflects the author's viewpoint on public nutrition. The editor has drawn for the first publication of the book, and his own experiences, that of other people working in public nutrition, various theories in nutrition and health planning, education, social marketing, business planning and leadership, and managers by objectives. The World Health Organisation should also be thanked for allowing using the second issue of the book, *Planning and Managing Community Nutrition Work*, as a point of departure for this issue.

Some pitfalls in Public Nutrition

- Lack of job description;
- Vaguely formulated or too ambitious job description:
- Underestimation of the importance of getting to know the community (such as through situation analysis) before activities are started;
- Focusing only on problems and obstacles, not considering opportunities and resources; Too little time given to long- and short term planning (or “Let’s get down to action as soon as possible!”);
- Lack of or poorly defined objectives;
- Forgetting the principles, overall view and long-term perspectives owing to preoccupation with inessential details;
- Trying to be too comprehensive and not focusing on a few important key issues when formulating programmes;
- Underestimation of resources needed in project work;
- Lack of or limited about leadership in general, and specifically leading a project;
- Evaluation not included in the planning;
- Follow-up not included in the planning;
- Use of an individualistic top-down approach;
- Disregard for the importance of community participation in the work of programmes and projects;
- Underestimation of the importance and complexity of working within and in interdisciplinary groups;
- Major and repeated changes of plan during implementation;
- Lack of or badly performed evaluation;
- Projects not completed and documented because others are being started;
- Not being able to refuse to take on new projects and activities in spite of existing overload of work;
- Lack of proper community channels for feedback and information to the community, authorities, mass media, and other groups; and
- Talking too theoretical rather than an applied approach in public nutrition education and in public nutrition work in general.

How to use this book

The book is by no means exhaustive. Its length is deliberately kept short. Further, the situation in the district of Nutopia, which is used as an example throughout the book, may differ in many ways from the reality that the reader or user normally faces. This does not really matter, because the device is meant only to elucidate important principles related to programmes and projects in public nutrition. You can use the book as a self-teaching instrument, as a basis for working with colleagues or in a small working group, as a tool in training workshops for personnel in public nutrition, or similar. It can be adapted to suit different countries and even different regions in a country. Do not read it through like a normal book, but go to the page or section or a chapter of interest and see if you find something of use or interest.

Like the overall objectives of the book, the objectives for each chapter describe what you can achieve by using it. If you do not want to go through the entire book the list of pitfalls in public 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 book as the only tool to use in the planning of public 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 public nutrition worker must have insight into each area, and understand their interaction and interdependence.

Setting the stage: The tale of Nutopia

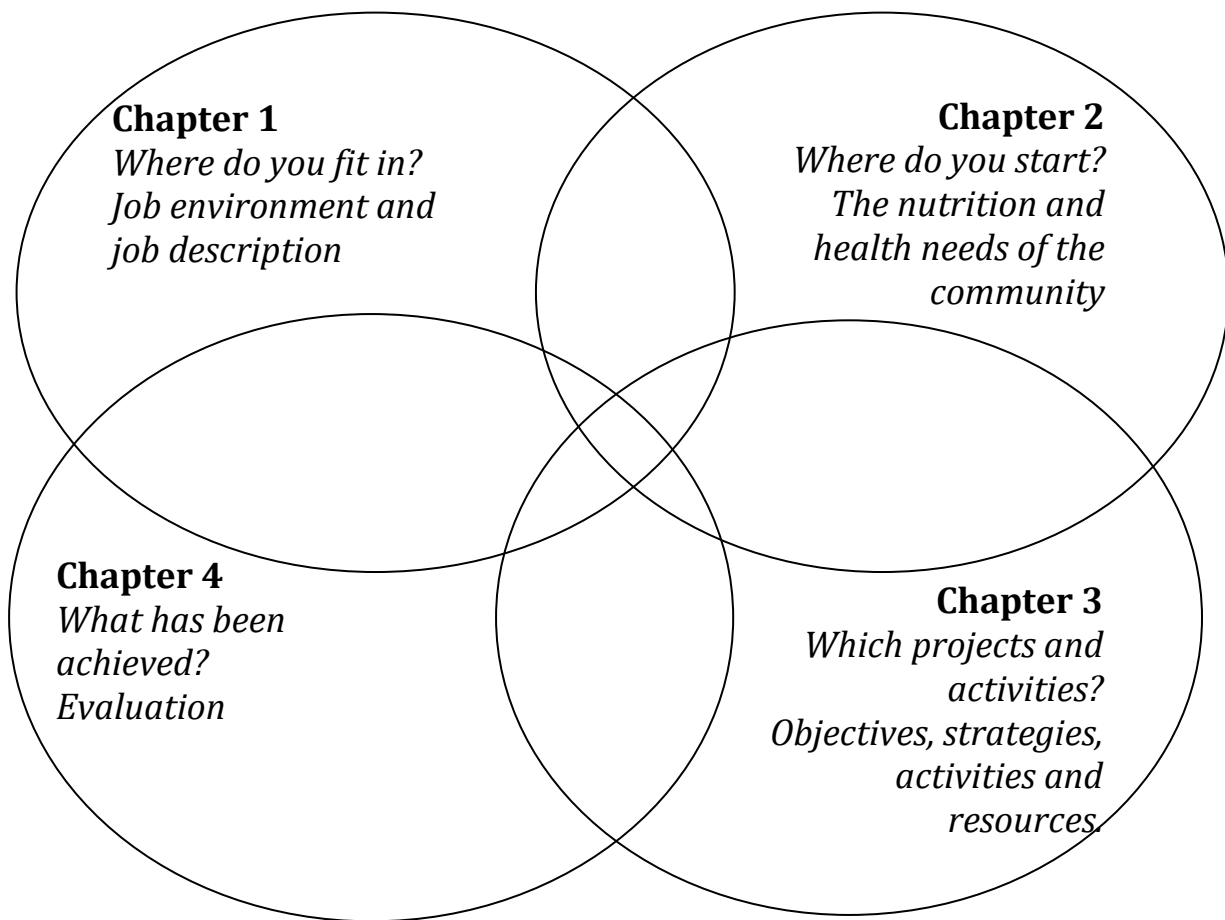
Once upon a time a nutritionist – Ms O.K. Piano² – was appointed to a newly created job in public nutrition. The post was linked to the office of the District Medical Officer (DMO) in the district of Nutopia. There were high expectations of what the nutritionist could do, and a number of areas for activities had been suggested. However, the actual job description was rather vague. Ms Piano therefore started with feeling of uncertainty.

Soon it was rumoured that a nutritionist was available to the district. Local physicians started to send some of their patients to Ms Piano; to whom (their patients) they did not have time or knowledge to give dietary advice. Request for starting slimming-clubs and giving lectures at schools and different organizations increased the workload. The DMO was worried about the increasing incidence of coronary heart diseases in groups of people below the age of 50 years. He wanted a proper study of the food habits of what he called “the high risk groups for CHD”. A pilot study showed that it would not be easy to enlist collaboration with the major risk group (busy men their prime time of their life) as a target group for public nutrition work.

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

²This is an invented name of an imaginary person.

Fig. 01: Topics of and links between the four chapters of the book



Morale:

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

1. WHERE DO YOU FIT IN?

Objectives of the chapter

After having studied this chapter and the references given (Romiszowski 1981, Oshaug et al. 1993, EMORY 2013, Young, Borrel, Holland, Salama 2004) you should be able to:

- Define public nutrition
- Describe what should be included in a job analysis
- Prepare a list of functions and tasks of a public nutritionist
- Write a job description of a public nutritionist, and
- Draw up an organisational diagram of the institutions whose work is relevant to Public Nutrition.

Nutopia: Episode 1

When O.K. Piano came to work in public nutrition in Nutopia, expectations of what she could accomplish were high, but her 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, and schools, private and other relevant organisations.

No other functions or tasks were specified, and there was no definition of public nutrition. Such a description is often too broad and vague, and gives seldom proper guidance on how the nutritionist should work or the important tasks to be performed. O.K. Piano 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 Public Nutrition

Work of importance for Public Nutrition takes place at a number of points along the line between political decision-makers, the health worker, and the food consumers. However, often 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 (in various groups), the analysis of food “intake”, changing catering practices, counselling and nutrition education, and therapy for diseases, just to mention a few. It may also include advice on simple food production, such as growing of vegetable.

Public nutrition work can be much more than this. A public 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 systems, or administrative malfunction may cause nutritional problems. Public Nutrition requires a local perspective (from disasters to local situations made difficult to reach people), a global perspective,

spanning from the concerns of wealthy and poor nations. A broad definition is therefore needed.

Public Nutrition³ means work related to planning, implementing and evaluation of programmes, projects, and activities, and consultations to institutions (private and public), business, groups and individuals in the local community in the field of food, nutrition and related health issues (natural or manmade). It is thus a broad-based approach (Young, Borrel, Holland and Salama 2004). The roles of the personnel involved in such work are defined by their job descriptions, and in the absence of descriptions of their functions, by their activities and/or tasks. Nutritional problems exist at national, community, and individual levels and include hunger, childhood malnutrition, famine, suboptimal growth, infection, dietary imbalance or deficiency, and chronic disease.

This can imply analyse how different societal and environmental conditions effects the situation, such as food access, diet, schooling, livelihood, environment, disasters, trade, global conditions, the nutrition and health situation, from individual to global level.

It may also involve description and analysis of the distribution of problems in society, the causes and consequences of different problems and inequalities created by nutritional problems. The various challenges need various approaches to improve and find solutions to the nutritional challenges.

Research within Public Nutrition focus on the distribution of nutrition status and health related problems or challenges, and positive aspects in the community. It points out possible problems and challenges which can be detected. It can address how diet, nutrition and related health issues can be improved in the community and for various groups of people: Development of policies, democratic governance, human rights, various programmes and projects; what is the effect (without being biased) of policies, programmes and activities how who these can be improved; etc.

All this implies an interdisciplinary approach to action.

Analysing the job content⁴

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

A job analysis of a public nutrition post may include:

- A list of functions

³ See also: <http://www.tulane.edu/~internut/Trial/RSRC.htm> for issues related to poor countries; Moch and Mason 1999, and Young, Borrel, Holland and Salama (2004) Public Nutrition in complex emergencies.

⁴ See also: http://en.wikipedia.org/wiki/Job_analysis. Whenever using Wikipedia be critical, and realise that some are written by persons with a specific interest and viewpoint which may not be what you are looking for.

- A list of activities and tasks
- Line of responsibility and position of the job in the organisation
- Decision-making and discretionary power
- Task the incumbent performed well
- Task the incumbent performed less well
- What the employer needs from the nutritionist.

You should work out a list for your own situation. The list can be tested for relevance by comparing it with the food needs and nutrition related health need in the community; it may be correct or flawed by the situation. It can also help institutions in identifying training needs, so that higher training in nutrition would be more relevant to the community situation.

Listing professional functions

The professional functions of a Public 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 public nutritionists. The list should include most of the normal functions of this professional group.

People working in Public Nutrition may vary widely in background and specialisation (such as Public Nutritionist, Clinical Nutritionist, community dietician, academically trained researcher and trainer of public health physicians). They also work at different levels in the administrative structure, inside and outside the health care system, and usually cooperated with other people at different levels of the organizational structure.

An employer's expectations of a Public Nutritionist can vary from the very precise to only vague indications. The success of large public nutrition programmes however, may require personnel with skills in three main areas: analysis of the programs of the community (with an ecological rather than a medical approach), the use of the analytical results to generate action (including disseminating data to users, lobbying without losing the job, and planning and managing activities), and evaluation and feedback⁵.

People working in Public Nutrition at district or local levels are important actors in 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 Public Nutrition personnel. The allocation of resources within the policy to support Public Nutrition work is also important.

⁵ Parish, R. Personal communication in 1988.

Exercise 1.1 List the main functions of a public nutrition worker. Where possible, refer to documents published, job descriptions etc. If no such information is 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 public nutrition worker are as follows	
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
...	
...	

Now compare your list with that below.

This list of professional functions was prepared by a group of European community nutritionists at WHO workshop (Oshaug and Sedere 1987). A community (today we would say “public”) 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 policies at various levels (local, regional, national and international);
- Plan, evaluate, lead, supervise, and implement action programmes on health and nutrition, identify and allocate gained resources for his/her 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 in initiating nutrition related work in the community;

- Provide nutrition education to professionals, organisations 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 audio-visual material; and
- Perform self-evaluation, and maintain and expand his/her professional competence.

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

Getting in order: Structuring and organisation

Support systems for public nutrition work are discussed in Chapter 2.

Exercise 1.2 Describe in an organizational diagram the institutions in which you work. Show where you are situated, the relationship between this organization and others whose work is relevant to public nutrition problems, links to field stations, etc. include the relationship(s) to responsible ministries or other authorities.



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 also later in this chapter) will establish your position in the organisation and your responsibilities. You should have an overview of the organization and the personnel, which can be used in Public Nutrition work. However, you may 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 as part of a bigger entity, in cooperation with your colleagues and superiors in your own and other relevant 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.

Writing a job description

A job description should clearly and concisely explain the main characteristics of the job of a person working in Public Nutrition. The description should be based on a thorough job analysis. However, particularly for a newly created job, 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;
- Value system (see also page 34 for definition and more details);
- A general statement of purpose, giving the scope of the job;
- A description of lines of responsibility and position of the job/post in the organization;
- Specification of personal attributes that the job demands; and
- A list of functions, as comprehensive as possible.

It is easy to be lost in preparing a job description according to the above format and to forget to think about the purpose of the task ahead. 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 the 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 evaluation personnel involved in public nutrition work.

However, it is 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!

Figure 1. OK. Piano's job description

Title: Public Nutritionist

Date: 15th of April, 2014 (should a value system be referred to?)

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 initiatives initiated by the DMP's office. In specifying nutritional programmes and activities, the responsibility will include situation analysis, planning, implementation and management, an 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. However, the public nutritionist will 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 public nutritionist has the same rights as medical officers, district nurses, sanitary inspectors, food and water controllers, etc.

Lines of responsibility: The public 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 public nutrition. The public nutritionist cannot singe 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 must have a higher degree in public nutrition; he/she will work in close contact with other professionals, the industry and business, teachers and schoolchildren, different ethnic groups, etc. The incumbent must therefore be able to communicate in a language based on science. The formulation or language in general must be simple and clear, suited to the target groups. The public nutritionist must be able 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.

Value system: The value system of the public nutritionist must be in line with Human Rights in general and its corresponding principles at any time.

Functions: The public nutritionist will:

1. Identify and access nutritional problems in different socio-economic, occupational, age, and other

types of groups in the community;

2. Advise the DMO's Office on how to include nutritional considerations in the general health policy development;
3. Prepare an annual work-plan, including specific objectives, strategies, activities, budget and an evaluation system;
4. Lead and interdisciplinary groups in planning a food and nutrition policy for the district;
5. Plan, organise, implement and evaluate nutrition training programmes for health staff, teachers, caterers and others who are in a position to contribute to public nutrition activities;
6. Plan, organise, 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;
11. Provide an information service on health, food and nutrition, and other professionals working at local level;
12. Assist in monitoring and evaluation of various activities in preventive health care work conducted by the DMO office;
13. Liaise with other district health authorities and various other local authorities in the implementation of various public nutrition activities;
14. Supervise the work of other staff members, and students, on placement 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 the competence needed in public nutrition as felt in the local community in question and as seen by you;
17. Keep up to date on the scientific research findings and related developments;
18. Liaise with colleagues on technical and job-related issues;
19. Review this job description each year and suggest improvements if required;
20. ...
21. ...
22. ...

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 do 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.

2. WHERE TO START?

Objectives of the chapter

After having studied this chapter and some reference documents (Beghin et al. 1991, Jelliffe and Jelliffe 1989, Mager 1984, Oshaug, Eide, Eide 1994, Yukl 2012), you should be able to:

- Explain the distinction between management and leadership and how the concept has developed, and describe important elements of leadership;
- Describe the factors which are related to the food and nutritional situation of the community where people are living;
- Rank by order of priority the nutritional problems in the community and analyse their probable causes;
- Describe various target groups in the community in terms of variables such as health status, age, gender, socio-economic status, cultural and ethnic background, occupation and education (add or change according to the situation of the community);
- Identify the elements of the system that may support public nutrition and list the actors (organisations and individuals) that are users of the services of nutritionists in related areas.

Nutopia: Episode 2

Ms O.K. Piano was in a difficult situation with tasks that were piling up and problems that had to be solved immediately. It looks like Piano had taken too much responsibility upon her shoulders. In addition to learn to say no to some requests, one solution to her problems could be to include other people in her mission. She needs help in one way or another. It might be unrealistic to hire more nutritionists for the project. Perhaps some native people could be engaged in the administration of the project, or she could educate someone to take over and give simple dietary advices.

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, including the assessment of the existing problems in the community. She needed to place her work within the framework of the national food and nutrition policy and national health policy. She had to collect policy documents, identify the overall goals of the policies and analyse their goals. Furthermore, she realised that she had to make a quite comprehensive analysis of the nutrition and health situation in Nutopia. This could then form the basis for the formulation of food and nutrition policy for the area, and for planning of programmes and activities.

Leadership⁶

Effective leadership

The word 'leadership' signifies that a leader should show the direction to go and thereby reduce the uncertainty of the followers. Effective leadership is simply said dependent of three factors: The leader, the followers and the situation. To be an effective leader demands certain qualities in the leader's personality and behaviour. A long list could be proposed. As examples, we can mention: The leader should be decisive, a good listener, fair, patient, goal oriented and so on. These examples depict an ideal leader. As a rule; leaders usually only have a degree of this qualities and there is no reason to despond confronted with a challenge to leadership because of little belief in your own qualities.

Effective leadership also is dependent of the followers. Which competence do the followers have to do the task? Which qualities do they have, and not at least: In what degree are they motivated? At last is effective leadership dependent of the situation: Is the task complicated to accomplish or is it simple? Are the required resources available? Does the leader have incentives that can be used to motivate the followers?

Leadership behaviour

A challenge within leadership is the variability of situations a leader might be facing. A leader has to look at the situation and thereafter decide how to behave. The decision how to behave has to be based on the leader's knowledge, experience and intuition. Traditionally leadership behaviour has been divided into two broad categories: Task-oriented behaviour and relations-oriented behaviour. The task-oriented behaviour has a focus on the right quality of the delivered services/goods. It includes planning, coordination and control. The aim of this behaviour is to secure that the customer will be satisfied. The relations-oriented behaviour has the focus on the followers needs. The leader will try to be supportive and helpful. In this way, the leader possibly will build a sense of personal worth and importance in the followers.

Both categories of leadership behaviour have their advantages and might be suitable in certain situations. The leader has to judge the situation before he or she chooses the type of behaviour. A tendency only to focus on the task may create problems for the relationships, and a tendency towards focus on relations may reduce the quality and the effectiveness in the work. The ideal is that the leader may keep in mind both the task and the relations at the same time. This is also true for the public nutrition work.

The follower's motivation

As mentioned, the task has to be one of the focuses for the leader. Since leadership is about accomplishment of a task by help of other people, it is obvious that the motivation of the followers is decisive for success. Motivation may be divided into extrinsic and intrinsic.

⁶This part is developed and written by Hans Risan, Oslo and Akershus University College of Applied Sciences, Kjeller Campus.

Extrinsic motivation is for example money, gifts or appraisal from others. Intrinsic motivation is a love for the work one is doing because one finds it interesting, meaningful and important. Both motivations have to be given attention, but for a leader and in many cases for the reaching of the goals, intrinsic motivation is the preference. This is not at least to prefer in public nutrition work.

Transformational leadership

How can a leader influence the intrinsic motivation of followers? The Transformational Leadership Theory (Yukl, 2012) is a relatively new theory that may give some guidelines for the answer. The theory claim that the leader has the possibility to transform and motivate followers by making them aware of the importance of the task and get them to forsake self-interest for the sake of the organization and to activate their higher-order needs like the need of realizing one's potentialities. Help of four types of leader behaviour may accomplish this:

1. The leader may influence followers by setting an example of dedication and self-sacrifice to benefit the followers and the task;
2. The leader may influence followers to look at problems from a new perspective;
3. The leader may give individual consideration, support and challenges to followers;
4. The leader may communicate an appealing vision of what they want to accomplish.

It is supposed that transformational leadership may be practiced at some degree of any leader. In most cases, transformational leadership will be combined with transactional leadership. Transactional leadership is exercised when someone does a job because of the payment or the gifts that follow. The motivation is in other words extrinsic.

Ethical leadership

Transformational leadership may be used to support the self-interest and the career advancement of the leader. It is essential that leaders within public nutrition have sound ethical values in their leadership. Emphasized values in ethical leadership are (Yukl, 2012²):

1. **Integrity:** Open and honest communication and consistency between words, values and actions;
2. **Altruism:** Wanting to help others without hoping for reciprocation;
3. **Humility:** Having respect for other people and their contributions;
4. **Empathy and peace-making:** Helping others to cope with emotional distress and being forgiving;
5. **Personal growth:** Helping people to learn from their mistakes and trying to be a coach or a mentor;

6. **Fairness and justice:** Encouraging fair treatment of people and opposing manipulation;
7. **Empowerment:** Giving followers opportunities to autonomy and more responsibility.

A leader that is practicing ethical leadership will be an example for the followers and in all likelihood influence and transform their morality and motivation. This will obviously promote public nutrition work. This is related to what is described here as principles of human rights.

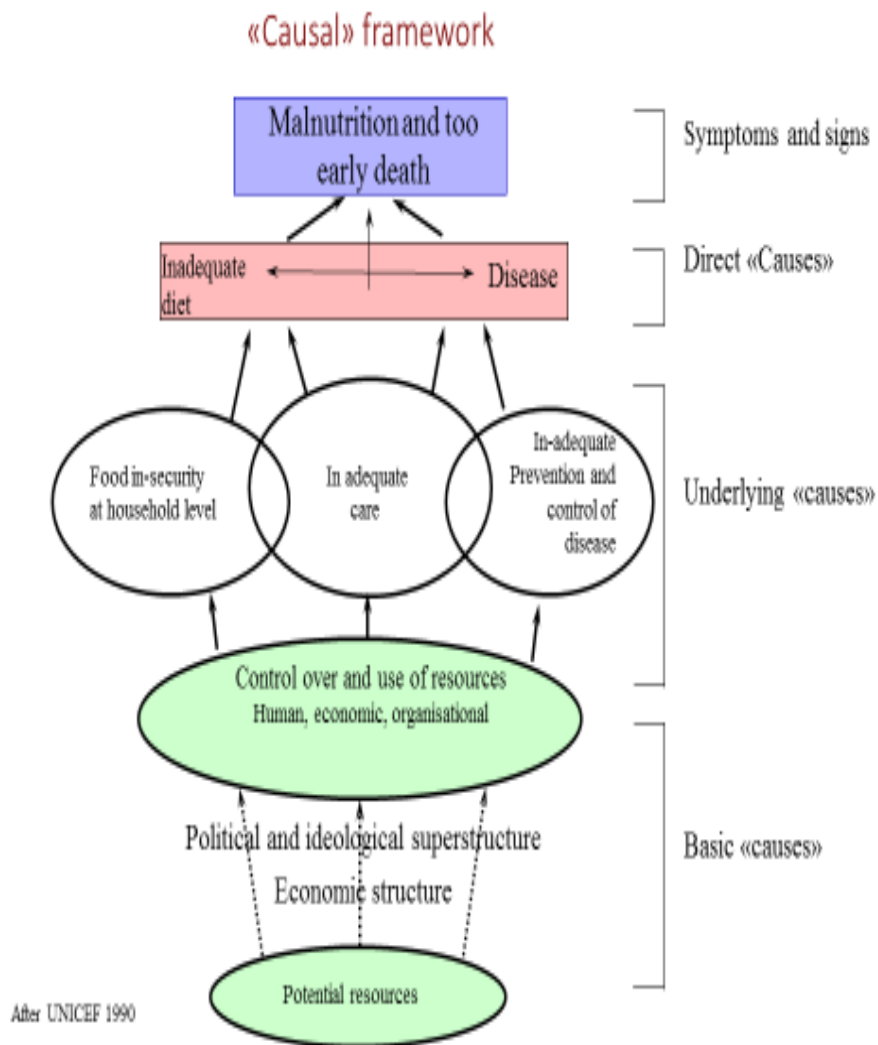
Relationship building

Transformational and ethical leadership are about the relationships between a leader and the followers. To reach the goal of helping people with their nutrition needs, the leader ought to build relationships of good quality with the single follower. The leader should for example get to know the followers competence, something about the followers family situation, where they are living and what they are doing during their leisure time. The leader should also reveal some information about her-/himself on the same areas.

By doing this, the leader will be more able to utilize the competence of the single follower. The leader will moreover be able to give support if a follower get in a difficult situation on the job or privately. As a result, mutual trust may arise between the leader and the follower. Trust in the relationships between the leader and the single follower will benefit the public nutrition work.

The situation for Ms O.K. Piano would become much better if she could involve others in the project that she could lead by help of transformational and ethical leadership.

“Casual” theoretical frameworks⁷



A report on “public health nutrition” (or some other central document) should provide some form of analysis in order to understand a particular issue. Using a theoretical framework for public (health) nutrition can help open up your analysis of past events by providing a particular set of questions to ask, and a particular perspective to use when examining your topic. Theoretical frameworks provide a particular perspective, or lens, through which to examine a specific topic within public nutrition.

⁷This part is developed and partly written by Ingrid Barikmo. The above framework is used by UNICEF and many people working in “public nutrition”. It is included in order to show that there is no correct framework, which need to be adapted to the local conditions. UNICEF Policy Review. Strategy for improved nutrition of children and women in developing countries. UNICEF, New York, N.Y., USA. ISSN: 1013-3194. First printing June 1990, second printing October 1992.

Theoretical frameworks usually come from other disciplines - such as economics, the social sciences, anthropology in addition to public nutrition - and are used to bring new dimensions of specific topics to light. There is no right or wrong theoretical framework to use when examining your topic since every topic can be looked at from a number of different perspectives.

Theoretical frameworks, however, are even more specific than broad subject approaches, such as public nutrition. Theoretical frameworks are specific theories about aspects of human existence such as the functioning of politics, the economy, human relations and public nutrition. These theories can then be applied to the study of actual events.

It can help to focus your analysis on a specific aspect of public nutrition and can direct your analysis, offering unexpected insights into the past, particular on essential issues.

Logical framework

Another type of frameworks is called log-frame (Logical framework). After the project has been identified, detailed information has been collected, and the goals are made, then start the planning of how to plan to implement the project - and as part of the design comes what is called Log-Frame.

A Log-Frame is a table (matrix) which provides a summary of the project plans. It is a tool that helps and strengthens the project design, implementation and the evaluation of the project.

	(The summary) Logical structure of the project goals	Objective measurable indicators	How to document (Evidence)	Potential problems / assumptions
General goal (objective) for a big project				
Purpose/secondary objectives (for our project)				
Results or "output" (which is the specific objectives)				
Activities				

The Log-Frame shows the logical structure of the project objectives and goals and what the project hopes to achieve and how. And how can we know when we are there? What will show that we have reached the goal? And there are some potential problems along the way?

General goals for a large project refer to an overall objective which we are trying to do something about.

The Purpose / secondary objectives are the specific change that we want the project to fulfill and to contribute to that the overall goal can be met.

Results or "output" - (which is also our specific goals) is what we want to see as a result of our activity, so that the purpose is achieved - which textually is made into results.

Activities describe the measures to be taken and required for the goals to be reached, and sometimes this come later in the process.

Objective measurable indicators how what we intend to achieve for each goal and activity and answers the question - how do we know when we get there? They are signs which measure project progress against objectives and are an important part in monitoring and evaluation.

It must be thought through how we intend to demonstrate that the targets are reached, how progress can be measured, who will be responsible for collecting the data and how often it will be done.

It must also be considered through which problems can occur, there may be factors beyond the project's control, possibly conditions or assumptions that must underlie so the objectives can be reached.

The key to completing a Log -Frame is to fill in the hierarchy of objectives by working down the Summary column, then work upwards through the Potential problems / assumptions column. Then work across each row to identify the Objective measurable indicators and How to document (Evidence) for each objective.

By completing the Log -Frame this way, you avoid getting too involved in the detail before the project structure has been developed.

The best way to construct a Log -Frame is to use several large sheets of paper and a pencil or post-it notes. This means that changes can be made to the Log -Frame during the course of discussions without making it look untidy.

Although it is made in the planning phase it is a living document that is actively used and can be changed through the project cycle.

Identifying overall food and nutrition goals⁸

Most countries and many districts/areas 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 analyse 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 their 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.
More?

⁸Locke and Latham (2006).

Assessing nutritional goals⁹

Look critically at the overall goals you have identified. Do they reflect what you thought should be the main priorities in nutrition in the area you work? 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 public nutrition.

Nutritionists need a basis for setting such goals and corresponding criteria to assess them. Such criteria can help you to make a relevant situation analysis and carry out subsequent work.

It may not be possible to identify a basis for goal-setting that suits all kind of communities equally well. It has been some proposal for use in formulating goals and objective for public nutritional work (Eide et al. 1986).

The *nutritional adequacy and safety* of the diet must be taken into account. In other words, the diet should be nutritionally adequate (in terms of nutrients and energy) and safe (with regards to bacteria, additives, chemical residues (including pesticides) in various foods, residues of hormones particularly in meat, etc.). It is coming more and more information of these issues, and they are important for the consumers.

Cultural acceptability and social importance is another consideration. The food culture need careful considerations; it includes the types of food and meals people eat, what they consider to be food and high-status foods, where they eat and with whom, the feeling of wellbeing and security, notions of the relationship between food, health, how people are feeling, and the way food is used in care, etc. Food has many functions in a cultural setting.

Another consideration is *viable food procurement* and the *prize of the diet* people are eating. 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,

⁹Goal setting involves establishing *specific, measurable, achievable, realistic and time-targeted* (SMART) goals. Work on the theory of goal setting suggests that an effective tool for making progress is to ensure that participants in a group with a common goal are clearly aware of what is expected from them. On a personal level, setting goals helps people work towards their own objectives. Goal setting features as a major component of personal development literature. It is considered an “open” theory, so as new discoveries is modified. Studies have shown that specific and ambitious goals lead to a higher level of performance than easy or general goals. As long as the individual accepts the goal, has the ability to attain it, and does not have conflicting goals, there is a positive linear relationship between goal difficulty and task performance. Goals are a form of motivation that set the standard for self-satisfaction with performance. Achieving the goal one has set for oneself is a measure of success, and being able to meet job challenges is a way one measures success in the workplace. It has been said that "Goal setting capitalizes on the human brain's amazing powers: Our brains are problem-solving, goal-achieving machines." Modified after: http://en.wikipedia.org/wiki/Goal_setting; See also Locke and Latham (2006).

whether material or non-material. Here it is important to remember and refute *discrimination* of any kind, but here particularly based in gender would probably be important.

The *sustainability in the way we produce food* is a very important consideration for nutritionists working in the community. The various foods that are part of people’s food culture and that nutritionists recommend in their campaigns must be available, affordable, and on a sustainable basis. This criterion also related to people’s ability to sustain a nutritionally adequate and culturally acceptable diet in crises such as natural disasters, ecological degradation and pollution, unemployment, the loss of a family member or breadwinner, or loss of social safety net etc.

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.

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.

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

Food chain – suggested organizing concept

A problem analysis will show that public health nutrition is linked to so many and complex issues that you may feel overwhelmed and maybe helpless. You will need analytical tools useful for 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 changing useful organizing concept on a systematic approach. Figure 2.1 shows a food changing that can be applied at various levels.

Figure 2.1 An example of a food chain (seen from an agriculture point of view). Under each issue, there are examples of researchable issue and policy issues. Below it is indicated that consumers often take an interest in this. Own figure from Ministry of agriculture.



Exercise 2.3 Identify the various components of a food chain as you see it in your community (use a separate sheet if necessary)

A food chain in your area

Analysing the food, nutrition and related health problems

After identifying the food chain in your community, you must analyse it in the light of, for example, the socioeconomic and political context, the agricultural policy, and the power and impact of market forces. A number of factors may be important in the determination of how household procure their food and what decides individual food consumption, including perceptions of food, expenses, ideology and religion, to mention some. 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 may be to identify problems and needs related to the food chain, using your experience and the result 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 related health situation. If you have to do a detailed situation analysis and don't have basic skills needed in research methodology, you may have to consult textbooks addressing these issues, or specialists.

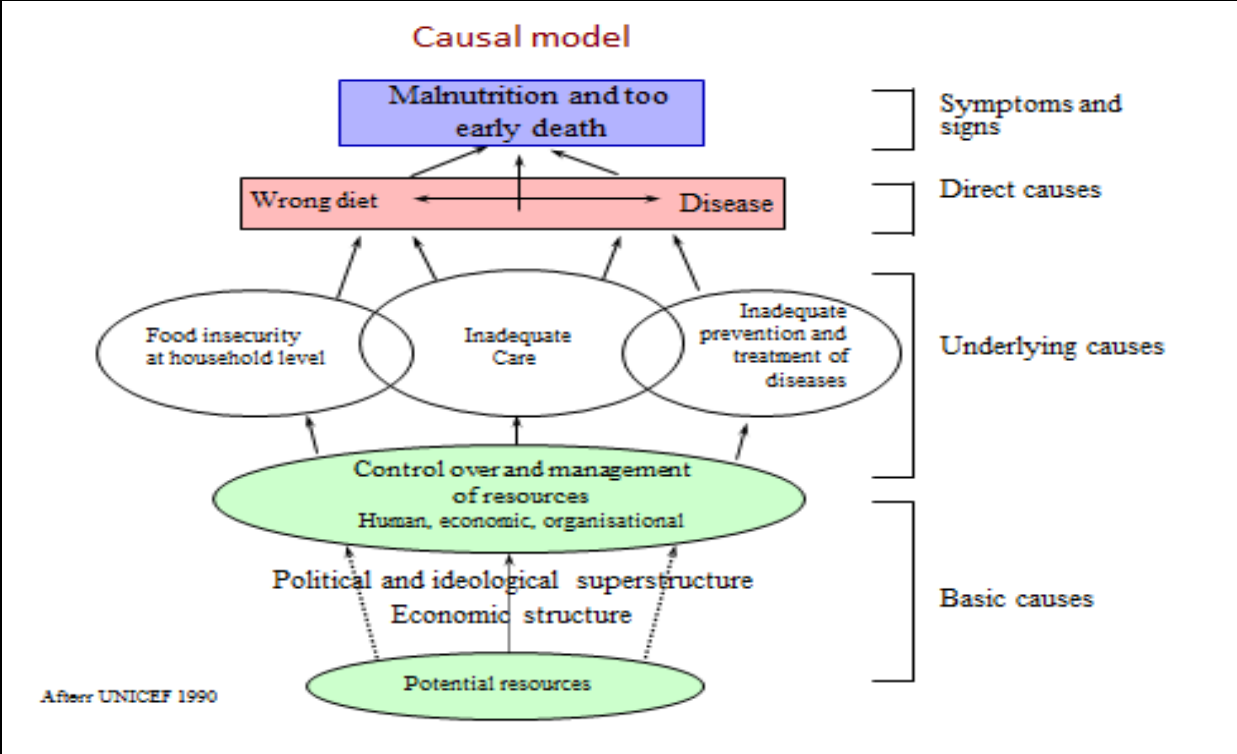
Exercise 2.4 Identify as many problems/needs¹⁰ as possible in each link of the food chain, and indicate their priority (1 for the highest, 2 for the second highest etc.). If the space is inadequate, do it on a separate piece of paper.

Elements of the food chain	Identified problems/needs	Priority

¹⁰ For the identification of indicators and methods see Beghin et al. 1992, and Maxwell and Frankenberger 1992.

A causal analysis of the problems of highest priority can be useful, although very difficult. It can help you gain the understanding that you need collaboration of various actors that affect the nutrition and related health problems. Here is only one example given.

Figure 2.2 Various causes of nutrition related problems



Exercise 2.5 Make a causal analysis of the problems you have identified as having the highest priority. Use a separate sheet if needed.

Having done so, do you wish to reconsider and modify your order of priority? Discuss with your priorities and analysis with your colleagues. When you have established various activity groups in your community, discuss priorities and causal linkages with them.

Actor analysis

An actor analysis can be seen as an approach to environmental management. Environmental issues are often very complex, because many parties are involved. All parties have their own interests, goals and strategies. Actor analysis provides a structured inventory of the parties and their interests to get an overview.

Instead of parties we speak of actors which comprise both individuals and groups like institutions, administrative authorities or consumer organisations. All these actors can change an existing situation by their priorities or value systems.

There have been many changes of environmental behaviour that can be described via actor analysis. For example all cars are now equipped with catalytic converters. Environmental organizations, governments, companies, legislators, customers, have all been actors in this process.

Actors are people and organisations that work in areas that affect the food and nutrition situation; some are active users of the services of nutrition workers. Development actors are operational at local, district, national, international and transnational (global) levels. These actors can be from the public (government) sector, private (business) sector or from civil society (ordinary citizens). It is common to refer to the different groups of actors as stakeholders and for interactions between them to be called multi-stakeholder meetings. These offer huge challenges in terms of communication and consensus building.

Identify the 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 services of nutritionists.

People in the public nutrition must deal with many actors of different kinds, including members of household or organizations in the public or private sector, and decision-makers at various levels. Some will draw on the services of public nutritionists 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 Problems/needs	Actors	
	Providers	Users

There are usually more actors than you would expect. Compare your list with the one in Exercise 2.7.

Exercise 2.7 Now consider the list of actors in this exercise. If you have used the sampled priority problems, underline all the actors you listed in the preceding exercise (they may also be in a different order/sequence); put brackets around any of that you have omitted. If you use other problems, analyse 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 problems/needs	Actors	
	Providers	Users
Increased content of pollutants in food and drink	Food/water analysts or controllers Toxicologist Veterinarians Chemists Specialist in purification technology Producers of purification equipment Researcher Staff of laboratories Local health authorities Hospital staff: Physicians Dieticians Clinical nutritionists Other nutritionists Health educators Non-Governmental Organizations (NGO) Politicians Staff of trade unions Consultants	Staff of the agricultural sector Staff of health institutions Staff of mass media Staff of primary and secondary schools Staff of institutions of higher learning Individual consumers Policy makers Staff of the food industry Staff of the legal bodies Staff of consumer organizations Staff of bureau of standards Quality controllers Food technologists Primary health care workers
Increased fear in the population of food poisoning	Nutrition/Health educators Health authorities Psychiatrists/psychologists Physicians (General practitioners) Marketing experts Journalists Toxicologists Food quality controllers Behaviourists	Staff of schools Institutions for higher training Staff of athletic/sports clubs Mass media Staff of food industry Primary food producers Marketing experts Individual consumers Parents Policy makers Primary health care workers Consumer organizations Marketing experts Staff of in places branded “wholesale of foods” Staff of in places branded retailers of foods

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 need to find an answer 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. Public nutrition touches on many different professional disciplines and problem areas such as health and diseases, communication and information, transport, food production, processing and handling, food subsidies, pricing policy particularly on foods, and social security policy. Naturally, serious conflicts may arise, between and within a group involved.

The food targets based on nutrient intake goals may conflict with the profit goals and the part of the food industry that wish to use cheap fat (which can be trans fatty acids) and sugar in food processing, or the agricultural policy at any point in time. The health ministry may have different views on resource utilization than the finance and agricultural 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. However, retailers may not be willing to pay for faster transport and better storage facilities without increasing their process or being subsidized by the government. These are only a few examples of common conflicts.

Exercise 2.8 Identify the overall goals and 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.		
9.		
10.		

Add more if you need.

The role of none-state actors - service delivery and/or policy advocacy

CSOs play mainly two roles in development policy: 1. implementers, and thus they are involved in the delivery of goods and services, which may also entail being contracted by a government; 2. catalysts, defined as the ability to inspire, facilitate or contribute towards development change

Over the past few years, many CSOs have moved from a “supply-side” approach, which concentrated only on development projects, to also a “demand side” approach, which seeks to help communities to articulate their preferences and concerns in order to become more active participants in the development process.

Principles of human rights

These principles¹¹ must be understood broadly. In addition to that, there is not a basic internationally accepted list but most experts say that the list of principles could be:

- Accountability: political, legal, administrative¹²
- Empowerment - of disadvantaged groups and individuals
- Equality – often a policy issue
- Focus on human dignity
- Independence of the judiciary
- Legality; national/international (claim-rights)
- Non-discrimination - in all matters of public policy
- Participation - by all members of society
- Responsibility - on the part of each individual
- Respect for the rule of law
- Transparency - in all public affairs
- Universal, that is human rights as interrelated, interdependent and indivisible (as reiterated at the World Conference for Human Rights in Vienna in 1993).

Value system of actors

A **value system** is a set of consistent values (ethical, personal and cultural) and measures used for the purpose of ethical or ideological integrity. A well-defined *value system* is a moral code. A value system is a judgment of the rightness or wrongness of something, or of the

¹¹See also Malhotra (2006) who mention the following: The move from advocacy to implementing a framework or like where a programme or activity is linked to the issues of identifying ... principles. See also Oshaug, Eide and Eide 1994; and General Comment 12 to the ESCR (The right to adequate food (Art.11) General comment 12 : . 12/05/99. E/C.12/1999/5).

¹²These principles are organised alphabetically.

usefulness of something, based on a personal view. As a generalization, a value judgment can refer to a judgment based upon a particular set of values or on a particular value system. A related meaning of value judgment is an expedient evaluation based upon limited information at hand, an evaluation undertaken because a decision must be made on short notice. In such a judgement Human Rights principles as a guide can be used.

Corporations in the Global Food System and Human Rights¹³: Exploring Problems and Potentials for Governments and Companies

See the Report (footnote 13) for further information

Institutional affiliations of the project and conference

See the Report (footnote 13) for further information

Structure and programme of the Conference

Please see the Report (footnote 13) for more information.

An additional note on the transformation of the global food system

Almost revolutionary changes have taken place since 1945 in the global food system, changes that with increasing speed penetrate also those developing countries (particularly Africa and large parts of Asia) that until a few decades ago were less affected by them.

One aspect of the transformations are the almost explosive growth of non-communicable diseases (cancer, diabetes, heart diseases) that are associated with changing food consumption patterns, over which the corporations have a decisive influence.

These world-shattering transformation of the food system has been summed up by Professor Tim Langi along twelve dimensions as follows (here somewhat abbreviated and modified from the original): How food is grown (increasing use of agrochemicals, hybrid plant breeding); how animals are reared (in factories); the move from chemistry to biotechnology including genetic modifications; sourcing of food from local to regional and now global; transformation of food processing; intensified use of technology to shape quality; change in the agricultural workforce and their working conditions; vast changes in distribution logistics (airfreight, heavy lorries and satellite tracking); changed methods of supply management (centralisation of ordering, use of computer technology etc.); moulding of consumers tastes and markets through heavy investment in advertising and marketing and placement of products; levels of control of markets; concentration of retailers that have become the dominant gateways to consumers.

Global flows of investment causes changes in the agricultural or fishery workforce by transforming the categories of the producers of food or catchers of fish (from smallholders using bio-diverse plants to mono-cultural plantation types and/or mono-cultural contract farming, from artisanal fisheries to capital-intensive trawlers). There is also a growing division of labour within food production, between the producers of feed (e.g. soy in Latin

¹³See the Report: <http://www.uio.no/english/research/interfaculty-research-areas/leve/news-events/news/2015/report-of-the-oslo-conference-.html>

America) and the producers of meat (animal factories in Europe and North America). Overall, there is a vast transformation from biodiverse food production to monoculture, with serious consequences for sustainability.

These revolutionary changes are facilitated by policies of free trade and investment, drawing on theories or assumptions of comparative advantages for corporations and states, which in practice is concerned less with the comparative advantages of different sections of people than of comparative advantages of profit for corporations or for accumulation of wealth by states.

- Focus on the producer side is on the impact of corporations on the livelihood of people in rural areas, including forest-living people and artisanal fisheries. They are all in increasing risk of being displaced by corporations, though it cannot be entirely excluded that there can also be win-win outcomes of corporate activities.
- Corporations are involved in buying, processing and marketing food.
- Corporations are increasingly also involved, directly and indirectly, in the production of food, through land purchase for plantation-type economies or for contract farming systems, for provision of seeds and fertilisers (e.g. Monsanto) thereby changing the modes and means of food production, and by determining what should be produced.
- Focus on the consumer side is on health consequences of corporation-processed and marketed food, addressing the whole chain from corporate food buyers, food processors and food retailers.
- Our concerns may need to be related also to the producers of other biomass, which can be in competition with the production of food and can be a major driver in large-scale acquisition of land (land grabbing).
- Regarding biofuel, there are no comparable concerns concerning impacts on the consumer's side (on consumers of ethanol or biodiesel, mostly for transport)¹⁴.

Target groups

All groups of actors are potential target groups for nutrition campaigns. Furthermore, information analysis is therefore needed to formulate relevant 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 company may help in formulating sound strategies. Members of the target group must be involved in producing the description; their task included assessing priorities of the problems that need to be addressed.

A weakness in many nutrition campaigns is that they consider the population to be a homogenous group. Many campaigns therefore fail or have limited effect. Populations have to be classified in sub-groups, usually according to criteria such as health status, age and gender, socioeconomic background, culture, ethnic background, geographical location, occupation and education. A variety of characteristics can be described, such as sub-groups' diet, ability to change, interest, biases, experiences, goals and strategies. The complexity of your community and the type and seriousness of the nutritional and health problems will determine

¹⁴ <http://www.uio.no/english/research/interfaculty-research-areas/leve/news-events/news/2015/report-of-the-oslo-conference-.html>

which subgroups and the most important target groups. Remember that controlling for issues in data analysis have implications to what can be done.

The selection of variables to use in a target groups description will depend on your location in the food chain, and the type of actors you are dealing with. In dealing with the people in the food industry, for example, you may choose to focus on their goals, strategies, ability to change, interests, biases and experiences. However, in dealing with taxi drivers in a busy city, you may add a focus on their disease pattern, blood pressure, cholesterol levels, dietary pattern an nutrient profile, meal frequency, time accessible, arrangements and facilities for regular meals, level of physical activity, smoking habits, level/type of 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 analysis at all. Involving the target groups in the analysis will provide more details, and improve its relevance and reliability to the community, in describing real needs.

Exercise 2.10 Describing each of the most important actors that you have identified in the food chain or linked to a high-priority problem.

Actors	Description

Support system

This can be an institution, organisation, administrative structure or other structures in a community that facilitates the successful implementation of 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, organisation, 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 organised 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 intermediated (district, regional or provincial) to the central level (WHO 1984).

Any action programme intended to improve the food and nutrition situation of people in the community will need support from many sectors and systems. The national food, nutrition and health policies provide 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 decision-making power, is important for nutrition work at various levels. It can either support or constrain initiation and implementation of programmes and activities.

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 so ensure access to the data needed for decisions and to avoid unnecessary overlap and duplication of work. Resource utilization may thus be ensured or 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 many; we can mentioned Codex Alimentarius Commission¹⁵, WHO/UNICEF on optimal breastfeeding^{16,17}, the legally regulated food fortification¹⁸, regulations against food adulteration and additives¹⁹, regulations of food labelling^{20,21}, help to refugees and displaced people²² provided for in the international humanitarian law²³.

Many more systems could be mentioned, but only three are added here, namely the health system²⁴, the agricultural system²⁵ and the educational system²⁶. This latter includes education

¹⁵<http://www.codexalimentarius.org/>

¹⁶http://www.who.int/nutrition/publications/guiding_principles_compfeeding_breastfed.pdf.

¹⁷Breastfeeding in public is forbidden (at least in the time this was written) in some countries and jurisdictions, not addressed by law in others, and a granted legal right in public and the workplace in yet others. Where it is a legal right, some mothers may nevertheless be reluctant to breastfeed, and some people may object to the practice. Breastfeeding is one of the most effective ways to ensure child health and survival. Optimal breastfeeding together with complementary feeding help prevent malnutrition and can save about a million child lives. Globally less than 40% (2013) of infants under six months of age are exclusively breastfed. Adequate breastfeeding support for mothers and families could save many young lives. WHO and UNICEF actively promote breastfeeding as the best source of nourishment for infants and young children.

¹⁸<http://www.who.int/nutrition/publications/micronutrients/9241594012/en/>

¹⁹http://journals.cambridge.org/download.php?file=%2FBJN%2FBJN5_03%2FS0007114551000546a.pdf&code=36d9d82579a13956a467b20ce538f628

²⁰http://ec.europa.eu/food/food/labellingnutrition/foodlabelling/proposed_legislation_en.htm

²¹<http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm2006828.htm>

²²<http://www.flickr.com/photos/unhcr/5803835800/>

²³<http://www.redcross.ca/what-we-do/international-humanitarian-law>

²⁴http://en.wikipedia.org/wiki/Health_care_compared#International_comparisons

²⁵http://www.csrees.usda.gov/nea/ag_systems/ag_systems.cfm

²⁶<http://academic.research.microsoft.com/Keyword/11575/education-system>

and training²⁷ from the primary to university level. 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 that exist, 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 public nutrition:

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

Unfortunately, in practice many of these systems constrain rather than support public nutrition. However, looking at their potential support leads to a consideration of their positive contribution to the public nutrition work. 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.

²⁷ <http://www.astd.org/>.

Exercise 2.11 Make a list of support systems for public nutrition locally. Indicate where nutritionists are working of where you think they are needed.

Support system	Use or need for nutrition competence

3. WHICH PROJECTS AND ACTIVITIES

Objectives of the chapter

After having studied this chapter and some of the references given, you should be able to

- List the factors that influence the formulations of goals and objectives;
- Formulate goals and objectives for public nutrition programmes and activities;
- List the qualities of behavioural objectives;
- List and describe at least six different types of strategies in public nutrition;
- List your colleagues' possible reactions to the proposed strategies, and device ways to overcome those that are negative;
- Make a resource analysis and prepare a budget for public 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. Furthermore, she had to prepare a budget and a realistic timetable that the DMO would accept. She felt she could really 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

An acceptable definition of food security²⁸

At the World Food Summit in Rome in 1996 a definition of food security was developed and agreed upon by the delegation of countries present at the meeting. The definition has later not been denounced and is thus the only agreed definition internationally to the knowledge of this main author:

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life²⁹, that is to avoid malnutrition as one example.

The concept of food security is defined, and they included both physical and economic access to food that meets people's dietary needs as well as their food preferences. In many countries, health problems related to dietary excess are an ever-increasing threat. WHO says that “malnutrition and foodborne diarrhoea are become double burden” of disease.³⁰

An acceptable definition of nutrition security

Nutrition security exists when all people have food security as defined by the FAO host of the World Food Summit in 1996, in General comment 12³¹ to article 11 of ICESCR, including covering of dietary needs and food preferences, adequate care and prevention and control of diseases, and avoiding dietary excess and foodborne diarrhoea, for an active and healthy life.

Formulating goals and objectives based on community needs

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 goal of the action programme. Goals are broadly stated, long-term expectations, and 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 the previous chapters. For example, goals for a public nutrition programme could be to improve the

²⁸For discussion on Food Security as an issue see also Maxwell and Frankenberger 1992.

²⁹http://www.fao.org/fileadmin/templates/wsfs/Summit/Docs/Final_Declaration/WSFS09_Declaration.pdf.

³⁰<http://www.who.int/trade/glossary/story028/en/>

³¹<http://www2.ohchr.org/english/bodies/cescr/comments.htm>.

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 entire population. In other words, objectives addresses 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 nutrition 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 infant and the preschool children of a vegan community;
- Reducing the incidence of diet-related diseases due to high alcohol consumption in unemployed men, etc.

The 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.

Factors to be considered in formulating of goals and objectives

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

- The overall goal of the 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 public nutritionists;
- The actors in the food chain, and their agenda and conflicting interests;
- Target group description; and

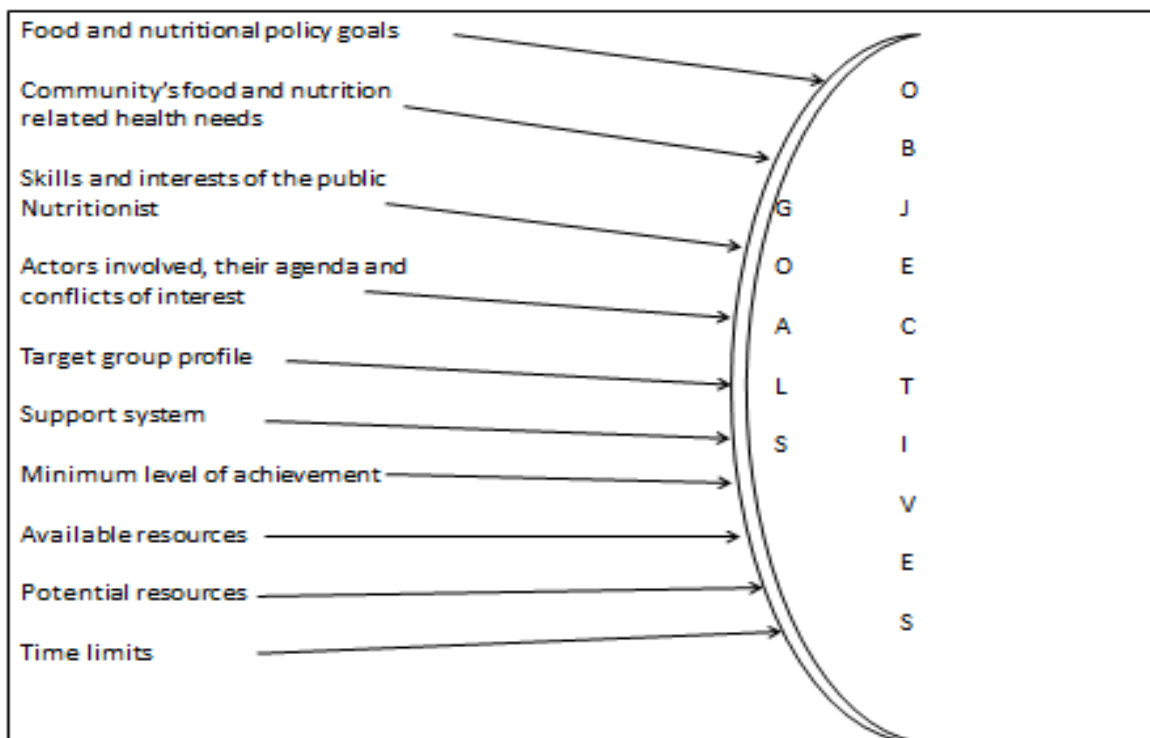
- The support systems.

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, financial, etc.)?
- What are the potential resources for the programme exist in the community?
- What are the time limits for the implementation of the various parts of the programme?

Thus, a number of factors will influence the formulation of realistic goals and general objectives.

Fig. 3.1 Influences on the formulation of foals and general objectives in public nutrition



Exercise 3.1 Define a set of goals your public nutrition programme. Take account of all the factors discussed above

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

Add as many as required.

Exercise 3.2 Test your goals and or general objectives (by writing yes or no in the space provided) as to whether they take account of the four major considerations identified in General comment 12.³²

Goals/ general objectives	Nutritional adequacy and food safety	Cultural acceptability	Affordability	Sustainable food base
1.				
2.				
3.				
4.				
5.				
6.				
7.				
?				

Incert more goals if needed.

³²<http://www.refworld.org/docid/4538838c11.html>.

Exercise 3.3 For each defined goal and/or general objective, write down the more detailed objectives that you think will cover all its aspects. If necessary, continue the list on a separate piece of paper.

Goals/ general objectives	Objectives
1.	1.1 1.2 1.3 1.4
2.	2.1 2.2 2.3 2.4

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)

Objective	Relevance	Feasibility
1.1		
1.2		
1.3		
1.4		
1.5		

Formulating policies, strategies and activities³³

Once the general objectives have been identified and spelled out, the next, often difficult step is to formulate specific objectives. This will help 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 by this author:

1. The expected change (e.g. behavioural, material, nutritional status);
2. The conditions under which the expected change is to take place, including, for example, the time, target group, and sometimes the strategies or activities used; and
3. The extent of the expected change³⁴ that will satisfy the purpose.

³³Adapted from Oshaug and Sedere (1987).

Including strategies or activities in the specific objectives will make formulating them very complex. Experienced people in formulating objectives will benefit from this practice, but novices will do better to deal with strategies and activities separate.

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:

- To conduct a campaign (2) among adults aged over 20 years (2) to reduce trans fatty acid (TFA) consumption (1) to the recommended level (3) within a period of five years (2) by providing public education (2), by declaring on the label the quantity of TFA in the product (2), and making wholesalers and retailers aware of the product with undesirable composition of TFA, and by making good quality fruit and vegetables for public consumption at local level (2).
- To implement an information campaign (2) reduce dental caries (1) by 20% in all school children (3) aged less than 12 years within a period of four years (2) by motivating (2) parents, teachers, primary health workers and school children (2) to follow a healthy diet defined by professional nutritionists (2), to increase consumption of starchy food (2), to reduce the consumption of sugar and refined foods (2), to clean their teeth after meals (2), and to visit a dental practitioner regularly (2).

Objectives must be consistent. Specific objectives should be derived from goals and/or general objectives and these again should be derived from goals.

A set of realistic objectives may deviate from what you as a public nutritionist see as an ideal situation. Unfortunately, reality requires continued change of priority, and plans should take account of the limits of resources and contextual factors, and particularly relevance and feasibility.

³⁴This 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 objectives

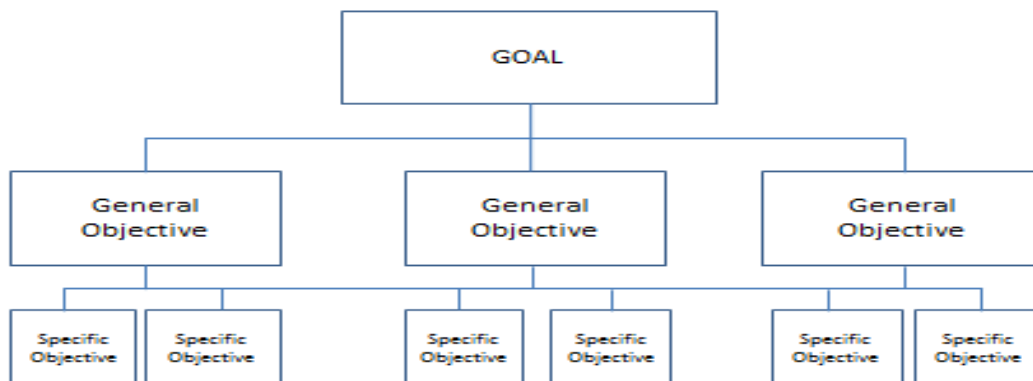
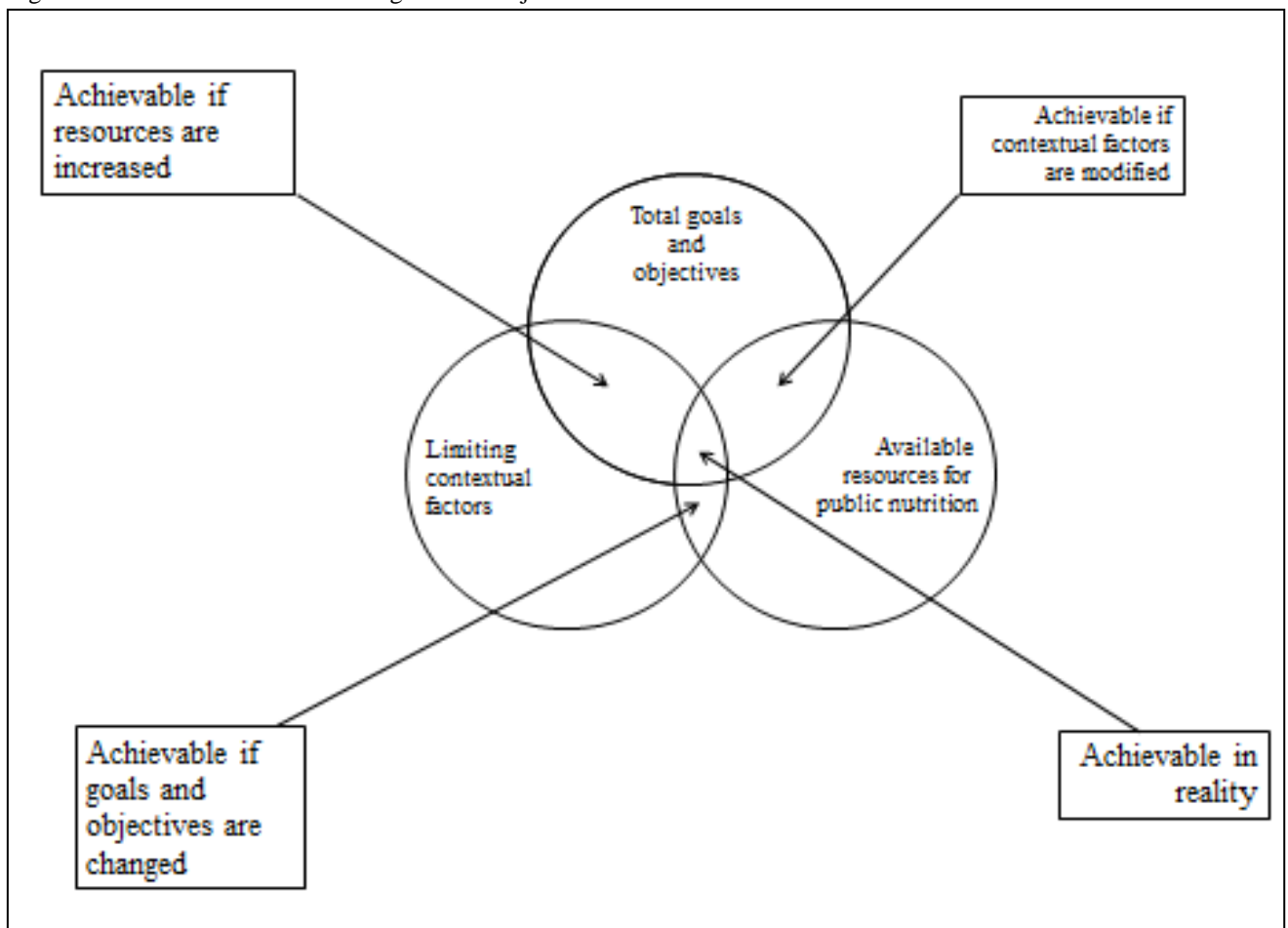


Figure 3.3. The selection of realistic goals and objectives.



Exercise 3.5 List specific objectives derived from your general objectives. Be sure that you included the 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 to (-) or that support (+) each other.

Objective	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 activities³⁵

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

The term 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 goals and general objectives. Strategies are often identified in the making of a situation analysis. In addition, the specific objectives may reflect the strategies adopted in the programme.

Public 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.

³⁵ Adapted from Oshaug and Sedere (1987).

Different strategies can always be used to solve a social problem. People in public nutrition sometimes forget to explore alternative or complementary strategies in the light of expected outcomes, by such means as assessing available and potential resources.

Public nutritionists (in previous editions we used the term “community nutritionists”) prepared the following examples of strategies and activities. The objective was to reduce the sodium intake of Nutopian people 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 to the need for more fruits, vegetables, cereals and other low-sodium foods and 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 or low-sodium dishes in mass catering.

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

- a. Food and nutrition policy formulation;
- b. Food legislation, regulation and (food safety, but not sufficient to do only food safety) control;
- c. Food availability and consumer issues;
- d. Food engineering;
- e. Training, education and communication;
- f. Pricing issues on foodstuffs (affordability in the food security discussion).

Food and nutrition policy formulation (the overall strategy)

The formulation of a good 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 from implementation. A competent and able secretariat has also been mentioned as a necessary but not sufficient measure issue (Helsing 1986). The various means selected to implement such a policy should reflect the

multifaceted problems related to food and nutrition in the society, and could be said to constitute an overall strategy.

A nutrition policy³⁶ is a food policy with explicit health objectives.
A strategy³⁷ is composed on an action programme and its many activities, and uses various means to achieve specified goals or objectives.
Means³⁸ 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)³⁹

Food legislation, regulation and control constitute one of the earliest strategies in the struggle to protect people from adulteration, food poisoning and dangerous additives (Burnet 1979, IIEA 2013, WTO 2013). 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 Commission⁴⁰ is the body that tries to coordinate international food standards, guidelines and codes of practice contribute to the safety, quality and fairness of this international food trade. Or said by Codex itself:

The Codex Alimentarius Commission, established by FAO and WHO in 1963 develops harmonised international food standards, guidelines and codes of practice to protect the health of the consumers and ensure fair practices in the food trade. The Commission also promotes coordination of all food standards work undertaken by international governmental and non-governmental organizations.

³⁶ Courses in food and nutrition policy is provided many places, such as in 2013 <http://ocw.jhsph.edu/index.cfm/go/viewCourse/course/FoodNutritionPolicy/coursePage/index/>, and only in Norwegian unfortunately, [http://www.hioa.no/Studier/HF/Master/samfunnsnaring/\(language\)/nor-NO](http://www.hioa.no/Studier/HF/Master/samfunnsnaring/(language)/nor-NO).

³⁷ <http://en.wikipedia.org/wiki/Strategy>.

³⁸ <http://www.thefreedictionary.com/means>.

³⁹ See also Andreassen and Marks 2006.

⁴⁰ <http://www.codexalimentarius.org/>.

International food trade has existed for thousands of years but until not too long ago food was mainly produced, sold and consumed locally.⁴¹ Over the last century the amount of food traded internationally has grown exponentially, and a quantity and variety of food never before possible travels the globe today.

The Codex Alimentarius Commission work out international food standards, guidelines and codes of practice contribute to the safety, quality and fairness of this international food trade. Consumers can trust the safety and quality of the food products they buy and importers can trust that the food they ordered will be in accordance with their specifications.

The increasing use of the practice of labelling food and food products is important for the consumer and the public nutritionist. Food manufacturers are using labelling not only to inform the consumer but also to promote their products. Food labelling^{42,43} is hotly debated globally today and is open to abuse by manufacturers and their marketing efforts, and to guide and inform the consumers. Manufacturers often try to convince the consumer that a product labelled according to regulations is therefore a healthy one. This practice can trigger a sort of “labelling hysteria”, in both consumers and manufacturers, and is often not understood properly by the consumers⁴⁴.

Public Nutritionists and other professionals working within food, food engineering⁴⁵ and nutrition issues should play an active role, along with consumers’ organisations and with manufacturers.

In the wake of the increasing ecological disturbances all over the world, public nutritionists must pay increasing attention to pollution and toxicological aspects of nutrition in the community⁴⁶. Demand will probably increase for more “pure” products (without pesticides, additives (such as hormones) in milk and meat products, and of low fat, or high protein, high fibre products. The legal system will thus play a stronger role in the future and provide an interesting and many times a forceful role in community.

Food availability

Food availability⁴⁷ is part of the food security concept⁴⁸. As shown by the history of nutrition campaigns in various part of the world and with various issues⁴⁹, the staff and people involved

⁴¹ <http://www.codexalimentarius.org/about-codex/en/>

⁴² http://www.registrarcorp.com/fda-labeling.jsp?s_kwcid=TC|9240|fda%20labeling%20requirements|S|b|7053622452&gclid=CManptXliLcCFWd7cAodFk4ALg.

⁴³ http://www.ciwf.org.uk/your_food/know_your_labels/default.aspx?gclid=CKO1_OrliLcCFSF7cAodtHgAVQ.

⁴⁴ <http://www.fda.gov/Food/IngredientsPackagingLabeling/LabelingNutrition/ucm274593.htm>.

⁴⁵ http://articles.courant.com/2013-05-06/news/hc-op-kleinman-no-need-to-20130506_1_foods-engineered-ingredients-biotechnology.

⁴⁶ The Chernobyl accident, for example, deposited radionuclides over a vast area. Are nutritionists prepared to deal with a frightened population in such a situation? http://en.wikipedia.org/wiki/Chernobyl_disaster. Accessed the 09th May, 2013.

⁴⁷ See also [http://www.ers.usda.gov/data-products/food-availability-\(per-capita\)-data-system.aspx](http://www.ers.usda.gov/data-products/food-availability-(per-capita)-data-system.aspx) and http://www.fao.org/fileadmin/user_upload/sustainability/Presentations/Availability.pdf. Accessed the 02nd June, 2013.

in such campaigns are often so preoccupied with the 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, wholesalers and retailers, and difficulties with the logistics infrastructure and economics. Political support at a fairly high level may be required, and securing it usually takes a lot of work and time⁵⁰. Food availability (Lee 2012) will increase in importance in the future, particularly as the process of urbanisation continues and rural districts become less densely populated. As stated by Lee in 2012 “In recent years, research and public policy attention has increasingly focused on understanding whether modifiable aspects of the local food environment - the types and composition of food outlets families have proximate access to - are drivers of and potential solutions to the problem of childhood obesity in the United States“. We see a continuous more complex situation than before, and the process is expected to develop even further.

Special strategies may be adopted to provide meals to elderly people (one of the largest growing population groups in the world today (2013)) 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 people who prepare the meals; These range from the food engineer in the manufacturing industry to the person who finally composes and prepare the meals. The role of mass catering (in institutions, cafeterias, restaurants, hotels, etc.) will probably continue to increase. Thus, a public nutritionist who works through or with the people involved can help to improve the nutritional quality of the diet provided.

Food engineering⁵¹

Food engineering is a multidisciplinary field of applied physical sciences which combines science, microbiology, and engineering education for food and related industries. Food engineering includes, but is not limited to, the application of agricultural engineering, mechanical engineering and chemical engineering principles to food materials. Food engineers provide the technological knowledge transfer essential to an effective production and commercialization of food products and services. It is a very wide field of activities. Prospective major employers for food engineers include companies involved in food processing, food machinery, packaging, ingredient manufacturing, instrumentation, and control. Firms that design and build food processing plants, consulting firms, government

⁴⁸ FS was defined in the WFS in 1996.

http://www.fao.org/fileadmin/templates/wsfs/Summit/Docs/Final_Declaration/WSFS09_Declaration.pdf. See also footnote 1 and 10.

⁴⁹<http://rpi-fff.blogspot.no/2010/04/food-labeling-fiasco-organics-and.html>.

⁵⁰Here you will probably need skills in lobbying without losing your job. See also Fisher and Ury (1983).

⁵¹<http://www.foodengineeringmag.com/>.

agencies, pharmaceutical companies, and health-care firms also hire food engineers⁵². This is a growing field of expertise.

Training⁵³, education^{54,55} and communication⁵⁶

Public education is perhaps the most commonly used strategy in public nutrition, and has been so for a long time (Gussow and Contento 1984, Israel 1987). Nutrition training has increased in momentum (Oshaug 1992, Oshaug et al. 1993), and professionals working in public nutrition repeatedly face the challenge of how to communicate their messages.

There are many theories of education and communication. In public nutrition 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):

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

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 some 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 public education.

⁵²After: http://en.wikipedia.org/wiki/Food_physics.

⁵³<http://www.hematology.org/training/>.

⁵⁴See also <http://www.kdk-harman.org/aboutgrants/evaluation/indicators>.

⁵⁵<http://en.wikipedia.org/wiki/Education>.

⁵⁶<http://en.wikipedia.org/wiki/Communication>.

Nutrition training

Nutrition training⁵⁷ (Aylward 1972) comprises academic and practical instruction in nutrition, dietetic and foods science and usually includes the scientific, economic and social aspects of the subject. Such training should be community and problem based, centred on the student, continuously evaluated, and should help the students to develop and apply problem-solving skills.

Nutrition training and development of a competent nutrition work force is essential to meet the many challenges related to nutrition (Beaudry & Delisle 2005). Worldwide, levels of obesity, hunger and under-nutrition (Black et al. 2008) contribute considerably to what WHO terms global disease burden (WHO 2004). The need for skills and competence to address the very slow progress in resolving these nutritional problems in a sustainable way seems evident to many.

The specialisation in nutrition aiming at promoting a nutritionally adequate diet and preventing nutrition related health problems in groups and populations has been called Public Nutrition (Mason et al. 2006) and Public Health Nutrition (Hughes 2003). 58

Therefore, a basis for developing a curriculum⁵⁹ for a bachelor study programme in public nutrition could be to ask potential employers of public nutritionists about which functions they would expect a public nutritionist should be able to perform (Torheim et al., 2009). Most of the previous studies on the topic describe which skills and competencies (Beaudry & Delisle 2005) nutrition professionals deem as most important, e.g. in Australia (Hughes 2003), the US (Dodds & Polhamus 1999; Rogers & Schlossman 1997; Wakou, Keim and Williams 2003), Latin America (Rogers & Schlossman 1997) and the UK (Landman, Buttriss, Margetts 1998) and in a range of other countries (Hughes (2004).⁶⁰

Potential employers said that in order to conduct a task satisfactory, various skills will be required, e.g. intellectual skills, communication skills or practical skills. Most often, a combination of skills seemed to be needed (Oshaug 1999).

⁵⁷See also: http://www.unicef.org/nutritioncluster/index_training.html.

⁵⁸Here there is an expansion of the definition of public health nutrition (here it is called public nutrition) to extend beyond the public health sphere to deal with the relationship between humans and foods in more aspects than health, but also in relation to food systems, food culture and economic issues to mention a few.

⁵⁹The curriculum, including the final learning objectives, was formed not based on the survey alone, but also supplemented by inputs from external sources; the review of the curriculum by nutrition experts from various institutions and the scientific literature.

⁶⁰In this way, one can interview potential employers, in order to get the opinion and perspective of outsiders of the nutrition community, thus our focus on functions. This fits well into Hughes' conceptual framework for analysing public health nutrition workforce development (Hughes 2003), and can be seen as stage three of the framework: work needed and core functions. An employer will expect the employee to perform certain tasks and functions to a standard¹⁵ and this requires an adequate mixture of skills and competencies. Selected potential employers of public health nutritionists in Norway were presented with a list of 31 generic functions (Torheim et al., 2009).

Nutrition education

Nutrition education⁶¹ (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 practises, and the introduction of better food hygiene or more effective use of food resources.

Nutrition Education is any combination of educational strategies, accompanied by environmental supports, designed to facilitate voluntary adoption of food choices and other food- and nutrition-related behaviours conducive to health and well-being. Nutrition education is delivered through multiple venues and involves activities at the individual, community, and policy levels.

This definition has been adopted by the Society for Nutrition Education and Behavior and was authored by Dr. Isobel Contento, a leading authority in nutrition education.⁶² The work of nutrition educators takes place in colleges, universities and schools, government agencies, cooperative extensions, communications and public relations firms, the food industry, voluntary and service organizations and with other reliable places of nutrition and health education information.

Nutrition education can also focus on children specifically. It can be an interactive nutrition tools and tips for parents and health educators to use to promote healthy living for the whole family. It can focus on educational activities, display it at websites and for those who have access to it, give children and families the knowledge and skills they need to make healthy choices.⁶³

⁶¹See also: <http://www.fao.org/ag/humannutrition/nutritioneducation/en/>.

⁶²http://en.wikipedia.org/wiki/Nutrition_Education.

⁶³<http://www.nourishinteractive.com/>.

Nutrition communication⁶⁴

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

Most nutritionists have used nutrition communication without seriously considered it a special professional academic discipline, and has been around for a long time. Wherever nutrition is talked of in the media (magazines, television, newspapers, and the Internet), the print, broadcast, and electronic media are constantly seeking professionally trained nutritionists who can communicate effectively. The same is true of public relations agencies, the food industry, and health and fitness centres. Community-based health promotion programs are also relying more and more on techniques of effective mass communication to influence behaviour.

Strategy formulation

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 nutritionists or health personnel qualified in nutrition do not necessarily carry out these activities. 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 to different levels of the food chain; together these can constitute a strategy.

⁶⁴For a master degree in the USA see: <http://nutrition.tufts.edu/academics/nnc>. This master degree is not free of charge but there are other universities around the world where one can get academic training in communication within public nutrition. For a bachelor in public nutrition see: [http://www.hioa.no/Studier/HF/Bachelor/Samfunnsnaring/\(language\)/nor-NO](http://www.hioa.no/Studier/HF/Bachelor/Samfunnsnaring/(language)/nor-NO). This bachelor study has communication built within its curriculum, and it will qualify to take a master with focus on communication within public nutrition.

Exercise 3.7 For each objective, identify alternative strategies (with activities) that could be implemented in your community. In addition, rate their practicability (very good, good, fair, poor).

Objective	Strategy and activity	Practicability
1.1		
1.2		
1.3		
1.4		
1.5		
1.6		
...		
...		

Exercise 3.8 Draw up a list of negative reactions to the proposed strategy, and how you will overcome the protests.

Possible negative reactions	Source 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.

Objectives	Material resources		
	Needed	Available	Potential
1.1			
1.2			
1.3			
...			
...			
Add more as necessary			

Human resources⁶⁵

When talking about human resources one often talks about competence (or competency). Competency is the ability of an individual to do a job properly. A competency is a set of defined behaviours that provide a structured guide enabling the identification, evaluation and development of the behaviours in individual employees. The term "competence" first appeared in an article authored by R.W. White in 1959 as a concept for performance motivation. In 1970, Craig C. Lundberg defined the concept in "Planning the Executive Development Program". The term gained traction when in 1973, David McClelland, Ph.D. wrote a seminal paper entitled, "Testing for competence rather than for intelligence".

Some scholars see "competence" as a combination of knowledge, skills and behaviour used to improve performance; or as the state or quality of being adequately or well qualified, having the ability to perform a specific role.⁶⁶

Competency is sometimes thought of as being shown in action in a situation and context that might be different the next time a person has to act. In emergencies, competent people may react to a situation following behaviours they have previously found to succeed. To be competent a person would need to be able to interpret the situation in the context and to have a repertoire of possible actions to take and have trained in the possible actions in the repertoire, if this is relevant. Regardless of training, competency would grow through experience and the extent of an individual to learn and adapt.

Competency has different meanings, and continues to remain one of the most diffuse terms in the management development sector, and the organizational and occupational literature.

⁶⁵See also: <http://www.thefreedictionary.com/competencies> and [http://en.wikipedia.org/wiki/Competence_\(human_resources\)](http://en.wikipedia.org/wiki/Competence_(human_resources)).

⁶⁶ For instance, management competency might include systems thinking and emotional intelligence, and skills in influence and negotiation. Competency is also used as a more general description of the requirements of human beings in organizations and communities.

Exercise 3.10 For each objective, make an estimate of personnel needed, identify those in your professional environment who can be used and try to locate professional and non-professional personnel in the community who may be important actors.

Objectives	Personnel		
	Needed	Available	Potential
1.1			
1.2			
1.3			
...			
...			
Add more as necessary			

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

Working out a budget⁶⁷

The decisions that public nutritionists 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 public nutrition work within the frame of the total budget for a larger area, such as the budget for preventive health care and for district medical officer's office. The allocation of funds to public 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 public 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 the community or an entire 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, but having funding as you see it from different sources. You should not do much planning of activities, projects or programmes that have little chance of being financed. In such cases explain why you do as you do to potential funders.

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, etc. Then the requirements can be organised into categories. The following are examples of such categories or requirements that may have to be included in a budget:

- Personnel expenses such as salaries, social security and insurance, and pre diem;
- The purchase of equipment;
- The expenses of providing facilities for the secretariat, such as offices, telephones, PC's with relevant and necessary soft-wares and internet access or typewriters (if necessary), printing and copying machines, furniture;
- Running costs of the secretariat (sometimes covered by a standard calculation of overheads);

⁶⁷ See also: <https://www.sorted.org.nz/a-z-guides/budgeting>.

- 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 public nutrition work that you do. There will inevitably be surprises and unplanned disturbances, such as changes of plans, adjustments of salaries during the programme period, inflation and important expenses that simply have been forgotten. It is therefore wise to make a 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 at any time. Looking into the management of money will be an important prerequisite for anyone who is managing nutrition related projects. Be aware of corruption. This must never be tolerated.

Scheduling

A timeframe has already been discussed in relation to formulation of objectives. The timing of activities, however, is also important. Others beside 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 schedule⁶⁸ for your programme.*

An example of such a schedule, in which the different tasks, *responsible* persons(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 public nutrition work. O.K. Piano made a large version of this chart and displayed it on the wall of her office.

⁶⁸ Often called a Gantt diagram.

Exercise 3.11 Draw up a schedule for your activities, specify them, and mention the persons responsible and the duration it will take.

A large, empty rectangular box with a thin black border, intended for the student to draw up a schedule for their activities, specify them, mention the persons responsible, and the duration it will take.

The Nutrition Map

Figure 3.4 A summary of related components of a plan for projects in public nutrition (O.K. Piano used this chart).

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?⁶⁹

Objectives of the chapter

After having studied this chapter and some reference documents⁷⁰ you should be able to:

- **Define the principal purposes of evaluation;**
- **Identify contextual factors that may lead to the failure of your programme or activity(s), and strategies to overcome them;**
- **Construct a questionnaire for the evaluation of your programme plan;**
- **Evaluate your own competence as a public nutritionist;**
- **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 realised that evaluation should be part of the planning of the programme, She had previously thought that evaluation was something one thought of and the end, and did all evaluation activities when done when all other activities where finished. Faced with this task in the planning phase, she was not sure how to approach such a nebulous and un-clarified topic.

Evaluation^{71, 72, 73} – the concepts and the jargon

Despite much talk about the importance of evaluation in all types of programmes, few attempts were made to define it and to incorporate it in the planning process for nutrition relevant work. However, a stronger focus on the substance of evaluation has led to many publications 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 editor has tried to simplify the theory and jargon so that evaluation can support and strengthen public nutrition

⁶⁹Adapted from Oshaug and Sedere 1987.

⁷⁰Relates to all references in this chapter. See also: <http://www.edtech.vt.edu/edtech/id/eval/eval.html>.

⁷¹<http://www.thefreedictionary.com/evaluation>.

⁷²<http://en.wikipedia.org/wiki/Evaluation>.

⁷³Evaluation uses various methods based on concerns like validity and statistical reliability of indicators. However when using qualitative methods these issues are considered differently than if one has solely quantitative methods; however such methods should be treated with respect since this approach get information that otherwise may not be collected.

activities. The first task for one in public nutrition is to address some key questions. They are important in the evaluation of any programme, project and/or activity.

Why evaluate?⁷⁴

The first question is: Why evaluate? This leads to a number of other issues (not a complete list).

- Do you want to ensure that the staffs 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 the 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.

⁷⁴<http://www.edtech.vt.edu/edtech/id/eval/eval.html>.

How is evaluation defined?

The literature gives many definitions^{75,76} but has gradually improved and all actors is now more or less in agreement in a definition. How it is defined 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 use, and one should not confuse it with assessment, but have the broader and more inclusive term as stated in the foot note. Here assessment is seen in addition to many other information sources.

The evaluation of a programme is a systematic collection, 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 public nutrition activities, and should be planned at the same time as the programme to be evaluated;
- Should take place at every stage of planning, indicating the stage of problem analysis a, 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.

Which are the functions of evaluation?

Evaluation has two main functions: “Formative” and “summative”. Formative evaluation is used to improved and develop activities or programs (and materials and people involved) as they carry out evaluation, which is th3erefore continuous. Summative evaluation measures the outcome of an activity or set of activities. It is used to ensure accountability, avoid corruption, to increase awareness of achieved results and for public relations purposes.

⁷⁵A resent definition is provided in: <http://www.edtech.vt.edu/edtech/id/eval/eval.html>; Evaluation is the process of determining the value or worth of a program, course, or other initiative, toward the ultimate goal of making decisions about adopting, rejecting, or revising the innovation. It should not be confused with assessment, which encompasses methods for measuring or testing performance on a set of competencies. Evaluation is the more inclusive term, often making use of assessment data in addition to many other data sources.

⁷⁶Douglas (2000) in Human development report 2000. UNDP, New York. He said «what gets measured gets done». P. 126. Douglas was chief executive officer of Coca Cola.

Monitoring⁷⁷ – different from process evaluation?

Monitoring is said to be the systematic and routine collection of information from projects and programmes for four main purposes:

- To learn from experiences to improve practices and activities in the future;
- To have internal and external accountability of the resources used and the results obtained;
- To take informed decisions on the future of the initiative;
- To promote empowerment of beneficiaries of the initiative.

Monitoring is a periodically recurring task already beginning in the planning stage of a project or programme. Monitoring allows results, processes and experiences to be documented and used as a basis to steer decision-making and learning processes. Monitoring is checking progress against plans. The data acquired through monitoring is used for evaluation.

This overlaps somewhat with what we define as “evaluation” here, but it is also a difference. Monitoring seems to be more elements of what we will call process evaluation as you will see below, and here it is talked about an evaluation system.

What methods should be used in the evaluation?

As we have seen, evaluation can be simple or complex.⁷⁸ The move from advocacy to implementing a framework or like here a programme or activity is linked to the issues of identifying and devising indicators and methods for collecting evaluation information that are relevant for norms, standards and principles (Malhotra 2006).

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 public nutrition projects and 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, qualitative and/or quantitative methods. Questionnaires, guides, general interviews, key informant interviews, participant observations, etc.

Demands to evaluation indicators in human right to development are said (Malhoutra 2006) to depend at least on:

- Identification of indicators that are sensitive and effective in addressing these distinct objectives have to be anchored in an adequate conceptual framework;
- There has to be an acceptable methodology for generating the required information for defining those indicators;
- The selected indicators have to be relevant to the context in which they are applied.

⁷⁷For a discussion on this complex issue see: http://www.sportanddev.org/en/toolkit/monitoring_evaluation/what_is_monitoring_evaluation_m_e/. Copy this link into Google if this link is not working.

⁷⁸See also Malhotra 2006.

Who should evaluate⁷⁹

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 manager(s). She/he will know the project or programme concerned well. Therefore, the internal evaluator's objectivity and external credibility are often said to be lower than those of an external evaluator. Because external evaluators are not directly involved or employed in the projects or programmes they examine in the evaluation, they enjoy 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. In evaluation the focus is on 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 job.

The amateur evaluator is normally less skilled in evaluation than the professional. Nevertheless, He/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 and often directly.

In this book the focus is on internal evaluation done by project personnel, usually an amateur evaluator, and often the person(s) in charge of public nutrition.

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/information be used in press releases, to promote the model used or increase awareness of the results?
- Should the data/information be used to give feedback to the target population?

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

⁷⁹<http://www.icap.org/PolicyTools/Toolkits/EvaluationToolkit/3UndertakingEvaluations/31WhoShouldEvaluate/tabid/443/Default.aspx>

Exercise 4.2 Describe briefly how you will use the results of the evaluation.

Formulating an evaluation system

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

1. Context evaluation preformed in the first analytical phase;
2. Input evaluation preformed in the preparation for action;
3. Process evaluation (which some would have called monitoring) preformed during the implementation phase; and
4. Outcome and impact evaluation preformed after implementation of the project/ programme.

The first three types are what we can call (and they have the nature) of formative evaluation and the fourth is normally called summative, but that can also be formative in nature.

Context evaluation⁸⁰

Context evaluation ensures that past experience is brought into the process of planning. It focuses on the initial decisions in public nutrition, 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(s). Context evaluation is normally carried out to refine, or confirm, objectives and strategies, and make sure that they are useful for solving problems in the community.

Context evaluation can also be used to analyse the 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 gender 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.

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

Contextual factors	Strategies to address them

Input evaluation⁸¹

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 start carrying out the programme.

A programme can be said to have 4 types of inputs:

- The programme plan;
- The material resources;
- The human resources such as nutritionists/dieticians (including yourself), teachers, medical personnel, instructors at factories, cooks, other catering personnel, etc. Specify their level of training and preparedness to take part in the programme;

⁸⁰<http://www.iisd.org/casl/caslguide/evalcontext.htm>

⁸¹<http://www.stanford.edu/group/FRI/indonesia/documents/pambook/Output/chap85.html>.

- The time for the programme, particularly that allocated for the initial phase, evaluation, feedback and follow-up.

At this point, the main concern is that the quality of the inputs, that is, the likelihood that they will help or hinder the implementation of the programme. Firstly look at the programme plan. Some of the activities planned may be in conflict with each other, owing to conflicts between objectives (see Exercise 3.6), competition of scarce resources or other reasons. Use the Exercise 4.4 as an initial test to 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 to the relevant questions for your programme. Add and answer any other question that should be asked but are not included.

Key questions	Answers		
	Yes	Partly	No
1. Have you formulated goals and/or objectives in the plan?			
2. If so, are these based on a detailed situation analysis?			
3. Have you tested the objectives for:			
- Relevance?			
- Reliability?			
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?			
8. Have you identified ways of coping with these conflicts?			
9. Are you using professionals other than nutritionists in the plan?			
10. If so, have you prepared guidelines and information for them?			
11. Have you involved target groups in the planning phase?			
12. Do you know that the target group will agree with the 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 of 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/or others?			
21. ...			
22. ...			

Consider your answers, particularly 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 professional public nutritionists involved in the programme. The public nutritionists need to be competent in at least four areas:

- Perform and explain and do the situation analysis;
- Plan the programs and activities;
- Implement and manage activities;
- Provide evaluation and feedback to some of the owners of the project.

Unfortunately, rather few higher training programmes of public nutritionists cover all these areas. Most professionals 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 public nutrition. Then you can develop new skills through; for example, through further training programs or independent studies. Use Exercise 4.5 to evaluate your skills and encourage other people working in public nutrition to do so.

Exercise 4.5 Evaluate your skills in public nutrition. Such an evaluation will highlight your weak points as well as your strengths, thus helping you to identify need for further competence building.

Instructions

1. Assess the importance of each item included in the following form⁸² to your role as a public nutritionist (as delineated from 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 public nutrition and evaluate the importance of each item in the table according to the following scale. Enter the score of each item in the 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 of the skill;

Award 0 points if the skill is not relevant to your job. You may eliminate this item from the form.

⁸² Adapted from Romiszowski 1984.

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 well informed about the item (although not a fully up-to-date expert) and you have much experience;

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 certain amount of knowledge about the item, but very little or no experience;

Award 1 point if you have 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 your skills are below that it the job require.

Exercise 4.5 (cont.)

Skills: area and item			
Situation analysis (do the different points in item 5)	A	B	B-A
1. Making a job analysis and description			
2. Formulating a professional profile of a public nutritionist			
3. Analysing the overall food and nutrition problems and goals of the country			
4. Identify the food chain of the country or community			
5. Identify and analysing the food, nutrition and related health problems of the community:			
• Identify information and data sources			
• Constructing questionnaires			
• Carrying out dietary surveys			
• Carrying out anthropometric studies			
• Carrying out socioeconomic studies, of both qualitative and qualitative nature			
• Carrying out studies on food culture			
• Involving community members in identifying and analysing problems			
6. Making a causal analysis of public nutritional issues			
7. Identifying actors in the food chain			
8. Analysing conflicts between actors in the food chain			
9. Describing the profile of a target group in the community			

10. Identifying			
11. Identifying			
Planning programs and activities			
1. Identifying and formulating goals and objectives			
2. Formulating objectives that meet certain criteria			
3. Assessing human and material resources needed and available for the programme			
4. Seeking potential resources (from funding agencies, public funds, professionals available for short-term and long-term jobs, etc.)			
5. Formulating strategies for implementation of programmes			
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 and evaluation system			
Implementing the programme and activities			
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 public nutrition work, and other work with possible impact on nutrition			
4. Conducting and managing interdisciplinary research and training groups			
5. Conducting and motivating group discussion in the community, at schools, in factories, etc.			
6. Implementing and managing promotional campaigns aimed at various target groups, using media such as pamphlets, radio, TV and news papers			
7. Keeping accounts on the programme income and expenses			
8. Implementing and analysing results of process evaluation			
9. Motivating and lead/manage personnel involved in the programme			
10. Providing, on demand, information and consultation to other professionals involved in implementing programs and activities			
Evaluation and feedback			
1. Formulating an evaluation system			
2. Integrating evaluation in all phases of the programme			
3. Constructing evaluation instruments (questionnaires, attitude rating scales, frequency list, etc.)			
4. Testing the relevance of the programme to the food, nutrition and health issues seen as 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 populations			
8. Evaluating changes in food consumption or other behavioural changes related to nutrition and health in the target group			
9. Providing feedback to team and the target population on the results of activities			
10. Informing organisations, authorities, funding agencies, etc. about results (positive and negative) of the programme and future plans (if that is relevant)			
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 evaluation⁸³

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 changes 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 identified and the activities that should address these problems. Some problems and programs demand daily evaluation or immediate data collections, while others need only occasional checking. Several factors should be considered when planning a process evaluation, such as: objectives; strategies selected; activities; scheduling; actors; resources.

The objective 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 of 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** of 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 the process evaluation. For example, if an activity goes wrong, who are creating problems? Are the people involved in implementation acting as expected? What can be corrected and how can this be done? Etc.

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

⁸³http://andevidecencelibrary.com/files/Docs/IDNT_Snapshot_NMEe4_S4.pdf

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 poor societies in which too little fat is eaten). In such a case the indicator may simply be 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 practice 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, added sugar and salt would be indicators.

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 process evaluation of a project. It has the advantage of collecting all the information on one sheet of paper, and giving a good overview of the situation.

Exercise 4.6

Use this for process evaluation (or to monitor) a public nutrition project in which you are involved. First reproduce the form on a larger (A 3) 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 actions

Outcome evaluation⁸⁴

Here we talk only about outcome evaluation since impact is very hard to measure. Outcome evaluation is performed on the completion of a programme, and to assess the achievement of its overall goals and objectives.

It therefore receives the most attention from the people who plans and implement public nutrition programmes.

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 groups, to see whether the outcome have ad been reached. This is often 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 behaviour 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 of the programme/activity.

Impact evaluation is thus more complex than effect evaluation. It is often difficult to show that the impact is due only to the activity/programme. In addition, impact evaluation requires more sophisticated evaluation designs. Public Nutrition staff is therefore normally concerned mainly with effect (outcome) evaluation.

A group of public nutritionists (at that time when these were made they were called public nutritionists) at a workshop was requested to list the most important considerations in effect evaluation. Their work can be summarised in the following way:

- What were the objectives of the programme and what indicators are needed to make judgements on each of the expected outcomes?
- What data are required for the indicators?
- If data are not available, how could they be collected? Can any anecdotal data be obtained from records? What additional information of crosschecking 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 analysed? Is the analysis simple? Is extra help needed? Would a computer or manual on methods be used (the use of computer analysis must be planned at an early stage – it is assumed now (in 2013) that almost everybody are using some sort of PC tools – editor's remark)?
- How should judgements be made? What criteria will be employed? Are they valid and relevant? Are they realistic? Are they accepted to people outside the programme?
- How are the findings to be reported? (Should a report be written? Etc.).

⁸⁴http://www.oxha.org/cih_manual/index.php/assessing-change-outcome-and-impact-evaluation.

Many more questions could be asked, but this is just to kick off the process. It is often best to disseminate the findings. This will probably help others to carry out better context evaluations and refine the objectives and strategies of new programmes.

Remember that a simple evaluation system is often 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 public-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.

Regarding reporting in the process evaluation (using instruments such as in Exercise 4.6, and in regular collection of qualitative data) it will form a firm basis for analysing why some objectives were achieved and other were not. Through key informants and key groups, the community should be involved in the evaluation of action programmes.

Some final remarks: Competencies – easy to develop a framework?⁸⁵

You are probably familiar with the phrase ‘what gets measured gets done.’ Defining and measuring effectiveness – especially the performance of workers – is a critical part of your job as a manager. The question is: How do you define the skills, behaviours, and attitudes that workers need to perform their roles effectively? How do you know they are qualified for the job? In other words, how do you know what to measure? Some people think formal education is a reliable measure. Others believe more in on-the-job training, and years of experience. Still others might argue that personal characteristics hold the key to effective work behaviour. All of these are important, but none seems sufficient to describe an ideal set of behaviours and traits needed for any particular role. Nor do they guarantee that individuals will perform to the standards and levels required by the organization. A more complete way of approaching this is to link individual performance to the goals of the business. To do this, many companies use ‘competencies.’ These are the integrated knowledge, skills, judgment, and attributes that people need to perform a job effectively. By having a defined set of competencies for each role in your business, it shows workers the kind of behaviours the organization values, and which it requires to help achieve its objectives. Not only can your team members work more effectively and achieve their potential, but there are many business benefits to be had from linking personal performance with corporate goals and values.

Defining which competencies are necessary for success in your organization can help you do the following:

- Ensure that your people demonstrate sufficient expertise.
- Recruit and select new staff more effectively.
- Evaluate performance more effectively.
- Identify skill and competency gaps more efficiently.

⁸⁵ Adapted from http://www.mindtools.com/pages/article/newISS_91.htm.

- Provide more customized training and professional development.
- Plan sufficiently for succession.
- Make change management processes work more efficiently.

How can you define the set of practices needed for effective performance? You can do this by adding a competency framework to your talent management program. By collecting and combining competency information, you can create a standardized approach to performance that's clear and accessible to everyone in the company. The framework outlines specifically what people need to do to be effective in their roles and it clearly establishes how their roles relate to organizational goals and success.

A competency framework defines the knowledge, skills, and attributes needed for people within an organization. Each individual role will have its own set of competencies needed to perform the job effectively. To develop this framework, you need to have an in-depth understanding of the roles within your field. To do this, you can take a few different approaches:

Use a pre-set list of common, standard competencies (it should exist), and then customize it to the specific needs of your organization.

Use outside consultants if possible to develop the framework for you.

Create a general organizational framework, and use it as the basis for other frameworks as needed.

Developing a competency framework can take considerable effort. To make sure the framework is actually used as needed, it's important to make it relevant to the people who'll be using it – and so they can take ownership of it. The following three principles are critical when designing a competency framework:

Involve the people doing the work – These frameworks should not be developed solely by HR people, who don't always know what each job actually involves. Nor should they be left to managers, who don't always understand exactly what each member of their staff does every day. To understand a role fully, you have to go to the source – the person doing the job – as well as getting a variety of other inputs into what makes someone successful in that job.

Communicate – People tend to get nervous about performance issues. Let them know why you're developing the framework, how it will be created, and how you'll use it. The more you communicate in advance, the easier your implementation will be.

Use relevant competencies - Ensure that the competencies you include apply to all roles covered by the framework. If you include irrelevant competencies, people will probably have a hard time relating to the framework in general. For example, if you created a framework to cover the whole organization, then financial management would not be included unless every

worker had to demonstrate that skill. However, a framework covering management roles would almost certainly involve the financial management competency.

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