

Working with Nutrition

**A comparative study of the Tanzania Food and Nutrition
Centre and the National Nutrition Unit of Zimbabwe**

**Jerker Carlsson
Suraiya Ismail
Jessica Jitta
Estifanos Tekle**

**Department for Democracy
and Social Development**

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**Department for Democracy and
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Evaluation Reports may be ordered from:

Infocenter, Sida
S-105 25 Stockholm
Telephone: (+46) (0)8 795 23 44
Telefax: (+46) (0)8 760 58 95
E-mail: info@sida.se, Homepage <http://www.sida.se>

Authors: Jerker Carlsson, Suraiya Ismail, Jessica Jitta, Estifanos Tekle.

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SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY

Address: S-105 25 Stockholm, Sweden. Office: Sveavägen 20, Stockholm
Telephone: +46 (0)8-698 50 00. Telefax: +46 (0)8-20 88 64
Telegram: sida stockholm. Postgiro: 1 56 34—9
E-mail: info@sida.se. Homepage: <http://www.sida.se>

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Abbreviations

BMI	Body Mass Index
CBGM	Community Based Growth Monitoring
CFNP	Community Based Food and Nutrition Programme
CIDA	Canadian International Development Agency
CSPD	Child Survival Protection and Development Plan
DANIDA	Danish International Development Agency
DHS	Demographic Health Surveys
DNN	Department of National Nutrition
EDP	Essential Drug Programme
EPI	Expanded Programme of Immunisation
ESAP	Economic Structural Adjustment Plan
FHP	Family Health Programme
FNC	Food and Nutrition Council
GM	Growth Monitoring
GNP	Gross National Product
GOT	Government of Tanzania
GOZ	Government of Zambia
ICH	International Child Health Unit (University of Uppsala)
IDD	Iodine Deficiency Disorders
IDRC	International Development Research Centre
IEC	Information Education Communication
IMR	Infant Mortality Rate
IVACG	International Vitamin-A Consultancy Group
LAMP	Land Management Programme
MCH	Maternal Child Health
MI	Micronutrient Initiative
MPSLSW	Ministry of Public Service, Labour and Social Welfare
NCCIDD	National Committee for Control of IDD
NORAD	Norwegian Development Aid
NPAN	National Plan of Action
NVACG	National Vitamin A Consultancy Group
NRU	Nutrition Rehabilitation Unit
OMNI	Opportunities for Micronutrient Initiatives
PASS	Poverty Assessment Study
PEM	Protein Energy Malnutrition
SCOPO	Presidential Standing Committee on Para-statal Organisations
SD	Standard Deviation
SDA	Social Dimensions of Adjustment
SFPP	Supplementary Food Production Programme
UNICEF	United Nations Children's Fund
USI	Universal Salt Iodination
U5MR	Under Five Mortality Rate
VAD	Vitamin A Deficiency
WFP	World Food Programme
WHO/NCHS	World Health Organisation/National Center for Health Statistics

“Working with Nutrition”

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1. Introduction

This chapter gives the background to the evaluation and why it was undertaken, the purpose of the evaluation and the specific questions raised. A reference is also made to previous evaluations and their purpose and focus.

Tanzania and Zimbabwe have for a long time placed a high priority on the improvement of their people's nutrition. The development strategies of both countries early on recognised the direct link between nutrition, health and the capacity for development. Sweden became involved in co-operation with national nutrition programmes almost from the beginning in both countries. The co-operation with Tanzania focused on the Tanzania Food and Nutrition Centre (TFNC) which was established in 1973. The co-operation with Zimbabwe dates from the time of independence in 1980 and focused on the Ministry of Health and the National Nutrition Unit (NNU).

Over 20 years of co-operation to the TFNC and some 18 years of co-operation to the NNU will be terminated in 1999. This evaluation should be seen in this perspective. It is an ex post evaluation, which focuses on lessons learned. Sida, who is also a major user of the evaluation and its findings, initiated the evaluation. Hopefully, the evaluation will also provide some new knowledge and insights into TFNC and NNU that they can feed back into their operational strategies and practices.

According to the Terms of reference for this evaluation there are two aspects, which explain Sida's interest in carrying out the evaluation.

First, institution building is nowadays an important aspect of Swedish development co-operation. The many years of co-operation naturally make both TFNC and NNU interesting objects for analysing the sustainability of the institution building effort contained in these programmes.

Second, there are similarities and dissimilarities between the two organisations and the way in which they have preferred to approach the implementation of their mandates. This permits a comparison of approaches to national nutrition problems, as well as the mode of collaborating with Sida and Swedish institutions.

The terms of reference specify two major questions for the evaluation to answer:

- What is the institutional capacity at TFNC and NNU and what is their basis for continuing effective activities after the phasing out of Sida funding?
- How have the form, modalities, scope and size of Sida co-operation helped TFNC's and NNU's activities, research and development within their respective national government systems?

It is instructive to relate the questions guiding this evaluation to the questions that had guided previous evaluations of the same programmes. Are we still interested in the same issues or has there been a shift in focus over the years? Twenty years is a long period of time and there have been considerable changes in both countries, changes that have not left the two organisations unaffected. A study of terms of reference can tell you much about how the context as well as the thinking about nutrition has changed.

In the case of the NNU the co-operation with Sida has never been formally evaluated before. This may appear surprising. Programmes that have been going on for around 20 years should have been evaluated at least once. The reasons for undertaking an evaluation may vary. It can be a simple matter of administrative routine or it can have its roots in a strongly felt need to highlight critical issues. In the case of the NNU co-operation there might have been negligence: none ever really thought of it. There may be perfectly legitimate reasons as well. The partners in the co-operation perhaps never felt any particular need to evaluate. They had a good dialogue about what happened, monitoring, reporting functioned well. Hence no need to ask any further questions.

TFNC, on the other hand, has been subjected to three previous evaluations. The first one was undertaken in April 1979. The terms of reference for this evaluation can be summarised in five points:

- To document and assess the major determinants behind the present food and nutrition situation in Tanzania.
- To document existing policy in this field and to analyse the feasibility of policy objectives fulfilment.
- To assess the priority given to TFNC by the Party and Tanzania Government.
- To assess the consequences of the present location of TFNC in the Tanzanian Government structure.
- To document and evaluate the organisation of TFNC and its present activities and research.

The evaluation is very much concerned with the role and place of TFNC in the national context of Tanzania. It also deals with TFNC as such and its effectiveness, but this is not the major concern of the evaluation. As the evaluators point out:

“A proper evaluation, we would maintain, can be carried out only within the context of the Party’s and Government’s long-term objectives of structural transformation of the economy and society at large. To clarify further, an institution such as TFNC should not only be efficient, but it should be efficient within the national strategy for transition to proclaimed national objectives of Tanzania – socialism and self-reliance” (Knutsson, et al., 1979, p.24)

The second evaluation was undertaken in 1986. The focus was now almost entirely on the internal effectiveness of TFNC. The team found that there was a continuing need for a food and nutrition centre in Tanzania, and that TFNC continues to have a great deal of potential for meeting that need. Although successful, the team found that TFNC had now entered a period of severe difficulty and reduced effectiveness. The recommendations made by the first evaluation in 1979 were still largely not implemented. Many other substantial changes were now also called for. The financial and administrative systems were scrutinised as was the relationship with Sida. The evaluation also comments on the programmes carried out by TFNC and suggests certain changes. The evaluation was generally positive to the achievements of TFNC and the recommendations are actually quite practical. One exception though, was the critique of the Food Science Department and in particular the laboratory. The evaluation was very doubtful of the relevance of this department.

The third evaluation was carried out in 1991. The general purpose was formulated as follows:

“There are several reasons for conducting a third evaluation of the work of TFNC. Few institutions of this kind have such a long history, with experiences that are relevant even for other countries. Thus, lessons should be learned and experiences discussed in a regional/international perspective...Furthermore, TFNC and SIDA need to evaluate the progress of their co-operation since the last evaluation in 1986 as a basis for discussions about possible co-operation” (Latham, et.al. 1992, p.24)

The terms of reference included the following issues:

- TFNC in the national and international context.
- Management and administration
- Staff development
- TFNC programmes
- Research
- Viability and sustainability

The major outcome of the evaluation is the finding that “TFNC will be unable to remain a strong, efficient institution without continuing or increased financial co-operation from external donors”. Continued donor co-operation therefore emerged as a key recommendation from the team.

The terms of reference of the evaluations reflect the social, political and economic changes that have taken place in Tanzania over these 24 years. In 1979 there was a great deal of development optimism and a strong belief in the Tanzanian development model. The relevance of TFNC was assessed from its contribution to the building of socialism in Tanzania. In the mid-80's there was a shift away from TFNC within the national context of Tanzania. The second evaluation was much more inward looking and focused its analysis on the organisational effectiveness of TFNC. When the third evaluation was undertaken the social and economic crisis of the country had deepened. This re-introduced the need to analyse TFNC in its national context. The fiscal crisis of the state now emerged as a major threat to the sustainability of TFNC. The concern over the long-term future of TFNC, and the effectiveness of the co-operation with Sida, is an even more dominant theme in the present evaluation. The fundamental question is: How can the capacities of TFNC be maintained in a situation where the state no longer can afford to pay for the services provided by TFNC? The answer to this question has to be found in an entirely different setting than that of the 1979 evaluation. TFNC will today have to sustain itself within the framework of a capitalist oriented development strategy, where the role of the state is quite different from that in 1979.

2. Executive Summary

Tanzania and Zimbabwe have ever since independence put a high priority on improving the nutritional standards of its citizens. The Tanzania Food and Nutrition Centre (TFNC) and the National Nutrition Unit (NNU) of Zimbabwe were both formed in order to become the focal points for the nutrition work in the respective countries. Sweden, through the Swedish International Development Agency (Sida), has offered support to both institutions ever since their formation. Such a long period of assistance is unusual in development co-operation. All things come to an end, however, and both programmes will be closed in 1999.

The major components of the Swedish support have been: (1) Technical assistance in order to build a cadre of nutritionist. This in turn has consisted of two sub-components: (i) scholarships and various training programmes; (ii) co-operation with a Swedish nutrition oriented institution. Technical experts have also been assigned to TFNC, but not to the NNU. (2) Various inputs to the nutrition programmes run by the two organisations.

Institution building is an important aspect of Swedish development co-operation. The many years of co-operation naturally make both TFNC and NNU interesting objects for analysing the sustainability of the institution building effort contained in these programmes. Furthermore, the similarities and dissimilarities between the two organisations offers possibility to learn from their various ways in approaching their mandates.

The terms of reference specifies two major questions for the evaluation to answer:

- What is the institutional capacity at TFNC and NNU and what is their basis for continuing effective activities after the phasing out of Sida funding?
- How have the form, modalities, scope and size of Sida co-operation helped TFNC's and NNU's research and development within their respective national government systems?

Both organisations have, in terms of human development, developed a considerable capacity. From this perspective only, they should be able to look at the future with a lot of confidence. In terms of sustainability there are differences between the two organisations. TFNC is today an organisation in crisis. It has developed an almost total dependence on external funding. Sida has been a particularly dominant donor. Although the Government of Tanzania contributes significantly to the current costs of TFNC, it is not able to finance any of its programmes. TFNC's operational profile has not changed much since its formation in 1973, although the environment of Tanzania has changed a lot. It is striking that ever since Sida announced its decision to withdraw its funding, TFNC has done almost nothing to prepare for the new situation. The current decentralisation effort in Tanzania, and the ongoing public sector reform, has not resulted in any changes in TFNC's operational strategy. It remains to a large extent an urban-based organisation, which focus on policy, planning and training. It is particularly noteworthy that it has such a limited presence at the regional and district level.

The NNU is fully integrated into the Ministry of Health. Within this context, with all its limitations, the NNU has managed to play a central role in changing the whole organisational context for food and nutrition work in the country. NNU has a strong field presence where it is making use of the existing Government structure to run regular programmes. Even if the withdrawal of Sida funding represents a considerable blow, the government of Zimbabwe is able to contribute enough to uphold at least basic activities in the field.

In terms of sustainability, NNU should be able to look into the future with some confidence. It is much more difficult to view TFNC as a sustainable organisation. It will undoubtedly face serious difficulties. Qualified staff is already leaving the organisation for “greener pastures”. There is an urgent need for the board and management of TFNC to become more pro-active and change and reorient its strategy.

Sida’s support has been instrumental in building up human capacities in nutrition. Both organisations have also benefited from Sida’s willingness to adapt a long-term perspective on institution building. It has successfully avoided the “campaign” approach of many donor agencies. It has been very valuable for TFNC and NNU to be able to make their own priorities. Sida has not tried to influence the programme portfolio of the organisations, but instead enabled them to develop their programmes according to national needs. Sida’s support has not, however, contributed to the sustainability of any of the organisations. This is for the simple reason that an external party cannot control the factors determining sustainability. It is largely a matter for the respective governments and the institutions themselves. We also conclude that Sida’s decision to withdraw was not based on any assessment of the current situation of the organisation in question. It was a unilateral decision and motivated largely by administrative concerns. For the future Sida need to realise that phasing-out of an organisation building project need to be planned already from the start.

The co-operation with the Swedish institution, the International Child Health Unit at Uppsala University, has not been geared towards developing a capacity for managing organisational change to facilitate sustainability. Rather, it has been a personalised exchange between researchers. This has no doubt been useful for the various individuals, but not very relevant for the organisation’s long-term survival prospects.

The evaluation selected for in-depth analysis two programmes run by both TFNC and NNU: the Iodine Deficiency Disorder (IDD) and Household Food Security.

The IDD programme initiated by TFNC was well thought through, and there were significant early achievements. However, quality control has not been maintained and serious logistical problems have arisen. Unless these are resolved soon early gains will be lost. NNU’s IDD programme has been generally good. It should be noted, however, that the situations in the two countries differ dramatically. Salt fortification and monitoring is much more difficult in Tanzania than in Zimbabwe.

Household food security is a broad concept. We have chosen to limit the analysis to activities designed to increase and sustain household food supplies, thereby reducing PEM. As such, the case studies focus on supplementary feeding programmes, community-based food production initiatives, the promotion of breastfeeding and improved weaning foods, and food processing and preservation.

NNU has made considerable investments in large scale, centrally-planned child feeding programmes, often linked to drought relief, and these have been transformed over time into community-based food production and consumption initiatives. The earlier child feeding programmes, which absorbed substantial human and financial resources, suffered from poor targeting and monitoring, but were effective in drought years. The more recent community activities have considerable potential in reducing PEM in a sustainable fashion. TFNC, on the other hand, has not tackled PEM and household food security in any consolidated way, and its inputs to UNICEF’s on-going community-based Child Survival, Protection and Development programme are limited.

TFNC has addressed the development and promotion of improved weaning foods and better food processing and preservation methods. Efforts in these areas have however been somewhat sporadic and small-scale; they have not led to any national initiatives. NNU's efforts to improve weaning practices were limited. Both organisations have made excellent progress in the promotion of breastfeeding and the Baby Friendly Hospital Initiative.

Other programmes examined included the control of Vitamin A deficiency (VAD) and anaemia, nutritional surveillance, and food and nutrition policy development. Neither organisation has seriously addressed anaemia. VAD control has received considerable attention from TFNC (but not from NNU), but the future of the programme is threatened due to lack of funding. Policy work has been undertaken by both organisations: Tanzania now has a food and nutrition policy, while Zimbabwe has a multi-sectoral Food and Nutrition Council which will finalise Zimbabwe's policy.

Both organisations are very weak in monitoring and evaluation of the nutrition situation in the countries. Up to date data on the most common nutrition indicators hardly exist. Thus, it is not really possible to establish the current nutrition situation in any of the countries.

Nutrition is not an isolated health issue. It is, more than anything else, a poverty issue. Donors habit of thinking, and operating, in terms of sectors do not help them to grapple with the complex reality of development. A multi-sectoral approach to development is much more appropriate.

TFNC and NNU have acquired over the years a considerable human capacity, as well as practical experience. The phase of organisation building is over. They should now be considered as resources to be used in a poverty reduction strategy. The poverty orientation of Sweden's country programme in Tanzania and Zimbabwe need strengthening. TFNC and NNU should be used as instruments in such an effort. It is a waste of resources not to use capacities that have been built up during some 20 years of co-operation.

3. Organisation and method of the report

This chapter describes the method used and why it was selected for this particular evaluation task. It defines necessary delimitation's, for example, the gender analysis and time period. It also defines important concepts such as nutrition and institution building. The chapter also presents the contents of the report and the team members and the division of work between them.

When selecting a proper evaluation method the point of departure is the key questions of the terms of reference. Our choice of method must be designed in such a way that we can provide reliable and valid answers. In this case the evaluation is guided by the following questions:

- What is the institutional capacity at TFNC and NNU and what is their basis for continuing effective activities after the phasing out of Sida funding?
- How have the form, modalities, scope and size of Sida co-operation helped TFNC's and NNU's activities, research and development within their respective national government systems?

Concepts

Emerging from these two questions are some concepts that will need to be more precisely defined. Clear definitions of key concepts form an important part of building an appropriate method. When they are operationalised they help us to identify what kind of information we are looking for.

Before embarking on the empirical part of the study it is helpful to clarify some key concepts and definitions. This will help us in organising the empirical investigation, and also assist us in the actual analysis of what we have seen.

The first concept that is relevant for us is *institution*. Institutional economics make a distinction between institutional development and organisational development. Without going into the details it is important to keep the distinction in mind. Institutions are defined as the “rules of the game”, i.e. the norms and values which guide and constrain the behaviour and actions of individuals and organisations and which shape human interaction. An organisation is represented by for example, a business firm or an organisation providing public utilities such as water and telecom services.

Business economics sometimes makes a distinction between an organisation and an organisation which has become institutionalised. The latter has developed a distinct “corporate culture”, sometimes manifested in written rules, but equally often in unwritten rules and norms, which guide the behaviour of the members of the organisation.

In development aid the concepts are often used interchangeably with little consideration for these finer points. We would prefer to refer to TFNC and NNU as organisations, rather than institutions, reserving the word “institution” for the “rules of the game”.

The second is *institution building*. Most concepts that refer to institutional development can be classified along two lines (Forss, K., 1998)

1. The intended level of the intervention (from individual and organisational to the system levels)
2. The type and composition of activities (from training and organisation development to establishing and enforcing rules and regulations for effective functioning of sectors and systems).

Let us present each of the three levels – individual, organisational and system - and what they contain in terms of activities.

- *Human resource development*

This concept refers to the ability of individuals to perform their functions more efficiently, effectively and sustainably. It includes all processes, which seek to improve and strengthen such individual abilities at all levels.

- *Organisational development*

This process seeks to change and strengthen structures and processes in specific organisations in order to improve organisational performance. This can concern the mandate of the organisation, structure, issues related to the management system, incentive systems, and the role of the board. Institutional co-operation, which is one of the major areas for this evaluation, is one instrument out of many for strengthening organisations by job specific training, procedural improvements and advisory services. It is a formalised long-term co-operation between two similar organisations to achieve mutual capacity strengthening.

- *Systems development*

In addition to a concern with human development and organisational development, we need to include a third level, The systems level includes an emphasis on linkages between organisations and the context within which organisations operate and interact. There are three systems levels:

- (1) The network and linkages among organisations, which include the network and contact between organisations that facilitate or constrain the achievements of particular tasks.
- (2) The sector environment referring to laws, regulations and policies that constrain or facilitate organisational activities and affects their performance.
- (3) The overall context of laws, norms and values which encompass the broad action environment for the organisation. This includes the economic, social, political, cultural milieu in which organisations operate, and the extent to which conditions in this broader environment facilitate or constrain the functional capacity of organisations.

Is it possible to combine these levels and arrive at a consolidated picture of the strength of the organisation? One attempt towards such an aggregated situation analysis is the staircase model (Andersson, G. & Winai, P., 1998). This model consists of four stages of organisational development. It is used to describe, not to explain organisational development.

- (1) *The organisation has a low and unpredictable output* (Output is defined as the products or services produced by the organisation for use outside the organisation).
- (2) *The organisation is able to deliver expected output with reasonable reliability and quality.* But the organisation lacks the capability to respond to new demands if external conditions are changed or if key staff leave the organisation.
- (3) *The organisation meets the performance standards set for delivering output.* It is capable of making changes on its own, and execute such changes.
- (4) *The organisation works actively to increase the value of its products or services in the client/customer system.* It knows the clients, has an ongoing dialogue with them and allocates resources to facilitate utilisation of its output.

We shall use this model to position the two organisations and see how far they have come after some 20 years of operation.

The third concept of interest to us is *nutrition*. This is a concept whose definition has changed considerably. Initially, it signified a food science and reductionist approach to nutrition problems. Today, nutrition is also used to embrace the social environment, in which individuals work and live. The definition of nutrition which we subscribe to in this evaluation can be summarised as follows:

The process whereby living organisms utilises food for the maintenance of life, growth and normal functioning of organs and tissues and the production of energy....
Nutrition science is the study of the reactions of the body to intake of food, the variations in the diet and other factors of pathological and systematic significance. (Nutrition, no. 2, 1973, p.8)

The nutritional situation in a community is dependent on a socio-economic and political structure generating food availability for individual members of the community. To understand why malnutrition occurs, the various factors influencing food availability and individuals ability to make use of available foods must be analysed. Thus, the physiological and dietary factors covered by the concept of nutrition and the social and environmental ones should be integrated into the concept of a food and nutrition system (Knutsson et.al, 1979).

Gathering information

The specific method of work employed by us was fairly straightforward. It consisted of studying documents and relevant literature, conducting interviews with key stakeholders and visits to the field.

Some 20 years of co-operation produces an enormous amount of reading material: annual and semi-annual project reports, evaluations, studies of the various nutrition programmes, research reports, to name but a few. Naturally we have not been able to go through all of this material. We have concentrated on project reports, a sample of programme reviews and the evaluation material.

Interviews form an important complement to the written material. Stakeholder views and opinions are not always reflected in the written documentation. It is often only through interviews that they have a chance of expressing their opinions about what was good and what was bad. If an interview is to yield good information it has to take time. We have therefore preferred to go for high quality, rather than high quantity. Rather than trying to meet as many stakeholders as possible, we have limited ourselves to a selection of key stakeholders. This made it possible for us to arrange follow-up meetings in case we needed to fill in some gaps.

Being national institutions, both TFNC and NNU have a responsibility to assist in the nutrition work that is carried out in their respective countries. It is only at the district and villages level that it is possible to make an impact on the health standards of the people. Thus, limiting ourselves to Dar es Salaam and Harare would reduce our possibilities of understanding and assessing the quality of the nutrition work carried out in the country and the role played by TFNC and NNU. Field visits were therefore arranged to see the implementation of the programmes.

The time period covered by this study is limited to the period 1993 – 1998. This was mainly done for practical reasons – time did not allow us to cover all years since the formation of the organisations. In the case of TFNC this does not present a serious restriction. The organisation has been regularly evaluated and rather than go through their time periods again, we have chosen to rely on their analyses. In the case of the NNU it is a different matter, since there has been no previous evaluation of the whole co-operation. We shall concentrate on the last five years, but nevertheless try whenever necessary to include a historical perspective.

It was not feasible to make in-depth studies of all the programmes implemented by TFNC and NNU. Following discussions with Sida and the two organisations, it was decided that the Iodine Deficiency Disorder programme should be selected as a case study in both countries. Furthermore, it was also decided that Household Food Security should be selected as a second case study.

The draft report was circulated within Sida, TFNC and the NNU. Written comments were received from various Sida officials. The report was also discussed at seminars in Dar es Salaam and Harare with the staff of the NNU and TFNC. We would like to thank everybody for valuable comments which were very helpful in pointing out shortcomings and omissions.

The evaluation team consisted of the following members:

Jerker Carlsson	Team leader and specifically responsible for the analysis of institution building and the effectiveness of the mode of intervention chosen for the co-operation. He also had an overall responsibility for putting the report together.
Suraiya Ismail	Overall responsibility for the analysis of the effectiveness and relevance of the nutrition work carried out by TFNC and NNU. She prepared the nutrition situation analysis in Tanzania, as well as the country case study of Tanzania. She synthesised the two case studies of the IDD and household food security programmes in both countries.
Jessica Jitta	Responsible for the nutrition situational analysis in Zimbabwe. She also prepared the country case study of Zimbabwe.
Estifanos Tekle	Responsible for the case studies of the IDD and household food security programmes in Tanzania and Zimbabwe.

4. Swedish co-operation with TFNC and NNU

TFNC and NNU both have a long history as recipients of development aid. This chapter starts with a review of Swedish aid policy in general, and in particular how it has been applied in Tanzania and Zimbabwe. The core of the chapter describes the extent and nature of the co-operation extended to TFNC and NNU, as well as the mode of implementation used by Sida. Since the mid-1980's institutional collaboration formed the nucleus of the co-operation. What this entailed will be briefly discussed here.

4.1 Swedish aid policy

The overarching goal of Swedish development assistance is to raise the level of living of poor people. Fighting poverty has always been a strong priority for Swedish aid. There has, furthermore, always been a consensus in the Parliament. At times it has only been the Conservatives who have argued for lower levels and a different orientation of aid, but without necessarily challenging the supreme objective of poverty reduction. To reduce poverty has been regarded as a goal in itself, but also as a means to create more stability and security in the world (Carlsson, J., 1997).

Who are the poor and why? The Government's analysis runs as follows. Starvation or malnutrition affects around 20% of the population living in developing countries. Most of them live in the rural areas. An important cause of poverty is the low productivity levels in agriculture and access to land and water. The distribution within households is often uneven. Women and children frequently have a much lower nutritional intake in relation to their nutritional needs, compared to men. At the same time it is the women who carry out most of the work in the household. Single women also head large proportions of rural households.

Poor children and youth are particularly vulnerable. The poverty of parents is the most important reason to different forms of exploitation of children. Education is often sacrificed for work. It is particularly girls who have to give up their education. Demographic factors do play an important role for causing, and explaining, poverty. A large family is often viewed as one of the best guarantees for avoiding poverty. Poor women often have limited possibilities to control the size of their families. Rapid population growth contributes to the spread of poverty. A large family often means that the children are forced out on the labour market. The supply of labour increases in a situation where there is already a high unemployment.

Fighting poverty in development co-operation is a matter of direct interventions to prevent suffering, but primarily it is a matter of contributing to creating conditions for the poor themselves to rise out of poverty. The basic responsibility therefore lies with the developing countries themselves and the policy and actions they choose to combat poverty. The role of development co-operation is to support such a development, but also to influence the poverty orientation of a national development policy in a dialogue with the recipient countries (Regeringens skrivelse 1996/97:169).

4.2 Swedish support to nutrition in Tanzania

Nutrition has been an important part of the Tanzanian development strategy from soon after independence. Sweden's involvement in this particular part of the health sector dates back to the early 1970's. In 1971, the GOT asked Sida to finance an investigation of how a national food and nutrition institute should be designed and outline the policy that would guide its operations. The proposal was rejected by GOT who felt that it was too research oriented and placed too little

emphasis on training and education. Back to the drawing board, a new team of experts came up with a proposal which was more in line with the intentions and needs of GOT. In November 1973 a Bill was enacted by Parliament, establishing the Tanzania Food and Nutrition Centre.

As with most government organisations, TFNC was not created out of nothing. Already during colonial times some attention was paid to nutrition. Nutritional problems were recorded towards the end of the 1960's when a National Nutrition Committee was formed. A Nutrition School was also established within the Ministry of Health.

Since the establishment of TFNC in 1973, Sweden has been its major donor and supporter. The co-operation, when it ends in 1999, will have been in existence for 25 years. This is somewhat unique in Swedish development co-operation. TFNC has over the years had three revenue sources: Government funds for recurrent and development expenditures; donor funding; and, own generated income and revenues from financial transactions. In the beginning Sweden was a dominant donor to TFNC, but not that dominant. There was some sort of balance between the various revenue sources.

When economic difficulty in Tanzania became severe in the mid-1980's, the Sida contribution began to account for the vast majority of TFNC funds. This trend continued into the 1990's. The Swedish contribution to TFNC came from different sources. First, there were the funds channelled directly to TFNC from Sida. Then there was Sida financing of the collaboration between ICH and TFNC, the funds provided by SAREC and through the Swedish University of Agriculture. Funds from Sida constituted a major share of the total. The relative importance of Swedish contribution can be seen in Table 4.1.

Table 4.1 Swedish contribution to TFNC, 1991 – 1996.
(TShs Million)

Year	Total funds	Donors funds	Swedish share (%) of donor funds	Swedish share (%) of total funds
1991/92	460	347	53	40
1992/93	664	499	58	44
1993/94	598	378	74	47
1994/95	898	603	68	46
1995/96	787	596	73	55

Source: Andersson, G. 1997

In the early 1990's Sweden was by far the most important donor, a situation that was reinforced towards the end of the 90's when Sida accounted for almost $\frac{3}{4}$ of all donor funds. The dominance is equally striking when looking at the Swedish share of total TFNC revenues. From 40% in 1991/92 it rose to 55% in 1995/96. When these figures are adjusted for inflation, it becomes clear that the real value of TFNC income has declined seriously over this period of time. If 1991/92 is taken as the base year, the real value of total funds had fallen to 63 in 1995/96 (Andersson, 1997). This trend was further aggravated during the last years of the phasing out period that ends in 1999.

The co-operation has been institution building in character. During the early stages of the period the co-operation included the following components:

- Budget support with very limited conditionalities attached.
- Technical assistance personnel in the areas of nutrition planning, nutritional laboratory development and communication.
- Limited staff training programmes.

In the 1986 evaluation several recommendations were made regarding the type and extent of Swedish support. One recommendation was that Sida should no longer provide either budget co-operation or general programme co-operation. Instead all Sida funds would be either earmarked or used among a specified number of projects. Earmarking may, however, prove necessary if “*high priority aspects of the Centre’s work*” (p.16) would not be sufficiently strengthened. One such priority area had to do with TFNC’s regional focus (an issue discussed already in the 1979 evaluation). The 1986 team “*strongly endorses the decision to focus most of TFNC’s efforts on a regional basis, and to prioritise TFNC projects accordingly.*” (Burgess et al, 1986, p.12). This implied, among many things, that individuals would be assigned to regional posts within the regional administration. Their tasks would include initiation, co-ordination and follow-up of nutrition activities. It was then suggested that Sida should reorient its assistance to support this regional approach. Sida funds should be reserved exclusively for activities that were supporting regional projects. As it turned out, however, TFNC’s regional focus never really materialised to the extent hoped for.

One of the recommendations made, and accepted by Sida, was to stop financing the TFNC laboratory and any food science projects. Furthermore, two Swedish experts were assigned to work with TFNC. One was a co-director of finance and administration, and the other a social anthropologist.

This more project oriented mode of aid delivery presupposed, however, a close communication between Sida and TFNC. There were various ways to achieve this. One would be to assign full-time experts to TFNC, another to employ new Sida staff members to oversee the TFNC programme. Both alternatives had their limitations that we need not discuss here (Greiner, 1989, Wohlgemuth et al, 1997). The alternative finally chosen came to focus less on individuals and more on the institutional level. The technical assistance model required would be based on an institutional collaboration between TFNC and a Swedish based nutrition institution. Assigning a technical expert to work full-time with TFNC was seen as unfeasible. Nutrition is multi-disciplinary in its nature and one or two persons could not cover all the aspects of nutrition. Hence, technical backstopping through an agreement with an institution, rather than individuals, would be the preferred model.

Sida engaged institutions to act as counterpart to TFNC. A co-operation based on institutions had several advantages. It guaranteed a long-term commitment that individuals could not always supply. It offered several types of expertise and relieved Sida of the burden of administrating a whole range of different experts. Thus, for Sida institutional co-operation was not only a cost-effective solution, it also offered better prospects for aid effectiveness. The International Child Health Unit (ICH) at the University of Uppsala became the counterpart of TFNC.¹ The ICH

¹ Several institutions became involved in the co-operation. First and foremost, the International Child Health Unit, Paediatric Department at Uppsala University. Links were also established with the International Rural Development Department at the Swedish Agriculture University, and the Institute of Nutrition, Uppsala University. But it was ICH that came to form the nucleus of the co-operation with TFNC. ICH has since changed its name to the Section for International Maternal and Child Health (IMCH)

became involved in two ways. First, an ICH nutritionist was to act as an advisor to TFNC staff through bi-annual visits to Dar es Salaam. The purpose of these visits was to hold technical discussions with the staff and also assist in the planning of TFNC activities. The second component of the institutional arrangement was a more elaborate staff training programme. TFNC staff went for academic training, usually at the Masters level, at ICH. This was linked to a re-orientation of the Sida support.

Previously Sida had not provided any funds for scholarship training abroad. This was changed towards the end of the 1980's when it had become apparent that the scholarships available were largely inappropriate for the needs of TFNC. The 1986 evaluation furthermore recommended that Sida should provide scholarships in areas such as: international nutrition, social science, library science, education, communication and printing. Sida accepted the recommendation.

This kind of training became linked to Swedish university institutions, the ICH being one. Students were also sent to the University of Umeå, Karolinska Institutet in Stockholm and at the University of Gothenburg. The training model chosen enabled TFNC staff to continue with their project work in Tanzania, while making short trips to Sweden every year and gradually working towards a Masters or Ph.D. degree.

Sida also began supporting specific projects. The best example is perhaps the IDD project. Sida financed the procurement and distribution of iodised oil capsules, while Netherlands and UNICEF supported the iodisation of salt.

The programme portfolio of TFNC has been rather stable during the 1990's. Sida's heavy involvement becomes apparent when looking at a simple listing of the various projects:

1. Nutrition policy and planning	Sida is the only funder
2. Nutrition Information system	UNICEF is the only funder
3. Vitamin A deficiency	World Bank (through IDA) and UNICEF
4. Iodine deficiency disorder (IDD)	Sida and UNICEF are the main funders
5. Nutritional anaemia	World Bank (through IDA) is the only funder
6. Breastfeeding	Sida and UNICEF are the main funders
7. In-service nutrition planning	Sida is the only funder
8. Food and nutrition library	Sida is the only funder
9. Germination and fermentation	Sida is the only funder
10. IEC material development	Sida is the main funder

Already in 1983/84, Sweden had taken a decision to phase out its support to the health sector in Tanzania. The argument was that it was necessary to concentrate Swedish support to fewer sectors. The health sector was chosen, as it was a small sector in Swedish aid. Furthermore, other donors were well established and could be expected to fill the gaps left by Swedish aid. The negative impact on the collaborating partners would therefore be limited. At that time TFNC had been excluded. In 1993/94 the decision was taken to phase out the support to TFNC. It is important to note that the decision was not based on any assessment of TFNC as such. Nor had it anything to do with Swedish views on the role of the health sector in national development. The main argument was that TFNC had been supported for quite a long time and the support had been considered successful. TFNC should now be able to stand on its own feet.

Let us finally examine the current Swedish aid programme in Tanzania. Since poverty reduction is the overarching goal of Swedish aid, it is natural to examine the portfolio according to what extent it is geared towards this objective.

Table 4.2 The Swedish aid portfolio in Tanzania and its Poverty Reduction (PR) orientation

Programme	Budget 1997 – 1999 (MSEK)	Direct PR orientation	Indirect PR orientation	No PR orientation
Civil Service Reform Programme	92			7%
General Education · education materials · teacher training	165		13%	
Health · TFNC · HESAWA	101		8%	
Infrastructure · Electricity · Telecomm.	356			27%
Natural resources · Land management programme · National Environment Management Council	102 11	8%		
Research co-operation	106			8%
Balance-of-payments support	184			14%
Financial sector development	36			3%
Private sector development	30			2%
Culture and media	17			1%
Swedish NGO's	114			8%
TOTAL	1,314			

Source: Partnership in Development. Sweden and Tanzania (1998). Swedish Embassy. Dar es Salaam.

We have chosen to classify the different programmes according to whether they directly or indirectly target poor people, or possess no poverty reduction orientation at all.²

Swedish support to Tanzania during the most recent years has focused on macro-economic reform, democracy, public administration, education, rural development (environment and production) and

² **Direct focus on poverty reduction (PR)** = Outputs are benefitting poor people and poor people is clearly defined as the target group.

Indirect focus on PR = Outputs are clearly benefitting poor people, but the target group is not clearly defined, or includes other groups than the poor.

No focus on PR = The intervention is not targeting poor people, neither is the output of particular relevance to poor people.

energy and telecommunications. Programmes that had some sort of poverty orientation consumed 29% of the country budget. Among them, it is only the Land Management Programme (LAMP) which has a direct poverty reduction focus. The emphasis is put on sustainable use of natural resources. The programme targets vulnerable groups, including women. Furthermore, it operates in four districts where a majority of the population is distinctly poor.

Two interventions – the support to the Tanzania Food and Nutrition Centre and the water and sanitation programme HESAWA – aim at outputs that have a clear poverty reducing impact. Fighting malnutrition and providing rural areas with clean water and proper sanitation facilities are important poverty reduction oriented objectives. However, none of the projects makes a distinction between the poor and the not-so-poor when defining its target group, except implicitly by targeting households with malnourished children.

The support to education materials and teacher training is difficult to classify. We have chosen to classify it as having an indirect poverty focus. The reason is that it focuses at the primary school level, where not all pupils come from poor families, but the poor probably constitute a sizeable proportion compared to students at secondary school level. Hence, the outputs – increased availability of primary text books and teacher quality – can be expected to have a sizeable impact on students from poor families.

The remaining programmes consume 71% of total resources. They have a very limited poverty reduction focus. To what extent they have an impact on Tanzanian poverty depends on the strength of the trickle-down effect, i.e. the policies of Tanzania and the effectiveness with which the country manages to implement them. A few examples may illustrate the point. Swedish assistance to the reform of public administration reaches the poor only insofar as the Government of Tanzania makes such priorities in its social sector policy. The poverty impact of measures to increase productivity in agriculture is dependent on the Government's policies for land ownership, credit facilities for small holders and technical extension services.

In conclusion, the support to TFNC constitutes one of the few programmes in the Swedish portfolio in Tanzania with a poverty reduction orientation.

4.3 Swedish support to nutrition in Zimbabwe

Swedish support to nutrition in Zimbabwe began soon after independence when supplementary feeding was needed for families suffering from the effects of war and drought. In the middle of the 1980's a new element in the support was introduced. After initial assistance to the Child Supplementary Feeding Programme (CSFP), Sida agreed in 1984 to support the Supplementary Food Production Programme (SFPP) which replaced the CSFP. This changed to a programme that assisted villages all over the country in establishing community gardens and small animal projects for the purpose of solving problems of malnutrition.

The Swedish co-operation began to expand beyond the SFPP to include:

(a) support to the development of a national food and nutrition policy; (b) review of the nutrition component of curricula for a broad range of educational and training programmes; (c) development of a national strategy for improving infant and young child feeding, including breast feeding; and, (d) a national IDD programme. Scholarships for both long and short-term staff training have also been provided.

In 1987 Sida indicated that future co-operation in the health sector should be concentrated on a few subject areas, in selected geographical areas, and increasingly use NGO's for implementation.

A review made in 1992 found that instead of concentration, the portfolio had grown and become even more diverse (Hanson & Matienga, 1992).

In the early 1990's nutrition was certainly not among the larger projects. It accounted for about 8% of the total budget in the period 1990 – 1993. For the whole period 1988 – 2000 a total of 17 MSEK was disbursed to the NNU (Table 4.3).

Table 4.3 Sida support to NNU, 1988 – 2000

Period	Disbursed amount	Expenditures	Balance
1988 to 1992	6,064,870	6,063,507	1,362
1997 to 2000	11,000,000	4,204,091	6,795,908
TOTAL	17,064,870	10,267,505	6,797,271

Comment: The MoH did not provide figures for the period 1993 to 1996.

Source: Ministry of Health

The share going to nutrition doubled, however, in the next 3-year period when it went up to 15% of the total budget, hence becoming the second largest project in the portfolio after the vaccination project. The portfolio has included some 10 projects of which the support to nutrition has been one. The composition of the portfolio does not reflect any elaborate strategy. On the contrary, the various projects have their own management structures and are generally not integrated with each other. The composition of the portfolio, as well as the budgeted amounts, is shown in Box 4.1.

In 1992 Sida decided to transfer the funds for management training at the Ministry of Health, nutrition and maternal health to the World Bank managed Family Health Project II. The FHP II was a hardware oriented project: physical construction, equipment, furniture, vehicles etc. In other words, quite different from the more “soft-ware” oriented Sida projects. The decision to include these projects under the FHP II umbrella was partly motivated by a wish to relieve the NNU of having to deal with too many donors. In addition, it also reduced administrative pressures on Sida’s own staff.

The NNU had the following to say about the shift in management:

Box 4.1. The health sector portfolio in Zimbabwe

Project	Budget (MSEK)	
	1990/91-92/93	1993/94-95/96
Vaccination	18.1	18.0
Water&sanit.	23.8	9.9
HIV/AIDS	4.2	15.0
Nutrition	5.5	13.0
Rehabilitation	2.0	10.0
Farm health workers	4.2	6.4
Maternal health	2.4	7.2
Training centers	6.8	--
Management training MoH	3.4	0.8
Planning, studies	1.8	4.7
Unforeseen	7.0	--
Total	79.2	85.0

Source: Lindahl, 1995, p.3.

“The transition from the usual direct Sida – Ministry of Health financing procedures to the FHP II/World Bank, meant a lot of planning, merging of activities and brought some confusion once in a while; but it looks like things are getting clearer as one is understanding how World Bank operates” (NNU Annual Report, 1991/92, p. 15)

The various programme components of the support to NNU is shown in Table 4.4. From the figures in Table 4.4 one can make the following observations:

First, community based nutrition programmes and child nutrition are the two programme activities that have received the bulk of the funds. Together they accounted for 35% of the budget resources in 1994 and the share rose to 47% in 1999.

Second, institution building normally consumed 1/3 of the resources. This mainly meant costs connected with various training programmes, most important of which was the Masters Programme in Uppsala.

Third, it would appear at first glance that there had been significant budget increases over the years. Unfortunately, this is not the case. It is mainly a reflection of the strong and quick depreciation of the Zimbabwe dollar in relation to most international currencies.

As in the case of TFNC, and for the same reasons, Sida recruited ICH of Uppsala University to provide technical backup to the NNU. ICH was also to develop staff training programmes, enabling the staff members to obtain the necessary academic degrees. The most common degree was the Masters programme.

In 1996 Sida decided that the time had come to phase out its support to the health sector. The decision was motivated by the need to concentrate Swedish aid to fewer sectors in Zimbabwe. Concentration would mean a greater potential for a strong impact, as well as economising with scarce administrative resources. It was also argued that other donors were also active in the sector and could be expected to “take up the slack”. Finally, health care in Zimbabwe was, compared to many other developing countries, of reasonable quality. This last point could however, be seriously questioned given the developments in the sector during the 1990’s.

Unfortunately, as an internal Sida document noted, the decision did not take into account the likely consequences for the various programmes. During the 1990’s the health sector in Zimbabwe was under considerable stress. Not only had the budget allocations to health diminished by some 40% during the period 1990-1994. There was also an emerging need for structural reform.

Decentralisation, reform of the Ministry of Health, a health insurance scheme were some of the structural reforms needed. Indeed, Sida’s decision to withdraw its significant support came at a time when the country’s capacity to maintain what had been built up was unusually low. The Health Division of Sida also noted that the decision was not strategically simple. Diminishing economic resources, lack of skilled staff and the escalating HIV/AIDS epidemics could motivate a continued broad support to the sector. In spite of this, the country strategy process came to the conclusion that the health sector support should be phased out during a three-year period, 1997 – 1999.

What about the poverty orientation of the Swedish country programme to Zimbabwe? This was studied in a report on European aid and the reduction of poverty in Zimbabwe (Killick, Carlsson and Kirkegaard, 1998). This is a comparative study of development aid from the main European donors to Zimbabwe and it focus on poverty reduction. We shall limit ourselves to summarising the main findings of the report as regards the Swedish country programme. Using the same categories – direct, indirect and no poverty orientation at all – the study found that the Swedish portfolio has a comparatively good poverty orientation. Projects representing around 1/4 of the value of the total country programme were found in the category direct poverty orientation. Another 1/4 had an indirect poverty orientation, while the remaining 50% were projects with no poverty orientation at all. This placed Sweden somewhat ahead of the other European donors in terms of poverty orientation.

Table 4.4 Sida Contribution to the Components of the Nutrition Programme at NNU, 1993 - 1999 (ZIM\$)

Programme	1994	1995	1996	1997	1998	1999
1. Nutrition policy development and implementation	350 000	380 000	410 000	450 000	480 000	130 000
2. Food and nutrition surveillance and programme monitoring and evaluation	Included in item (1)	Included in item (1)	Included in item (1)	250 000	700 000	50 000
3. Community based nutrition programme	500 000	550 000	605 000	2055 000	2850 000	4 500 000
a) Community food and Nutrition	No disaggregation possible	No disaggregation possible	No disaggregation possible	1010 000	1600 000	1 354 000
b) Community based growth monitoring				600 000	700 000	1 720 000
c) Drought/emergency preparedness				445 000	550 000	1 426 000
4. Maternal, infant, young and school children nutrition	550 000	600 000	660 000	1305 000	1500 000	3 632 000
a) Maternal nutrition	No disaggregation possible	No disaggregation possible	No disaggregation possible	90 000	90 000	226 000
b) Infant nutrition				785 000	1020 000	2 940 000
c) Young child nutrition				190 000	300 000	266 000
d) School child nutrition				240 000	90 000	200 000
5. Control of micronutrient Deficiencies	535 000	588 000	676 000	433 000	615 000	824 000
a) Iodine deficiency disorder	No disaggregation possible	No disaggregation possible	No disaggregation possible	168 000	240 000	224 000
b) Other deficiencies				265 000	375 000	600 000
6. Institutional and dietetics issues				30 000	360 000	1 300 000
7. Nutrition advocacy and information, education and communication				650 000	105 000	200 000
8. Institutional support, capacity building and human resources development	1 010 000	1 111 000	1 222 000	910 000	850 000	6 600 000
TOTAL Sida BUDGET	2 995 000	3 227 000	3 573 000	6 083 000	7 430 000	17 236 000
TOTAL GoZ Budget	-----	8 000 000	20 000 000	17 000 000	35 000 000	35 000 000

Source: NNU. Annual reports to Sida, various issues

5. Organisational development

This chapter is concerned with analysing the strength and structure of the two organisations. The analysis is conducted at three levels: (i) Human resource development; (ii) Organisational development, and; (iii) System development. The role of aid, in particular the institutional co-operation, is also discussed. The chapter finally tries to position the respective organisations according to the staircase model.

5.1 TFNC

5.1.1 Human resource development

TFNC staff has grown steadily since its formation in the early 1970's. In 1998 there was a total of 187 persons as compared to 58 persons in 1980. Table 5.1 shows the development divided between programme departments and the Finance and Administration Department.

Table 5.1 Employment at TFNC, 1980 – 1998, selected years.

	1980	1987	1991	1995	1998
Programme Departments	54	68	76	75	84
Finance & Administration Department	4	11	66	92	103
TOTAL	58	79	142	167	187

Source: TFNC. Annual reports and Andersson, G., 1997

Over 18 years TFNC has expanded its staff quite considerably, from 58 to almost three times as many. It is particularly noteworthy to see that this expansion has mainly taken place in the Finance Department. It has grown from 4 to 103 employees in these 18 years. The programme departments, on the other hand, have experienced in comparison a more modest growth rate from 54 to 84 staff members. This development brings out a critical issue – does TFNC carry a too heavy administrative rucksack? Is it using financial resources for an in-efficient administration, which could be better utilised in programme activities. This is of course a difficult question to answer. TFNC explained to us that the statistics were misleading. First, supporting staff working – secretaries for example - in the programme departments are registered as members of the Finance Department. In other words, a good proportion of the administrative staff is actually working with programme activities. Second, there are a large number of drivers, security guards, office messengers and other support staff.

Still, these explanations cannot hide the fact that TFNC has a high proportion of administrative staff. Do they also consume an equally high proportion of total salaries?

A breakdown of staff categories and their respective share of total salaries may shed further light on this issue. Table 5.2 presents the situation in 1997/98.

Table 5.2 TFNC salaries according to staff category, 1997/98

N:o of Employees	Categories	Salary amount T.Shs.
30	Professionals	83.6 million
59	Technicians	117,875 million
96	Unskilled	102,878 million
185		304, 272 million

Source: Information from Finance Department, TFNC

A breakdown of staff categories into professional, technicians and unskilled enables us to examine any imbalances in the use of financial resources. Professionals constitute 16% of the workforce and consume 28% of the salary resources. Technicians represent around 1/3 of total employees and consume about 40% of total salaries. Finally, unskilled staff constitutes over 50% of total staff and account for about 1/3 of total resources. If professionals and technicians are grouped together as programme related staff then we will see that skilled staff, constituting 48% of total staff, uses around 67% of total salaries. Still, by comparison with other organisations of a similar nature, spending 1/3 of total salary payments on administration is excessive.

The 1992 evaluation noted the importance of staff development:

“ The professional and technical capacity of the staff, their capability of dealing with changes and dynamics within their fields, as well as their motivation for improving their performance, are central factors for the success of an institution”. (Latham, et.al., 1992, p. 53)

This has always been a priority area for TFNC. The organisation has consequently since its establishment sent its staff for both academic training and more job-related, shorter training courses. The 1986 evaluation commented that although TFNC actively used available training opportunities it was not always fully in line with existing needs. Post-graduate training during the early years tended to reflect available training opportunities, rather than actual needs and priorities. One result was that TFNC found itself having more qualified food scientists, than staff members with an expertise in areas such as maternal and child nutrition or community nutrition. In order to redress this imbalance a scholarship component was built into the Sida programme.

Table 5.3 Staff qualification levels in 1998

Department	Ph.D.	Master s	First Degree	PG Diploma	Diploma	Certificate	TOTAL
Finance, Personnel & Administration	1 M	5 M	3 M	1 M	5 M 1 F	5 M 4 F	20 M 5 F
Nutrition policy & Planning		6 M 1 F	4 M 1 F	1 M	1 F	2 F	11 M 5 F
Community, Health & Nutrition		2 M 8 F	4 M 4 F	1 M 3 F	1 M	1 F	8 M 16 F
Nutrition, Education & Training		3 M 3 F	2 M 5 F	1 F	2 M	2 M	9 M 9 F
Food Science & Nutrition	2 M 1 F	8 M 1 F	2 M 2 F	3 M		6 M 3 F	21 M 7 F
TOTAL	3 M 1 F	24 M 13 F	15 M 12 F	6 M 4 F	8 M 2 F	13 M 10 F	69 M 42 F

Source: Finance Department, TFNC

Table 5.3 shows the most recent picture of staff qualifications. It is beyond doubt that TFNC is one of the most qualified nutrition institutions in Africa, not to say the most qualified. The table reveals some interesting patterns that warrant comment.

The first observation that can be made is that the imbalances in terms of appropriate training mentioned by the 1986 evaluation have not yet been fully redressed. The departments not really involved in direct programme activities - Finance and Food Science - are both very well endowed with qualified staff. They are, for example, the only departments with Ph.D. holders. They have, furthermore, 14 (38%) out of 37 staff members with a Masters degree. Obviously more can be done in terms of further developing staff capacities in critical programme areas. It also confirms an established truth that capacity building, especially if it involves academic education, requires a long-term planning perspective.

Secondly, in terms of gender balance TFNC's training policy has been reasonably good in providing men and women with equal opportunities. Out of the 111 staff members who were given "professional" training, 39% were women. This proportion is found throughout the various educational levels – between 35 – 40% of those trained for various degrees were women. This imbalance reflects a gender bias in terms of staff recruitment composition. In the professional categories, TFNC employs more men than women. Only in one programme area did we find more trained women than men – community health and nutrition.

TFNC has always had a low staff turnover. Over the 10-year period 1983 to 1993 an average of 7 staff members left annually and an average of 16 were recruited (Andersson, G. 1997, p. 9). In 1998 four persons left the organisation, while seven were new recruits (Annual Report, 1997/98). One important cause of this low turnover is the opportunities in terms of training and contact networks that the organisation offers its employees. Since the beginning of the 1990's TFNC has also had a service scheme in place which has given staff reasonable salary developments as well as career prospects.

The most recent information we have of the staffing situation shows that TFNC has a problem of vacancies. As many as 29 staff positions were not manned. Total staff positions were 216, of which 187 were filled in June 1988. These vacancies were mainly found in the programme oriented

departments: Nutrition Policy and Planning (10); Nutrition Education and Training (7); Food Science and Nutrition (7), and; Community Health and Nutrition (3). The department of Finance and Administration had fewest vacancies, out of 105 positions, 103 were filled.

5.1.2 Organisational development

Mandate

The principal role of TFNC is to plan and initiate food and nutrition programmes. According to the Act of 1973 the Centre shall perform the following functions:

- Plan and initiate food and nutrition programmes for the benefit of the people of Tanzania;
- Undertake review and revision of food and nutrition programmes;
- Provide facilities for training in subjects relating to food and nutrition;
- Carry out research in matters relating to food and nutrition;
- Advise the GOT, the schools and other public organisations;
- Stimulate and promote awareness of the importance of a balanced diet and of the dangers of malnutrition;
- Gain public confidence in methods suggested by the Centre for the correction or avoidance of malnutrition;
- In collaboration with the Ministry responsible for development planning formulate plans relating to food and nutrition;
- Make available to the GOT and the public its findings on any research carried out in matters relating to food and nutrition;
- In collaboration with the producers, manufacturers and distributors of articles of food, to ensure proper nutritional value of the food marketed in Tanzania or exported to other countries;
- To participate in international conferences where food and nutrition issues are discussed (Latham, 1992, p.27-28)

To summarise, the Act of 1973 gives TFNC an advisory and advocacy role. This role also requires TFNC to actively conduct its own research as well as maintaining a close relationship with international food and nutrition research.

Organisation status and structure

TFNC is a para-statal organisation under the Ministry of Health. The term para-statal refers to an organisation that basically is a public organisation, but is located outside the official Government structure. Such an organisation is assigned special tasks on behalf of the Government. It is largely financed from the state budget as any other public organisation. For a long time TFNC had to follow the regulations laid down by the Presidential Standing Committee on Para-statal Organisations (SCOPO). This effectively set the framework for TFNC's organisational structure, salary scales and terms of employment.

In 1995 the 1973 Act was amended which established TFNC as an autonomous body under the Ministry of Health. This gave TFNC more freedom on budgetary matters. When SCOPO was abolished, as a result of the reform process in Tanzania, TFNC got even more freedom. Most important, it could retain all revenues it may earn. TFNC still remained within the public sector in the sense of being financed through the state budget, but like any other para-statal, it was free to define its own organisation, set its salary scales and so forth.

In the 1992 evaluation there is a detailed description of the basic management structure of the organisation. We have found no reason to disagree with the conclusions made at that time. TFNC is generally well-organised, with a well defined management structure and clear lines of authority and reporting. It is particularly good at documenting its various activities. For an outsider it is not difficult to quickly get an understanding of how the organisation operates. Another important indicator of organisational efficiency is the fact that TFNC for a good number of years has received clean audits. Thus, TFNC is an efficient and transparent organisation.

Today TFNC is organised in five departments: (1) Planning; (2) Nutrition Education and Training; (3) Community Health and Nutrition; (4) Food Science and Nutrition and; (5) Finance and Administration. The work of the Centre, on the other hand, is organised as projects (presented above) which run across the departments. The purpose of this arrangement is *“to allow more flexible linkages outside departmental structures and make decision making more decentralised, and responsibilities more shared among the staff”* (Latham (1992), p.55).

According to the Annual Report of 1998, the distribution of projects per department was as follows:

<i>Department (*)</i>	<i>Project</i>
Nutrition Policy & Planning	Food and nutrition policy and planning Nutrition Information System Planning, monitoring and evaluation
Community Health & Nutrition	Child feeding Iodine Deficiency Disorder Nutrition anaemia Diet related diseases Maternal nutrition
Nutrition Education & Training	In-service nutrition training Curriculum review and training Materials development Food and Nutrition Library and documentation Nutrition and health in primary schools Breastfeeding
Food Science & Nutrition	Household Food Security Germination and fermentation Laboratory Vitamin A deficiency

It would appear that the Department of Community Health and Nutrition is responsible for many of the main projects. Programmes such as IDD, anaemia and child feeding are among the cornerstones of TFNC activities. Is this reflected in a similar organisational strength? The department has 23 staff positions of which 20 are presently occupied. This is about the same as Nutrition Policy and Planning and Nutrition Education and Training, but less than Food Science and Nutrition (33) and Finance, Personnel and Administration (105) (Annual Report, 1997/98).

Given the combined Department/ project mode of organisation, it can be argued that judging departmental strength, and management priorities, by staff positions is not correct.

Each department can draw from other departments, as a project requires it. Still, Latham (1992) voiced a concern of the situation – “*This department now is overloaded and over worked*” –, which we would like to agree with.

Another noteworthy feature is that in Community Health and Nutrition a majority of the staff members are women. This is not the case in any of the other programmes where there is a predominance of men.

Finance

Andersson (1997) analysed the issue of recurrent cost and donor dependence at TFNC. His excellent analysis forms the major input to this section.

TFNC has three main sources of funding. Core funding is obtained from the Ministry of Health and is designated for the recurrent costs of the Centre, but the development budget may also include funds for TFNC under the same Ministry. The second major source is the resources coming from various donors. The third source, finally, is own generated income and income on financial transactions. The distribution between the different sources is shown in Table 5.4.

Table 5.4 TFNC Income According to Source, 1991/92 – 1995/96 (%)

<i>Source</i>	1991/92	1992/93	1993/94	1994/95	1995/96
Governmt.	21%	21%	23%	23%	19%
Donors	75%	75%	63%	67%	76%
Own	4%	4%	14%	10%	5%
TOTAL	100%	100%	100%	100%	100%

Source: Andersson, G. (1997)

The figures in the table reveal that TFNC is an extremely donor dependent organisation. Around $\frac{3}{4}$ of its revenues comes from various donors, notably Sida. Although the GOT has contributed an impressive share of total costs, given the state of the Tanzanian economy, it is clear that it will be very difficult for the GOT to fully compensate for a shortfall in donor funds.

The GOT contribution is mainly for recurrent costs. Hence TFNC's programme activities are dependent on a combination of donor funds and its own generated funds. For most of this period the latter account for 4-5% of total revenues. But during two years they contribute a substantial 10-14%. According to Andersson (1997) this is explained by earnings from foreign exchange transactions, “*made possible through an account in a Swedish bank that TFNC operates and the devaluation of the shilling in relation to Swedish kronor*”. Thus, the increase in the contribution from “*own revenues*” does not reflect any reduction in donor dependence.

During the 1990's, Sida has not only been a dominant player among donors to TFNC, it has also provided a significant share of total budget resources. In 1991/92, Sida accounted for 40% of TFNC's budget. This proportion increased to 55% in 1995/96. Thus, the Swedish contribution has become significant in relation to both donor funding and to the total income of TFNC.

TFNC has not been shielded from the high inflation rates experienced by Tanzania during the 1990's. In real terms TFNC has not been able to retain its income. It is particularly noteworthy to find that the GOT's contribution has declined more in real terms than any of the other revenue sources. Andersson (1997, p.13) makes the following observation:

“The great fluctuation in the government subvention is symptomatic of the budgetary situation in Tanzania. The sharp drop during the last year may be explained partly by the introduction of the cash budget implying that disbursements from the Treasury are done only when cash is available.”

What are the revenues used for? Table 5.5 summarises TFNC’s expenditures.

Table 5.5 TFNC expenditure, 1991/92 – 1995/96

Category	1991/92	1992/93	1993/94	1994/95	1995/96
Administration	16%	22%	25%	34%	32%
Projects	72%	66%	65%	66%	67%
Other	12%	11%	10%	n.a	1%
TOTAL	100%	100%	100%	100%	100%

Source: Andersson (1997)

The different expenditure items warrant some comments. Under administrative expenditures fall salaries and operations/maintenance costs. Project expenditure refers to specific costs for running the projects, for example the procurement of iodised capsules and investments in training, but also includes administrative costs, except salaries. Project expenditures therefore includes both recurrent and capital expenditures. The category “Other” mainly refers to depreciation.

The following observations can be made. First, administrative costs have risen from 16% to around 1/3 of total expenditures. This trend is the same also when we allow for inflation in the country. In real terms administrative expenditures rose from 100 in 1991/92 to 176 in 1995/96. During the same period project expenditures fell from 100 to 81. Second, there was a significant change in the composition of administrative expenditures. Personnel cost rose by 6 times, while other charges rose only three times. In real terms this meant that staff salaries managed to stay ahead of inflation.

Finally, let us look at the relation between income and expenditure. During the first six years of the 1990’s, TFNC recorded a healthy overall surplus, a surplus that was made possible by the inflow of donor funds. Andersson (1997) makes the additional point that when comparing donor funds with project expenditures, the surplus is even greater. The conclusion is then that *“the donor funds are used to offset deficits accruing from excessive administrative and other expenditures”*. In other words, donor funds have not been limited to covering project (development) expenditures only. They have increasingly been used to finance the recurrent costs of the organisation.

A picture of the fiscal year 1997/98, which is the most recent, shows that the situation remains basically the same. Total revenues for that year were TSh. 1,175 million and expenditures stayed at TSh. 849 million, leaving a healthy profit of TSh 325 million. This corresponds to around 28% of total turnover that is quite respectable by any corporate standard. Donor funds contributed 70% of total revenues, while the GOT covered 28%. Earnings from various consultancies were quite small – TSh 1,9 million – that is less than 1% of total earnings, about the same as the earnings on foreign exchange transactions. Thus, TFNC remains extremely dependent on donor funding for its operations.

How were the revenues put to use? Up to 1995/97, project activities had always consumed the lion’s share of available resources. The trend has, however, been declining (see Table 5.5) and continues to do so. In 1997/98 administration increased its share of total resources to 50%. There are several possible explanations to this significant rise in administrative costs. Project activities may have changed from resource demanding fieldwork, to more desk-oriented work. More resources are needed for staff salaries and related expenditures. It may also reflect a common phenomenon that

administrative bureaucracies tend to grow rather unrelated to the needs of the actual activities of the organisation.

The financial analysis of TFNC certainly puts a serious question mark as to the long-term sustainability of TFNC. The issue is then, what are the options, in terms of organisational strategy, for TFNC? Below we have listed some alternative approaches. The reader should note that the alternatives are not mutually exclusive. They can easily be combined with each other. It is mainly for the sake of clarity that we have preferred to present them in this way. Furthermore, we do not necessarily see any or all of these options as desirable.

Box 5.1 Strategic options for TFNC

- The first option involves a change in the programme portfolio. This may involve closing down programmes that require too much of available TFNC resources, and developing new, more cost-effective programmes.
- Second, develop new revenue generating activities - consultancies and business ventures - to increase budget resources.
- Third, make more efficient use of existing resources by reorganisation which may involve laying off staff, closing down some departments and make more use of existing resources outside TFNC.

Let us discuss the strength and weaknesses of each possibility.

It is difficult to judge the feasibility of the first alternative. Programmes, which require extensive work at the regional and district level, cannot be implemented with TFNC's present organisational structure and resources. They require in most cases the collaboration, and resources, of other actors, such as the Ministries of Agriculture or Health. Clearly, programmes such as Vitamin A deficiency, IDD, nutritional anaemia and breastfeeding, require a field approach to be effective. Unless TFNC can secure the financial and organisational resources of another organisation, it is not possible for it to run all of them. There will be a need for making difficult choices.

The present programme portfolio has remained more or less unchanged since the early 1980's. There are good reasons for this, since all programmes continue to address relevant issues. The major programmes such as IDD, vitamin A deficiencies, nutritional anaemia, child health and nutrition, and a programme for nutrition surveillance, all have their five-year plans. In its strategy for the 1990's, TFNC has given highest priority to community level activities through policy and strategy development and relevant operational research in key areas. The strategic orientation is there, but not much has been done to make it fully operational.

At the present moment in time, TFNC has few alternative revenue sources that can compensate for a shortfall in donor funding. One possibility is consultancies. TFNC has already conducted several consultancy studies for domestic and international clients. Still, they are far from sufficient for the needs of the present organisation and its activities. We are doubtful as to whether TFNC really will be able to develop its consultancy earnings to such an extent that they can become a significant budget resource. This has little to do with the technical quality of the staff. The problem lies elsewhere.

TFNC is basically a para-statal organisation financed through the government budget. This has clearly permeated the organisation's culture and its staff members. It is the culture of a public, research-oriented organisation. It might be difficult to specify what that exactly means. Still, we can at least conclude that it is quite different from that of a professional, strictly commercially oriented

consultancy organisation. For a commercial organisation profitability is the only way to guarantee long-term sustainability. TFNC is neither set up nor accustomed to think about profitability. Staff incentives do not reward individual profitability and staff members do not think about themselves as consultants. Furthermore, staff are not evaluated according to its ability to attract assignments.

TFNC is now developing a business venture involving real estate and the building of a hospital. We are not in a position to say anything about the feasibility of these ventures. We would simply like to refer to our earlier comments. It is difficult, and risky, for an organisation that is not used to work as a business entity in its true sense, to involve itself in such ventures. Generally, when an organisation embark on a process of change and development, it makes good sense to start developing its existing comparative advantage. TFNC is good at working with food and nutrition issues. It has less competence for working with commercial business ventures.

Finally, what can TFNC do in terms of restructuring its organisation to adapt to a “new” situation with limited donor funds to finance its activities? As far as we can understand it – very little. A major problem is TFNC’s para-statal status. At the moment the government is financing the salaries of the staff. The government’s willingness to do so is impressive given the weak budget position of the government. For TFNC this is a blessing in disguise. As the system works, TFNC cannot lay off staff and still retain the money the government is paying for a particular staff member. The money is lost with the staff member. This acts as a very good disincentive for TFNC to trim its organisation. Ideally, there should be a system of core funding from the government. Funds should not be earmarked for salaries or any specific operational costs. It should be largely up to TFNC to decide how it wants to allocate its resources.

Institutional co-operation

Following a recommendation from the evaluation in 1991, Sida arranged for a long-term institutional co-operation between TFNC and ICH. This co-operation effectively took place between 1992 and 1997. Before 1992, an ICH staff member worked on a personal basis as a consultant to Sida, as well as an advisor to TFNC.³ After 1997, Sida funds diminished to such an extent that ICH’s involvement was basically limited to that of supervising students. The intention of the co-operation was expressed as follows:

“.....the institutional co-operation between TFNC and ICH shall be strengthened and widened in scope by linking all levels, as well as competence areas of the two institutions closer to each other”
(Agreement 1994/95-95/96)

The purpose of this co-operation has been outlined above and we shall here try to shed some light on what the assistance actually meant. How did ICH support TFNC?

For the agreement period 1992/93 – 93/94 the parties had identified five basic areas for their collaboration:

- Methods for monitoring and evaluation of nutrition programmes.
- Research methods, in particular rapid assessment procedures in epidemiology and sociology.
- Information, education, communication, including development of audio-visual materials and social marketing.
- Capacity building through post-graduate training.

³ An arrangement which was criticised by the 1991 evaluation and contributed to the setting up of the institutional arrangement between ICH and TFNC.

The areas appear to be fairly stable over time. In the Agreement for the period 1994/95-95/96 the same areas are still there. Two new ones were added though:

- Regular in-service nutrition training together with the International Agricultural Centre at Wageningen.
- Operational research in maternal nutrition, protein-energy malnutrition and micronutrients.

There is a core set of activity areas around which the co-operation is focussed. What is less clear to us is exactly the role of ICH. Neither the reports of ICH nor those of TFNC give much information as to what ICH's inputs consist of. An example can be given from the TFNC Budget and Plan of Operations for 1995/96. One of the projects listed addressed Vitamin A deficiency. TFNC, the Ministry of Agriculture and the Ministry of Health implement the project. ICH is one out of 10 collaborating institutions. It is not clear what exactly was the role of any of these collaborating institutions in implementing the project.

Much of ICH support has centred on the bi-annual consultancies of core ICH staff. During a two-week visit to TFNC the ICH consultant made himself available to TFNC for discussions and technical advice. To a large extent the support from ICH can be characterised as very personalised. Planning and reporting is also very personal and not very clear in terms of outcome. It is often not easy to see exactly what has transpired during the discussions at TFNC and what has come out of them. We asked the chief consultant, Dr. Greiner, to give us some examples of the kind of advice he had given to TFNC over the years.

- Advised on the introduction of anti-virus programme and making it a regular activity.
- Only by investing in human capital can TFNC become world class. It will enable staff to compete for well-paid jobs in international organisations.
- Focus on micronutrients in order to attract attention to the work of TFNC. Start with IDD, continue with vitamin A and then anaemia.
- Conduct a national assessment of feasibility of the school nutrition programme.
- Promote continued attention to breastfeeding.

This represents a mix of the general and the more specific, the small and the more far-reaching advice. Together they tell us a lot about what institutional co-operation might be all about. We recognise that the outcome may not always result in something tangible, but can nevertheless be very important to the organisation. TFNC has also expressed its satisfaction with the co-operation with ICH. Our overall impression is that the support given by ICH has been technically useful, but rather unsystematic and focusing on individuals, rather than the whole organisation.

An important part of the collaboration was the post-graduate training programme offered at ICH. The purpose was to provide Masters and Ph.D. training in nutrition and related subjects. The accumulated experience was not entirely positive. First, it took a long time for ICH and Uppsala University to come up with clear admission criteria. Second, the drop out rates was high in the beginning. There were various reasons for this: poor selection of candidates on the part of TFNC; weak supervision by ICH, and; students leaving for more attractive jobs elsewhere.

5.1.3 Systems development

As indicated earlier systems development refers to linkages between the organisation and the context within which the organisation operates and interacts. These linkages can be studied at three levels: the network and linkages among organisations; the sector environment; and, the overall

context of laws, norms and values which encompass the broad action environment for the organisation.

For TFNC, networking is the major mode of operation. Its advisory and advocacy role requires close interaction with other organisations. We can exemplify the importance of networking by looking at the mandate of TFNC and the more specific functions it should perform. The most important functions are: (1) planning and initiating programmes; (2) review and revise programmes; (3) undertake research; and, (4) offer training. When carrying out any of these functions, TFNC depends on networking with other organisations. Let us give some examples on how this networking can take shape.

Planning and initiation of programmes can only be done if there is an organisation interested in undertaking concrete programmes. TFNC is not an implementing organisation. For this it depends on networking with other organisations. Within the state machinery the Ministries of Health and Agriculture are important collaborators in this regard. External donors such as Sida, UNICEF, WHO and the World Bank are equally important. Their resources and interest enable TFNC together with other state agencies to implement programmes.

Although TFNC is not strictly research institute, it nevertheless conducts applied research as an important part of its activities. The effectiveness and relevance of this research is dependent on TFNC's interaction with nutrition research institutes across the globe. The links with ICH, the Department of Epidemiology at the University of Umeå, Cornell University are examples of such research-oriented links. Participation in international conferences is one way of exchanging experiences of research findings. Latham (1992, p.41) commented that:

“The very extensive international travel of TFNC professionals over the last few years shows the demand being placed on TFNC. It also illustrates that TFNC staff are recognised as leading figures in their various fields of expertise, and are highly regarded.”

Training is another activity where TFNC has managed to establish links with other organisations. Links with domestic organisations such as the Ministry of Agriculture are important for TFNC's ability to extend nutrition training throughout the country. Internationally, TFNC has also developed close links with the International Agricultural Centre at Wageningen.

The second level of systems development concern the sector environment. By this we mean laws, regulations and policies which set the parameters for work within a particular sector. The issue here is to what extent this regulatory framework has constrained or facilitated TFNC's work. At the time of the formation of TFNC, the regulatory framework was rather rudimentary. There was, for example, no food and nutrition policy in place. Still, there was a lot of political support for food and nutrition issues. Over the years, TFNC has been a key actor in creating a regulatory framework for its own activities. Through its role as a catalyst it has managed to engage and co-ordinate other important actors in the field of food and nutrition. The first important outcome was the first Food and Nutrition Policy for the country. It was later equally active in developing a National Plan of Action on Nutrition (NPAN). TFNC has also rendered technical support to regions and districts on the inclusion of food and nutrition concerns in their development programmes.

The third level of systems development consists of the overall economic, social, political, and cultural environment in which the organisation operates. To what extent do they facilitate or hinder the work of TFNC?

One of the most important factors placing a limitation to the work of TFNC is the general state of the economy. Although the economy has experienced positive growth rates for some time, it has not yet had any favourable impact on GOT finances. In 1997/98 there was a budget deficit of 1.4% of GDP, revenue collection was 92% of the revised target for the year. Expenditures were about a quarter below target for the same year. According to the Bank of Tanzania this was a consequence of sluggish foreign inflows that were planned to finance development expenditures. There are of course many reasons for this sluggishness, such as a low recognition of the potential of Tanzania. Another important factor is corruption. The international community, as well as the opposition parties, has heavily criticised the government's inability to fight corruption. Transparency International now ranks Tanzania as one of the four most corrupt countries in the world. Add to this donor fatigue when it comes to transparency and issues of aid effectiveness.

The 1998/99-government budget was presented against a background of an economy severely affected by the recent adverse weather conditions. It was a cautious budget. The government will continue to follow a strict fiscal policy with a cash budget system, implying that expenditures for any given months cannot exceed the average revenue collection for the three previous months. This policy will not exactly facilitate long-term planning by any organisation financed through the state budget. On a more positive note the budget emphasised the provision of social services by increased allocations.

The economic outlook should be favourable if the weather, and the political situation, is favourable. Still, given the structural adjustment policies currently implemented, one should not expect more resources to any Ministry or public funded organisation to conduct new programmes. Such monies will, as has been the case for the last 25 years, have to be provided by the international donor community. TFNC is a case in point. The limited domestic resources available for its activities must be considered as a major hindrance to its further work. What might turn out to be positive development in the acquisition of donor funds, and the possibilities for long-term planning, are the plans for a health sector programme. A number of organisations, including the World Bank, are going to contribute to the reform. Obviously, TFNC will be a major player in such a programme.

5.2 NNU

5.2.1 Human resource development

On the surface NNU appears to be a very small organisation. There are only 5 professional staff members at headquarters, as compared to the 30 professionals and 59 technicians of TFNC. Given the national mandate of NNU one might wonder how it should be possible to service each one of the 9 provinces of the country. NNU can, however, be described as a small head on a big body (as compared to TFNC which has a big head on a rather small body). Through its inclusion into the Ministry of Health it can utilise the existing government administration structure at provincial and district levels. Thus, each province and each district should ideally have provincial nutrition officers and district nutrition co-ordinators working directly with the various nutrition programmes at the local level.

In practice, however, there are several vacancies at both the national and the provincial level. Table 5.6 shows the current situation.

Table 5.6 Staff at different levels

Province	Nutrition Officer
Headquarters	5
Manicaland	2
Mashonaland Central	2
Mashonaland East	Vacant
Mashonaland West	1
Masvingo	2
Matabeleland North	2
Matabeleland South	2
Midlands	2

Source: The National Nutrition Unit (as of March, 1999)

nutrition issues and can in some instances compensate for the absence of a trained nutritionist. The provincial and district medical officers are also important co-operation partners of NNU. Thus, extensive inter-ministerial collaboration has enabled NNU to carry out its activities at the field level in spite of the lack of manpower resources. This collaboration has not come about by chance. It is largely the result of the successful work of the inter-ministerial committee on food and nutrition issues, where NNU has played a very important role.

At the district level, NNU has trained nutrition co-ordinators. They are not fully trained nutritionists in the sense of having an academic degree. They have been given a short training course to familiarise them with basic nutrition issues. This has enabled them to participate in the monitoring of the various programmes. However, there is obviously a need for supervision from an experienced nutritionist. As the GOZ has absolutely no funds for this, the NNU has tried to use funds within its various programmes to pay for their salaries.

As in the case of TFNC, NNU has put a high priority on training. Shorter courses, as well as longer, academic courses leading to an academic degree have been extensively used. Box 5.2 provides an example from 1991/92 of the training opportunities available to the staff.

At headquarters there are 6 positions, but only five are presently filled. In each province there should be 2 nutrition officers. This is the case in six provinces. The situation is particularly difficult in Mashonaland East, where both nutrition posts are vacant. Staffing at the district level is even more difficult, since there are no government funds available to employ any nutrition officers at all at that level. At the moment, therefore, there are 18 trained nutrition officers who are supposed to cover all nutrition activities in the whole country. This might seem an impossible situation (which it also is). Still, activities are being carried out. NNU has developed an extensive collaboration with other ministries – agriculture in particular. Agritex officers are, from their food production perspective, also heavily involved in

Box 5.2

An example of staff training as it took place in 1991/92

- Two training officers, Senior Nutritionist - Masvingo and Senior Nutritionist - Matabeleland North, undertook Diploma courses in Nutrition. The one who attended for the six weeks course on Management in the Netherlands was sponsored under Sida as planned. The Belgian Government funded the other one attending a nine-month nutrition programme in Belgium.
- One officer, Deputy Director, continued research studies in collaboration with the International Child Health Unit in Uppsala. No other officer started research work.
- The Senior Nutritionist for Manicaland Province undertook a Masters in Community Nutrition for 12 months in Australia from July 1991 to June 1992.
- Two officers, Chief Nutritionist and a Dietitian from Parirenyatwa Hospital, attended a four-week course in Lactation Management in San Diego, USA.

NNU. Annual report, 1991/92, p. 13-14.

5.2.2 Organisational development

Mandate

The mission of the NNU is to improve the quality of life of the people of Zimbabwe by promoting healthy diets and lifestyles and reducing the prevalence of nutrition related disorders.

The role of NNU in the health sector is based on the Food and Nutrition Policy framework document in which the Cabinet approved the establishment of a national Food and Nutrition Policy and the formation of a council to co-ordinate the implementation of the policy.

The functions of NNU can be summarised as follows

- Provide policy guidelines on nutrition issues related to the health sector
- Programme strategy guideline development
- Monitor the use of strategy guidelines and revise them as need arises
- Human resource development and capacity building to fulfil the nutrition mandate of the health sector
- Monitoring and evaluation of nutrition programmes and their impact on the nutrition status of the population
- Provide technical support and guidance on nutrition issues
- Disseminate nutrition information to the general public and advocacy aimed at policymakers
- Resource mobilisation (technical, financial and material) to support nutrition programmes

Organisational status and structure

Following independence in 1980 there were great disparities in Zimbabwe between the African population and the white settlers with regard to health status and access to health services. The liberation war and the persistent drought during 1981-83 contributed to alarmingly high levels of malnutrition among children. Health and nutrition issues, not surprisingly, came to occupy a dominant role in the new government's development policy.

The MoH initially proposed that a Food and Nutrition Council be established under the Office of the Prime Minister to co-ordinate food and nutrition work. This proposal was rejected and the Department of National Nutrition (DNN) was created within the MoH instead. As part of its primary health care policy, the MoH expanded the small Dietetics Unit that existed before independence into the DNN. This department was given more staff and an expanded mandate to:

- determine the magnitude and extent of malnutrition in Zimbabwe
- implement a nutrition surveillance system to monitor nutrition
- develop nutrition programmes in line with the primary health care strategy
- use inter-sectoral co-operation to develop a National Food and Nutrition Policy
- establish norms and guidelines for government institutional feeding
- train institutional food service managers for government
- provide technical expertise to other government agencies

The decision to place the DNN within the MoH reinforced the view that malnutrition was a health issue. While the mandate given to the DNN was sufficiently broad to tackle the problems of malnutrition, the MoH did not always understand or appreciate the inter-sectoral aspects of this mandate.

The DNN grew gradually stronger during the early and mid-1980's. The staff was composed of four nutritionists and two dieticians, and a full time secretary. Nutrition posts were also established in the provinces and posts for dieticians in most large hospitals. It acquired an important place in the maternal and child health field through some of its activities and by incorporating nutrition concepts into health training programmes.

The DNN was demoted to the status of a unit under the Maternal and Child Health department as part of MoH internal restructuring in 1988. However, its mandate remained unchanged. This placed nutrition activities at a further disadvantage, reducing the department's ability to undertake its role as secretariat of the National Steering Committee for Food and Nutrition. The reduction in status made co-ordination with other sectors difficult. It had been difficult already when the unit was a full department and the demotion did not really improve matters. It was difficult to negotiate from a level below that of departments in other ministries.

In 1995 a special Task Force submitted a recommendation on the establishment of a Food and Nutrition Council (FNC). One reason for this recommendation was the recognition that the Steering Committee had not succeeded in involving relevant actors outside the government structure. The food industry and various farmers organisations, in particular, needed to get involved. For this, it was argued, it was necessary to establish a recognised, national body within which actors from all spheres of society could get together and discuss food and nutrition issues. The FNC will start working in March 1999. This body will be formally responsible for co-ordinating food and nutrition work in the country.

Finance

Direct GOZ funding of nutrition activities is limited. Funds are channeled through the NNU and for drought relief activities through the Ministry of Public Service, Labour and Social Welfare (MPSLSW). In the last two years, NNU has received less than 1% of MoHCW budget for its work (Table 5.7).

Table 5.7 Direct government allocation to nutrition related activities
Z\$ millions

Programme & Ministry	1996/97	1997/98
Drought relief, Dept. of Social Welfare	519	300
Nutrition, Nutrition Unit, MoHCW	17	35

Source: NNU, 1998, Annex 1

Most of the funds for food and nutrition work are available indirectly in the form of support to the following:

1. Agricultural activities – targeted at the attainment of Food Security – in the Ministry of Lands and Agriculture
2. The provision of rural water supplies and housing through the Ministry of Local Government and National Housing.
3. Preventive health services through the Ministry of Health and Child Welfare
4. Education for future generations through the Ministry of Education.

The amounts involved and distribution between various Ministries are seen in Table 5.8.

Table 5.8 Allocation of Government Expenditures
Z\$ million

Ministry	1996/97	%	1997/98	%
Lands & Agriculture	1,055	3	1,311	2
Local Government & National Housing	984	3	n.a.	1
Health and Child Welfare	2,332	7	3,818	5
Education, Sport and Culture	5,748	16	11,172	16
Higher Education and Technology	1,447	4	2,819	4
Others	23,996	67	50,507	72
TOTAL	35,562	100	70,607	100

External assistance to the GOZ is mainly used in the provision of infrastructure (rural water points, dams, schools, clinics and hospitals). While the GOZ pays for salaries and administrative running costs for the NNU, programme funds have been received from Sida, WHO and UNICEF since independence. During the years of drought recovery (1993-1996), other donors became active in the Nutrition programme, especially in the Child Supplementary Feeding Programme. NORAD, the World Food Programme (WFP) and the Netherlands were some donors that assisted. Most external funds for the NNU have come from Sida. For the period 1997-2001 the NNU expects support from Sida, the Commonwealth Regional Health Secretariat, NORAD and FAO (NNU, 1996).

Institutional co-operation

Institutional co-operation was established towards the end of the 1980's. Again the ICH was selected to assist the NNU.

The function of ICH was basically the same as in Tanzania – technical and administrative services. What, more specifically, was ICH supposed to do?

The 1992/93 agreement between Sida and ICH is worth quoting in some detail, as it gives a good picture of the function of the ICH. Box 5.3. describes the tasks of the ICH in the co-operation with the NNU.

Some of these tasks need to be elaborated further. What for example was meant by “*research collaboration*”. Examples can be selected from the ICH plan for 1992/93:

Box 5.3. The Tasks of the ICH

1. ICH shall facilitate staff training and development for the NNU.
2. The skills requirements of the NNU personnel will be reviewed by assessing professional training needs and identify suitable programmes internally and externally.
3. ICH shall provide computer searches on specific subjects as well as copies of relevant articles to enable the NNU to keep abreast of developments in the field of nutrition.
4. ICH and the NNU shall undertake collaborative research.
5. ICH and the NNU shall undertake research and training that leads to post-graduate programmes in areas relevant for the NNU.
6. ICH shall make arrangements for staff to visit Sweden, among other countries, for the purpose of providing suitable training.
7. ICH staff shall make at least two visits annually to Zimbabwe for the purpose of assisting the NNU in planning, monitoring, evaluating and reviewing programmes.
8. ICH shall assist in the identification of suitably qualified expatriate nutritionists and dieticians for secondment to the NNU.

Source: Agreement between the Ministry of Health and Child Welfare and the University of Uppsala, 1992/93.

“Technical support to Nutrition Unit to conduct a simple research project with leading Zimbabwean health professionals to prove to them that healthy, exclusively breast-fed infants under local conditions do not need any additional water” (Greiner, 1993)

We have, on the basis of the official reporting from the project, not been able to assess with some degree of accuracy to what extent and with what quality ICH has delivered its services. Still some sort of judgement can be obtained by asking the NNU itself.

How did the NNU staff assess the value of the ICH support? The Director was asked whether she, if given untied funds, would use them for procuring the services of ICH also in the future? The answer was yes, apart from the Masters Programme offered by ICH. This programme was badly administrated with unclear rules. Although there was nothing wrong with the content of the courses, the bureaucracy surrounding it was considered overly complex. The other staff members, many of them having attended the Masters Programme in Uppsala shared the Director's view of this programme. If given a choice they would have preferred to study elsewhere. The very personalised consultancy services offered by Dr. Greiner and Dr. Ogle were appreciated and found useful by the Director. As to the value of the ICH consultancy services, none of the other staff members felt that they could assess their value. The reason was simply that none of them had had much contact with either Dr. Ogle or Dr. Greiner. It appears that it was mainly the Director who was benefiting from their advice. When the ICH consultants visited the NNU they met firstly with the Director, and only occasionally discussed with the other staff members.

5.2.3 Systems development

As indicated earlier systems development refers to linkages between the organisation and the context within which the organisation operates and interacts. These linkages can be studied at three levels: the network and linkages among organisations; the sector environment; and, the overall context of laws, norms and values which encompass the broad action environment for the organisation.

NNU has consistently worked on developing a network of stakeholders with an interest in nutrition issues. For NNU this was a deliberate strategy to place nutrition on the development agenda in Zimbabwe. There were two reasons for this strategy. First, NNU realised early on that such a small unit could never on its own take on the enormous task of developing and implementing an action programme for nutrition in the country. Collaboration with other stakeholders in the country was a necessity. Key ministries such as Agriculture and Local Government not only possessed resources that could be utilised to complement those of NNU itself, they were also important partners for the implementation of a multi-sectoral nutrition strategy. This then forms the second reason why networking was important for the NNU. Nutrition was an issue that cut across sectors. It was understood as a multi-sectoral problem, and not a limited health issue. The traditional government organisation is not organised along such lines. It represents a rather compartmentalised understanding of societal problems. Therefore, in order to develop a multi-sectoral strategy for nutrition, NNU needed to step outside the traditional government structure with all its ministries. NNU has promoted the development of inter-sectoral mechanisms to co-ordinate food and nutrition activities. Provincial and district food and nutrition management teams have been set up, and they have in time become sub-committees of the Development Committees. A National Steering Committee for Food and Nutrition has been in existence for ten years. It is a voluntary group, chaired by Agritex and given administrative support by the NNU. The participants have no official sanction from their respective ministries and other organisations. Still, the Committee has had considerable influence in shaping and focussing joint food and nutrition activities.

At the level of the sector, the NNU has been particularly active in shaping the contours of a regulatory framework for food and nutrition work. The networking activities of NNU had, among other things, created an awareness and understanding of the importance of food and nutrition. The recurrent droughts and developments in the agricultural sector had highlighted the serious situation for a majority of the population in terms of food security and malnutrition. The President, Robert G. Mugabe, when opening the 3rd African Food and Nutrition Congress in Harare in 1988 observed:

“Given its multi-disciplinary nature, the problem of food insecurity and malnutrition cannot be adequately addressed by only one sector or institution. Many key sectors have, indeed, to be consciously organised in addressing the problem”

The National Steering Committee for Food and Nutrition was the first attempt to co-ordinate nutrition work. A Task Force for Food and Nutrition followed in 1995. The Task Force held meetings and consulted widely. On the basis of a problem analysis it identified a number of important strategies that could be adopted in dealing with these problems. It analysed food and nutrition functions for various stakeholders, and recommended the setting up of a Food and Nutrition Council to harmonise the work of government and non-governmental agencies. Furthermore, it produced a Food and Nutrition Policy Framework. Cabinet approved this framework in mid-1988, and the setting up of a Food and Nutrition Council is under way. The Council will start to function this year.

Finally, looking at the broad action environment of the NNU there is a growing similarity with the situation for TFNC in Tanzania. For some years after independence, the public sector was fairly well provided by resources from the Government coffers. Add to this a high policy priority placed on health issues (of which nutrition formed a part) and the external conditions appeared quite favourable. During the 1990's the country has witnessed dwindling economic growth rates, partly because of external conditions such as recurrent droughts and partly because of weak and inappropriate economic policies. In spite of attempts towards reform, Zimbabwe has not been able to achieve sustainable growth. As a consequence, the GOZ's revenues have been falling. The large budget deficits have been financed through increased internal borrowing and, as a consequence, interest rates have soared. This has, in turn, held back productive investments in a situation where structural adjustment policies have opened up for competition from abroad. Another consequence of the high indebtedness has been a growing debt service. Interest payments and amortisation on the external and internal debt have taken a large chunk of the GOZ budget. The budget deficit has also been put under pressure by a weakening resource base. Lower taxes, low and inefficient collection of taxes, weak growth/capita and falling real wages has all affected the GOZ revenue base. A series of ad hoc expenses such as wheat subsidies, the arrangement of large international sporting events and conferences, huge losses in inefficient parastatals, have all undermined the GOZ finances.

The social sector has been hit by this combination of misguided policies, mismanagement of public funds and various external events. The costs for debt servicing in 1994/95 took about 50% of available GOZ revenues. Interest payments alone were larger than the expenditures on health and education. The GOZ has tried to compensate the social sectors share of the budget, growing from 30% in 1990/91 to 38% in 1994/95. This nevertheless lead to a fall in the real resources available to both health and education, due to inflation.

Thus, the environment in which the National Nutrition Unit operates, and the one in which the coming Food and Nutrition Council will operate, has become increasingly difficult in economic terms. Politically, the situation is different. Food and nutrition issues continue to benefit from strong political support.

5.3 The organisational strengths of TFNC and NNU – a summary

In order to provide a comprehensive picture of the organisational strength we have used the staircase model. Andersson & Winai (1998) have developed this model in close collaboration with Sida. The authors are careful to point out that the model is basically a tool for describing the status of an organisation through a stage analysis. It cannot be used for explaining why organisations have reached one level and not another. The model also assumes that an organisation must reach one level before going on to the next. Thus, it is not possible to jump from level 1 directly to level 4. This is an assumption that can be challenged. Another critical issue is whether or not an organisation can be at several levels at one point in time. We shall comment on these issues as we apply the model to TFNC and NNU.

Output and ability to change are the two basic dimensions used to describe the development stages of an organisation. Is anything produced at all and if so, in what quantity and of what quality? Has the output been produced with a reasonable input of resources? Is the output relevant to the customers and has it had the desired effects? The second dimension relates to what is accomplished within the organisation in terms of changes: in production, production methods, administration and management.

The four stages of the model are the following:

Stage 1. There is an organisation, but with a low and unpredictable output

Output is defined as the products or services produced by the organisation for use outside the organisation. At this level, output is low and its delivery unpredictable.

Stage 2. The organisation is able to deliver expected output with reasonable reliability and quality

At this level, production is carried out within the installed capacity and with available resources. However, the organisation lacks the capability to respond to new demands if external conditions are changed or if key staff leaves the organisation.

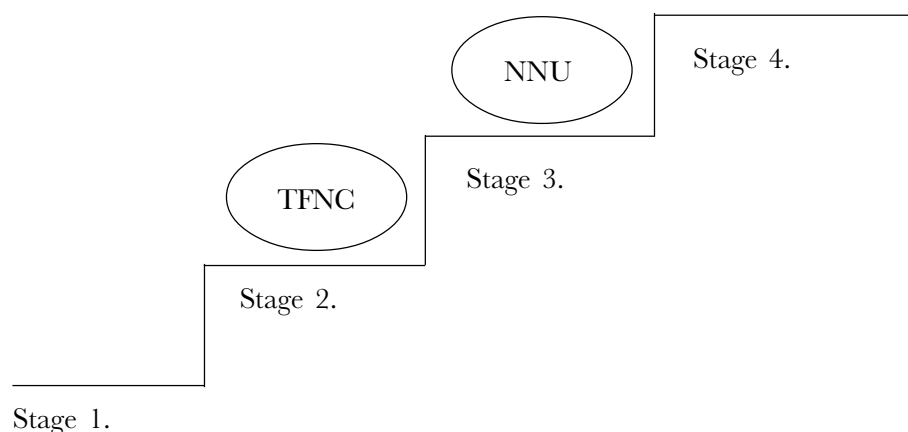
Stage 3. The organisation carries out changes on its own

The organisation can now meet set performance standards. It is also capable of making changes on its own, and actually executes such changes: in products, production methods and administrative/management systems. This level is based on the assumption that the ability to develop is manifested in implemented changes and on-going development activities.

Stage 4. The organisation works actively with its clients or customers

An organisation that has climbed to this stage works actively to increase the value of its products or services in the client/customer system. It knows the clients and has an on-going dialogue with them and allocates resources to facilitate utilisation of its output.

Where shall we place TFNC and NNU on this staircase?



Both organisations have managed to obtain a certain stability in their output, in terms of quality as well as quantity. In that sense they have passed stage one. Both also qualify for the second level. They deliver the expected output with regularity and consistency. Both are dependent on favourable external conditions to be able to deliver their output. They require, for example, access to external funding and other organisations for implementing and delivering their products and services.

Only the NNU can be said to have reached stage three. There are two issues to consider here. First, to what extent does the management actually control its organisation? Second to what extent does the management actually govern its own change? Our conclusion is that neither of the organisations have sufficient autonomy to govern its own change. They are both, although to varying degrees dependent on bodies higher up in the state machinery. Even if TFNC has a somewhat independent status vis-à-vis the government, its freedom to make substantial strategic

changes is limited. There are definite limitations as to how the government budget contribution can be used. Furthermore, its dependence on other organisational bodies, furthermore, imposes limitations to the management's control of its organisation.

We would judge that NNU has managed to acquire sufficient autonomy to govern its own change. First, it has its own budget line under Ministry of Health that is not limited to current costs only. The GOZ also provides funds that are sufficient to enable at least basic programme activities. Further, it has managed to develop strong sector co-ordination mechanisms in contrast to TFNC, which has given it a good control over the implementation programmes.

At stage 4, finally, the organisation works actively to increase the value of its products. Furthermore, it does this in an extensive dialogue with its clients. It is a typical customer oriented organisation. This behaviour is mandatory for any profit-based organisation. Without satisfying its customers it soon loses its market. For TFNC and NNU the situation is more complicated. The first issue is who are the clients? By looking at their respective activities one is led to believe that they are primarily other government organisations. It is with them both TFNC and NNU enter into a dialogue when it comes to discussing products and services. This is in many ways natural. Both TFNC and NNU are dependent on these other actors for their existence. Naturally they need to keep them informed and involved.

Still, we would think that qualifying for stage four should also require interaction with those who are supposed to benefit from the services provided by TFNC and NNU. The end-users of their services – poor women and children in rural areas - appear as rather passive consumers of their services. Although NNU has a much stronger field presence than TFNC, there is not that much difference in terms of interaction with the intended beneficiaries.

Neither of the organisations is good in evaluating the results and impact of what they do. This means that to a large extent they lack the information that is needed for them to interact and enter into a dialogue with the beneficiaries of their work.

5.4 A Note on Gender and Organisation

In the introduction we stressed our limited competence in conducting a proper analysis on gender. Still, after studying the two organisations we were left with some impressions that might be of interest to the reader. It is quite instructive to compare the two organisations and what the gender situation looks like, and then relate it to how they have chosen to operate.

In terms of policy, TFNC is not unaware of the need to provide equal opportunities to men and women. Employment policies, staff incentives and opportunities do take into account the need to pay attention to a good gender balance. Still there is still some way to go. Just to take a few examples: TFNC employs more men than women; men are particularly dominant in management positions; there is only one department where women dominate and that is “Community Health and Nutrition”; there are more men with a higher academic degree than women – 3 men and one woman with a PhD, 24 men and 13 women with Masters degrees.

NNU, on the other hand, employs principally women. This is true from the well-trained women at the centre in Harare, down to the nutrition co-ordinators at the district level. There are very few men working within the NNU organisation. Some of the cooperators of the NNU, such as Agritex, have predominantly men as agricultural extension officers. Thus in a larger perspective one could perhaps say that there is some sort of balance.

In sum, both organisations display their own gender bias. TFNC tends towards a male bias, while NNU tend towards a rather strong female bias. There may be a historical reason for the biases. Medical doctors established TFNC, and men dominated this profession in the 1970's. NNU, on the other hand, emerged from the dietetics department of the MoHCW, staffed largely by individuals with backgrounds in dietetics or home economics, both professions dominated by women.

Does this mean anything in terms of how each organisation chooses to approach its work, namely its operational strategy. Here we enter the realm of speculation. Our rather spontaneous observation suggests that there might be a linkage. NNU has a strong field presence. In fact of the whole staff a majority is working out in the provinces and districts. Only five persons are stationed in Harare. TFNC, on the other hand, has no field presence. Its professional officers are based in Dar es Salaam where they work with policy and planning issues, applied research and designing and carrying out training activities. NNU has less of this kind of work. There is little time for any kind of research and training. Most of the staff works with the various field-oriented programme activities.

In sum, there could be a linkage between the gender profile of the organisations and what they choose to prioritise in terms of operational strategy. The analysis is complicated by the differing mandates of the organisations, mandates which however the organisations could have chosen to change. Arguably, the drought crisis in Zimbabwe that occurred early in the life of the NNU compelled it to establish a strong field presence. Tanzania, however, has also experienced drought at various points during the existence of TFNC, and this has not provoked a response similar to that of the NNU's. We do not claim to have any scientific evidence, and we might indeed be totally wrong. We leave it for more in-depth research to verify if there is any substance to our impressions, namely that the mode of operation has been influenced by the respective gender compositions of the organisations.

6. Nutrition trends and development in Tanzania and Zimbabwe

This Chapter analyses the nutritional trends in both countries during the time period of the co-operation with Sida. It provides the background for the analysis of the relevance of the programmes of TFNC and NNU in Chapter 7.

Assessing trends in nutritional status of most countries is problematic. Few national surveys were conducted prior to the Demographic and Health Surveys, and trends must therefore be estimated from localised surveys (limited to regional or provincial levels at best, and often to district or village levels) or data from clinic-based growth monitoring programmes. Extrapolation from local surveys to national level is not valid, and data from growth monitoring programmes are generally biased due to limited and changing clinic coverage, an age bias in clinic attendees, and poor quality of the measurements of weights and heights of young children. The use of growth monitoring data to assess the prevalence of undernutrition in a population will grossly underestimate the extent of the problem.

The assessment of trends is also difficult because of a lack of uniformity in the indicators and cut-offs used to define malnutrition. In the past, weight in relation to age (weight-for-age) was the most commonly used nutritional status indicator, with the cut-offs of 80% and 60% of expected weight for age (using a variety of reference populations to obtain the expected weight for age, but more recently the WHO/NCHS reference values are generally used), to define moderate and severe underweight respectively. Growth monitoring data consist almost exclusively of such weight-for-age data. Weight-for-age data do not differentiate between two forms of malnutrition, namely stunting (low height-for-age) and wasting (low weight-for-height). Stunting is an indicator of chronic undernutrition (indicating long-term inadequate food intake, and/or high morbidity) while wasting indicates a current acute situation (very recent or current episode of disease or severe food shortage). Since the 1980s, WHO has recommended the use of these latter two indicators and the use of standard deviation scores (z-scores) as cut-offs: below -2SD and -3SD to define moderate and severe stunting and wasting. Unfortunately, not all countries have complied with this recommendation.

6.1 Tanzania

6.1.1 Background

The United Republic of Tanzania comprises a mainland area of 945,000 km² and the islands of Zanzibar and Pemba. Mainland Tanzania is well supplied with rivers and large lakes. Lying to the south of the equator, it has four climate zones: the Coastal zone, the Plateaux, the Highlands and the Lake regions. With some regional variations, the dry season extends from May to October and the rainy season from November to April. Between 1967 and 1988, the population of Tanzania has grown from 12.3 millions to 23.1 million, with an annual growth rate ranging from 2.8% per annum to 3.2% per annum. Although rapid urbanisation has taken place, Tanzania remains primarily a rural country with agriculture playing a crucial role in its economy. Administratively, Tanzania is divided into 20 regions on the mainland and five in Zanzibar. Each region is further divided into districts.

Table 6.1 provides some basic indicators of development for Tanzania over two decades.

Table 6.1 Tanzania: Basic Indicators

YEARS	1974-76	1979-81	1982-84	1984-86	1987-89	1989-91	1992-94	1994-96
GNP (US\$/cap)	180	280	250	250	160	120	110	140
Food Supply calorie/ cap/day	2159	2282	2286	2296	2266	2226	2053	2020
Infant mortality rate	140	104	102	110	105	107	108	109
Under-five mortality rate	240	201	190	181	176	173	167	154

GNP rose significantly in the first decade then fell sharply to a level below that of the mid-seventies. Despite a rapidly growing population, Tanzania succeeded in maintaining its per capita food supply levels (in Calories per caput per day) until the end of the 1980s. The nineties, however, have seen a worrying decline in per caput food supply. FAO's Food Balance Sheet data indicate also that there have been major changes in food supply, reflecting perhaps a changing dietary pattern. Cereal supply has risen since the 1960s, and Tanzania now imports more than 6% of its cereal supply, mainly wheat, rice and maize. On the other hand, the supply of starchy roots and tubers, the most popular staples, has fallen. Supplies of fats and oils have risen, but their contribution to total calorie supply (less than 14% in 1996) remains comfortably below the high (and unhealthy) levels of European countries (often more than 40%). Of much greater concern is the serious rise in the supply of alcoholic beverages and the falls in the supplies of milk, fruits and vegetables. There are acknowledged problems related to the accuracy of the Food Balance Sheet data, but if the trends at least are real, then we are perhaps seeing a deterioration of the Tanzanian diet.

UNICEF lists Tanzania among its group of least developed countries. While infant (IMR) and under-five (U5MR) mortality rates have declined substantially over the past two decades, both remain high (Table 6.1). Currently Tanzania has the 29th highest U5MR in the world and the 26th highest among the 46 sub-Saharan countries. Trends in the incidence of low birth weight indicate little change over the past two decades (ranging from 13% to 14%), but these figures are unlikely to represent the true situation in Tanzania, since few birthweights are recorded, and those that are will tend to be hospital deliveries. Life expectancy at birth is 51 years which is also the average for the sub-Saharan region. The distribution of wealth is however more equitable in Tanzania than in most countries of the region: in Tanzania, the income share of the households in the lowest 40% of the income bracket is 18% while that of the households in the top 20% income bracket is 45%. Equivalent figures for the sub-Saharan region are 11% and 58%. In the period 1990-96, 38% of the population had access to safe water, but there is a wide difference in access by rural and urban populations: 73% have access in urban areas and only 29% in rural areas. This difference is especially important in light of the fact that 75% of the population lives in rural areas.

Table 6.2 presents data on education among the households participating in Tanzania's (and Zimbabwe's) Demographic and Health Surveys.

Table 6.2 Proportion of household members with no education by sex, residence and age (1)

Country		Zimbabwe		Tanzania	
Year Group	Age (yr)	1988 %	1994 %	1991/92 %	1996 %
Females	15-49	17.2	15.0	41.8	35.0
Males	15-49	N/A	5.8	20.0	13.0
Urban	6-65+	6.4 (2)	4.9	30.0	21.7
Rural	6-65+	17.0 (2)	15.3	45.7	40.4
a) Women					
Young	15-19	2.5	1.5	14.8	16.0
Older	45-49	28.3	26.3	73.1	62.7
b) Men					
Young	15-19	N/A	1.8	11.1	9.9
Older	45-49	N/A	14.6	35.8	26.9

1) Data extracted from the Tanzania and Zimbabwe Demographic and Health Surveys

2) Females only. No data on males available.

While there has been a significant decrease in individuals with no education, the figures remain high. They are highest among women (35% in 1996), and in the rural areas (40.4% in 1996). Tanzania has however made a commendable effort to reduce the gender gap in primary school enrolment: in 1960, enrolment of boys (33%) was twice as high as that of girls (16%), but in 1990-95, it was almost equal (71% and 69%). Adult literacy in 1995 stood at 79% for males and 57% for females.

6.1.2 Trends in nutritional status in Tanzania

Protein energy malnutrition (PEM) in young children

Nutritional status data from the 1970s and 1980s is limited largely to clinic-based growth monitoring data, supplemented by sporadic localised surveys. For all the reasons noted above at the beginning of this Chapter, comparison with later data is not possible, and at best these early data can be used only to give a possible indication of trends, and not of actual prevalences of malnutrition.

Table 6.3 summarises data from Tanzania's growth monitoring system, which suggests that there was little improvement in the period 1976-88 in the nutrition status of young children.

Table 6.3 Tanzania: Prevalence of total underweight (<80% of median weight-for-age) from Maternal and Child Health growth monitoring system (National): children aged 0-60 months.

Year	Prevalence (%)
1976	7.5
1977	8.4
1978	7.3
1985	8.0
1986	6.9
1987	7.0
1988	8.4

Sources:

a) TFNC: Data report on the food and nutrition situation in Tanzania 1973/74 – 1977/78

b) Quoted in: 'Nutrition – Relevant Actions' by F.P. Kavishe, UN ACC/SCN, 1993

With regard to the actual levels of undernutrition shown in Table 6.3, it has been noted that the use of an inappropriate denominator in the calculation of prevalence is likely to have seriously underestimated the true prevalence of underweight children. Figures for the 1980s provided by Kavishe (1987), for example, give an estimate of 52% for the prevalence of underweight in young children.

Kavishe (1993) notes that 'the only nationally-representative data on protein-energy malnutrition in children under five years old...' come from two sources: the nutrition module included in the Household Budget Survey and the Demographic and Health Surveys. These data are presented in Tables 6.4 (for wasting) and 6.5 (for stunting). These tables provide also the months in which the surveys were conducted, since seasonality can affect the prevalence of malnutrition, especially wasting.

Table 6.4: Tanzania: Prevalence of wasting (<-2SD from median weight-for-height): children aged 0-60 months.

Year:	1991/92	1996	1996
Month:	October-March	January-February	July-October
	%	%	%
Mainland (all)	5.5	5.5	7.1
-urban	4.9	4.0	7.6
-rural	5.6	5.7	7.0
Dar es Salaam	6.8	n/a	8.1
Zanzibar	11.0	8.8	11.0
Males	6.2	n/a	8.1
Females	5.1	n/a	6.4

Sources:

a) TDHS 1991/92 and TDHS 1996

b) WHO Global Database on Child Growth and Malnutrition

Table 6.5: *Tanzania: Prevalence of stunting (<-2SD from median height for age): children aged 0-60 months.*

Year:	1991/92	1996	1996
Month:	October-March	January-February	July-October
	%	%	%
Mainland (all)	46.6	41.6	43.6
-urban	41.1	32.1	32.9
-rural	48.1	43.3	45.9
Dar es Salaam	28.5	n/a	30.6
Zanzibar	47.9	38.7	37.1
Males	48.1	41.7	44.9
Females	45.3	41.4	41.9

Source:

a) TDHS, 1991/92 and TDHS 1996

WHO Global Database on Child Growth and Malnutrition

The figures presented indicate that there remains a considerable problem of moderate and severe wasting among young children in Tanzania, a prevalence of approximately 7% for mainland Tanzania in 1996 (July-October). Among sub-Saharan countries for which data exist, UNICEF (1998) reports that Tanzania has a prevalence similar to five countries, below that of seventeen countries, but higher than that of eleven countries. The prevalence of wasting is higher in Zanzibar than on the mainland, in Dar es Salaam in comparison to rural areas, and it is also higher among boys than among girls. A comparison of the two DHS surveys (1991/92 and the second 1996 survey) suggest that there may have been a slight worsening of the situation but seasonality could explain the difference, especially since the first 1996 survey provides figures that are very similar to those of 1991/92.

Tanzania has a substantial problem with low height-for-age, namely stunting, reflecting perhaps its level of national development. The 1996 prevalence of moderate and severe stunting of 44% gives Tanzania a ranking of 26th among the 38 sub-Saharan countries for which data exist. It should however be noted that while the estimated prevalence of stunting in the sub-Saharan region has increased in the period 1990-95 (from 38.7% to 39.4%), it has actually fallen in Tanzania, from 46.6% in 1991/92 to an average of 42.6% in 1996.

The prevalence of stunting is substantially below the national average in the urban areas, especially Dar es Salaam, in Zanzibar, and somewhat lower among girls than boys. The prevalence of severe stunting only is unacceptably high: 19.6% in 1991/92 and 17.9% in 1996 in mainland Tanzania. Given the established links between stunting and both poor mental development and high mortality, these figures are cause for serious concern. Childhood stunting leads also to lower productivity in adulthood and higher maternal mortality because of obstetric complications.

National figures hide considerable disparities between the regions. While there is some question about the validity of regional prevalences from the DHS data (because of small sample sizes), the 1996 DHS data would seem to indicate that the prevalence of wasting varies from 11.2% in the Coast Region to 4.1% in Morogoro Region, and the prevalence of stunting ranges from 70.5% in Iringa to 25.7% in Tabora. Both the DHS surveys also show that the levels of stunting and wasting are associated with maternal education levels, an association reflecting the link between malnutrition and socio-economic status: 49 % of children of mothers with no education were

stunted and 8.5% were wasted in comparison to 24.1% stunting and 5.2% wasting among children of mothers with a secondary education.

The age pattern of the development of malnutrition, both wasting and stunting, is similar to that seen in most developing countries. The prevalence of stunting begins to rise in the weaning period, after 6 months of age. The deficits are cumulative and there is little or no recovery, so that the highest prevalence of stunting is seen in the older child. This pattern stresses the importance of timely interventions. The prevalence of wasting also begins to rise in the weaning period, peaking in the 12-23 month age group, but recovery does occur thereafter. It should however be noted that mortality in the weaning age group is high, and at least part of the 'recovery' is due to the survival of children with better nutritional status.

A final point needs to be made on the impact of Tanzania's UNICEF-funded Child Survival, Promotion and Development Programme (CSPD), which has been implemented, to various extents in districts of eleven regions of Tanzania. Using community-based growth monitoring data, UNICEF (and Kavishe, 1993) claims major improvements in CSPD regions. The Programme began in different years in the eleven regions, starting in 1985 (in Iringa, the Programme was preceded by the Joint Nutrition Support Programme). Using weight-for-age below 80% of the reference value as the indicator and cut-off, it would seem that the prevalence of malnutrition, especially severe malnutrition, has been substantially reduced. For example, in Iringa, moderate malnutrition fell from just under 45% in 1984 to just over 30% in 1995, and severe malnutrition from 9% to just over 1% in the same time period.

These data are not however supported by the regional figures given in the two DHS surveys, (the figures are not directly comparable because the DHS surveys use the z-score cut-offs). Again in Iringa, the DHS results suggest that malnutrition (low weight-for-age) actually rose from 37% in 1991/92 to 48% in 1996. Indeed there is no difference discernible in change in the prevalence of stunting and wasting between 1991/92 and 1996 when one compares the regions benefiting from the CSPD programme with the non-CSPD regions. Such discrepancies need to be investigated in order to get an accurate picture firstly of trends in nutritional status in Tanzania and secondly to assess the real impact of such a large scale programme as the CSPD.

Malnutrition in other age groups

It is only relatively recently that nutritionists have turned their attention to malnutrition in groups other than young children and pregnant women. With recent research establishing links between maternal malnutrition and both childhood malnutrition and adult disease, the realisation that the elderly are becoming more numerous and may no longer be sheltered within the extended family, and the recognition of the importance of good nutrition in adulthood to productivity (and hence the national economy), nutritionists have begun to examine the nutritional status of other sections of the population.

The Body Mass Index (BMI), derived from the weight and the height of the individual, is the indicator of choice for measuring adult nutritional status, both over and undernutrition.

Undernutrition is defined as a BMI of less than 18.5 kg/m² (or less than 20 kg/m² by some authors) and overnutrition as a BMI over 25 kg/m². Kavishe (1993) quotes figures surveys conducted in five regions in the late 1980s using, unfortunately, only a BMI cut-off of 20 to define undernutrition: a mean prevalence of 33.8% of undernutrition and 9.6% overnutrition was found. BMI was also measured in the DHS surveys, but only the 1991/92 report gives figures for overnutrition. The figures for undernutrition are not comparable to those reported by Kavishe as the DHS survey uses the cut-off of 18.5. The 1991/92 survey shows a national prevalence of

undernutrition among women of 9.3%, and no change in prevalence by 1996 (9.2%). Overnutrition in 1991/92 (8%) was slightly lower than the figure reported by Kavishe for the late 1980s (9.6%).

As with the nutritional status of children, the DHS survey results show substantial regional differences in the nutritional status of women (from 3% undernutrition in Kigoma to more than 15% in Arusha in 1996). Marked differences are also seen by educational level of the women: a prevalence of undernutrition of 11.2% among women with no education compared to 6.5% among women with a secondary school education.

Kavishe (1993) reports a prevalence of malnutrition of 40% among men in five regions in the late 1980s. The DHS surveys did not measure men. Kavishe (1993) also gives the findings of surveys conducted in 1987 in 2 regions of Tanzania (Rukwa and Mbeya) on schoolchildren aged 7-13 years. A low prevalence of wasting (2%) and high prevalence of stunting (39%, increasing with age from 10% at 8 years to 71% at 13 years) characterised this population. No figures on malnutrition in the elderly were found. A study in rural Malawi found a very high prevalence of malnutrition (BMI<18.5), 36% among women and 27% among men (Chilima et al, 1998), suggesting an urgent need to investigate this section of the population.

Micronutrient deficiencies

a) Iodine deficiency disorders (IDD)

More complete details of the prevalence of IDD are to be found in the case study of Tanzania's IDD control programme (Annex 2). Briefly however, it is estimated that Tanzania has a serious problem of IDD: approximately 40% of Tanzania's population live in iodine deficient areas and are therefore at risk of IDD. Between 1980 and 1990, a series of surveys (10 primary schools per district) was carried out to assess the prevalence of the deficiency. From these it is estimated that the total goitre rate is approximately 37%, with visible goitre in 5.9% and cretinism in 5.2%.

b) Vitamin A deficiency (VAD)

A hospital-based sentinel surveillance system to detect xerophthalmia (the clinical manifestation of VAD) was established in 11 regions in 1982. In addition there have been a number of community-based surveys. From these it has been judged that VAD is a problem of public health significance. It has been further estimated that 2-4 thousand cases of blindness due to VAD occur each year, and that VAD probably affects about 6% of the population. Vitamin A deficiency is generally associated with a high prevalence of malaria, and successful interventions to control malaria will thus have a major impact on the prevalence of VAD. VAD is also worse in the drought-prone semi-arid regions of Tanzania where supplies of Vitamin A-rich foods may be poor.

c) Nutritional anaemia

Most nutritional anaemia in Tanzania, as in other developing countries, is due to iron deficiency. The bioavailability of dietary iron is considered to be the most important determinant of anaemia in most countries of sub-Saharan Africa. Also associated with anaemia are high levels of parasitism (especially malaria, intestinal parasites and bilharzia), and high female fertility. The most vulnerable groups are children and pregnant and lactating women, although it is increasingly recognised that other groups, such as adolescents, men and the elderly, also have high levels of anaemia that merit attention. For example, global figures from ACC/SCN suggest that the prevalence of anaemia among adolescents is higher than among young children, and it is as high among men as among young children.

Data on the prevalence of anaemia in Tanzania are severely limited, and no assessment of trends can be attempted. A recent study (1991) gathered hospital-based data on the prevalence of anaemia and found that it ranged from 20% to 80% among young children and 18% to 87% among pregnant women. However these data are difficult to interpret, firstly because hospital-based data are likely to show a prevalence that is much higher than population figures, and secondly because the cut-off used to define anaemia was different from all recommended WHO cut-offs. The data do however suggest large regional differences, with the highest prevalence in coastal and other low-lying areas and the lowest prevalence in high altitude areas.

6.2 Zimbabwe

6.2.1 Background

Zimbabwe has a population estimated at 12 million based on 1991 Census and growing at 3.1 percent per annum. It is divided into eight provinces with 54 districts and has five agro-ecological zones. There are five human settlement areas, and the highest rates of poverty and malnutrition are found in the country's overcrowded and drought vulnerable communal lands. The country has an agriculture-based economy with a vibrant large scale commercial farming sector. The government's 1995 Poverty Assessment Survey Study (PASS) found 62 percent of all Zimbabwean households live in poverty, while 42 percent are unable to meet basic nutritional requirements. The Economic Structural Adjustment Programme (ESAP) introduced in early in 1990 to create incentives for economic growth did not include adequate specific measures to protect the poor (UNICEF, 1998).

Table 6.6 provides some basic indicators for Zimbabwe over two decades. GNP rose substantially until the mid-eighties, then fell to a level similar to the mid-seventies. Like Tanzania, the nineties have seen a decline in per caput food supplies. FAO's Food Balance Sheets indicate some change also in the pattern of food supplies: decreasing supplies of cereals (offset by starchy roots), meat, milk, vegetables and alcohol, and increasing supplies of oils and fats (23% of calories came from total fats in 1996). The Zimbabwean diet is generally healthy, consisting of maize with relishes of vegetables, peanuts and legumes and sometimes meat.

Table 6.6 Zimbabwe: Basic Indicators

YEARS	1974-76	1979-81	1982-84	1984-86	1987-89	1989-91	1992-94	1994-96
GNP (US\$/cap)	550	870	800	690	630	650	530	550
Food Supply calorie/ cap/day	2148	2233	2161	2159	2181	2160	2000	2017
Infant mortality rate	N/A	75	77	76	69	61	58	52
Under-five mortality rate	N/A	132	N/A	120	106	88	82	75

Sources:

Unicef: State of the World's Children (various years)

World Bank: World Development Report (various years)

United Nations: Demographic Yearbook (various years)

Women's literacy rates (75%) are lower than men's (86%). Fifteen percent of children of school age do not attend school, rising to 50% in more remote parts. Many children do not attend school regularly, and drop out rates are high, with 21% of those that enrol in school leaving before grade 7. Primary school enrolment shows no gender differences, but the gender difference is marked at entry to secondary school (male 68% and female 57%). Families withdraw girls from school when economic resources are limited (UNICEF, 1998). Although the overall proportion of individuals with no education is low, the urban/rural difference remains (Table 6.2).

Zimbabwe's U5MR in 1996 was the third lowest among the sub-Saharan countries, and its IMR was the second lowest. Both have declined steadily over the last two decades. National figures hide regional differences: as in most countries, IMR and U5MR are lowest in urban areas (Harare and Bulawayo) and highest in the rural areas. Trends in the incidence of LBW show little change since the late 1970s. Seventy-nine percent of the population has access to safe water (99% in urban areas and 69% in rural areas). Income distribution in Zimbabwe is less equitable than in Tanzania: the income share of the households in the lowest 40% of the income bracket is only 10%, and that of the households in the top 20% of the income bracket is 62%.

6.2.2 Trends in nutritional status in Zimbabwe

PEM in Infants and Young Children

Almost all forms of malnutrition in Zimbabwe are related to poverty and inequity at the 'basic level' and the health-related causes are of less importance than in other Sub-Saharan countries (Tagwireyi and Greiner, 1994). Data on PEM in young children before 1980s are patchy but suggest that PEM was common. In the first formal nutrition assessment Berg (1982) noted the paradox of Zimbabwe, a leading food exporter in the region but with major malnutrition problems along side food surplus. Many families suffered from seasonal nutritional inadequacies and micronutrient deficiencies particularly goitre and pellagra. Ten years later the country had successfully reduced high level of child malnutrition despite economic setbacks and recurrent droughts. Zimbabwe has the second lowest level of malnutrition among all the sub-Saharan countries surveyed by DHS (1994).

During the early 1980s it was estimated that 28% of the under-fives were stunted (median height of less than 90% for age) and 9% was wasted (less than 80% of median weight for height). A national survey of 1982 estimated 16% urban and 36% rural children were below 90% of the median height for their age and nearly 20% of all urban infants below 6 months had low weight for height (MoH, NU, 1982).

By the end of 1980s, the levels of stunting had remained static but wasting had rapidly declined in the first years of independence and has remained at low levels. When the 1988 DHS data was re-analysed (Thomas, 1990) using the same cut-off point used in the 1982 survey, results showed substantial improvements in malnutrition levels, reduced by half between 1982 to 1990. The data show persistence in the rural/urban differentials, with stunting more severe in rural areas while wasting was higher in urban areas. The most vulnerable children were in re-settlement areas (Kinsey, 1992) and these did not show any improvement during the 1980s. From the Nutrition Surveillance data (1987 to 1990) children aged 2-5 years showed the highest level of malnutrition.

Table 6.7 Zimbabwe: Prevalence of wasting and stunting (<-2SD of reference median)

	Wasting (low weight for height)				Stunting (low height for age)			
	1988 %		1994 %		1988 %		1994 %	
a) By age								
0-35m	1.2		5.8		29.8		21.4	
0-60m	1.3		N/A		29.0		N/A	
	%	Age (m)	%	Age (m)	%	Age (m)	%	Age (m)
b) By sex								
Female	1.3	0-60	4.5	0-36	28.0	0-60	21.1	0-36
Male	1.4	0-60	6.5	0-36	29.9	0-60	21.7	0-36
c) By residence								
Urban	1.5	0-60	6.1	0-36	14.3	0-60	17.6	0-36
Rural	1.3	0-60	5.3	0-36	33.6	0-60	22.8	0-36

Source: Data extracted from the Zimbabwe Demographic and Health Surveys (1988, 1994). The 1994 Survey included only children aged 0-35 months.

Comparison of the two DHS data sets (Table 6.7) shows a decline in the prevalence of stunting among children less than 3 years of age in the 6 year-period from 30 to 21%. In contrast, the prevalence of wasting increased from 1 to 6 percent over the same period. This could be a reflection of drought in 1992 and poor harvest, or a rising prevalence of AIDS. Although there was a reduction from 1988 levels, stunting is still a serious problem. Direct comparison, between the two surveys, of changes in urban and rural areas and and by sex is complicated by the fact that the two surveys measured different age groups. Both surveys showed differences among the provinces, with stunting in 1994 ranging from 12.8% in Midlands to 28.5% in Matabeleland North, and wasting from 1.9% in Mashonaland East to 9.8% in Matabeleland North. The worst hit populations for stunting are the commercial farm workers and those living in communal areas. Nutritional surveillance data shows a general trend towards improvement between 1987 to 1990 in all provinces, except in the worst affected provinces of Matabeleland North and Mashonaland Central.

Stunting occurs early, starting at birth and most growth retardation occurs in during the first year of life. Moy (1991) found in a prospective study of 204 infants weighed monthly in a district, that infants are stunted at birth. This is supported by the observation of 90% of all LBW infants being small for gestational age (ZDHS, 1994). The most affected age groups for both stunting and underweight were the 12-23m (UNICEF, 1998).

A problem of overweight problem is feared because of its relation to diet related chronic diseases, but it has not yet been studied among children in Zimbabwe. Anecdotal evidence suggests that middle class families over-feed their children, often on processed foods. In Zimbabwe the concern of obesity in urban infants has been expressed (Mathe et al, 1995). Overweight was more frequent in children of urban women with a secondary-level education while stunting was more common in less educated rural mothers. In adults, however it is known that the consequences of over-nutrition are high and diet-related diseases are believed to be increasing although the exact contribution made by the changing diet has not been determined. The City Health Department of Harare

shows an increasing trend in diabetic and cardiovascular cases with 5.5 percent and 9.3 percent of deaths as a result of these conditions in 1996, compared to 3.9 percent and 8.9 percent, respectively, in 1995 (UNICEF, 1998).

Malnutrition in other age groups

School-age nutrition has been wrongly assumed to be normal because it was thought that PEM declined in this age group. Until the 90s little attention had been paid to this age group in Zimbabwe. Current data are based on small, usually district-level, studies. It was found that the nutrition status of 2-5 year old children was not worse than that of school children (Tagwireyi and Greiner, 1994). Undernutrition among school-age children has important effects on learning ability and achievements. Stunting is the most prevalent form of PEM among primary school children (Kittle and Mundy, 1997). A survey of over 6000 children aged 6-17 years in ten primary schools of rural communal lands indicated that 15.8% were stunted (<-2SD) but wasting was insignificant as shown by Schuon and Fleischer in 1988 (Tagwireyi and Greiner, 1994).

More boys are stunted (18.7%) than girls (10%) (Madzima et al, 1991). The City of Harare growth surveillance of the 6-14 year age group shows consistently higher rates of stunting among boys (7.3-11%) than girls (4.3-8%), a trend that may be due differences in school drop out rates. Stunting was most prevalent among the 8 years olds (50%) but generally increased with age in both sexes. It was higher in rural than urban school children while wasting was higher in urban first graders (Tagwireyi and Greiner, 1994). Children from communal land were more stunted (17.1%) than those on resettlement area (9.3%) and commercial farms (4.4%). School children are more stunted in some districts: in Wedza a third of all 6 to 16 year olds were stunted (UNICEF 1998).

Adult nutrition has received very little attention although it appeared to be better than that of children. The weight gain of antenatal mothers attending one rural and five urban high-population density areas clinics was poor during pregnancy (26 to 38 weeks), less than the recommended level 10.3 kg). BMI was low among 12.6% of non-pregnant women and 8.7% of men although not as low as in other developing countries (India and Ethiopia). Over-weight was higher among the women (17.4%) than among men (5.6%) (Tagwireyi and Greiner, 1994).

Micronutrient deficiencies

a) Iodine deficiency disorders (IDD)

By the beginning of the 1980s, very little was known on the extent of the problems of the major micronutrient deficiencies in Zimbabwe: iodine, Vitamin A and iron deficiency anaemia in children and adults. Micronutrient deficiencies are seen despite the relatively healthy Zimbabwean diet, possibly linked to the use of highly refined maize flour in the country. Goitre is a result of poor iodine content in soils that leads to poor iodine content in crops and animal foods.

The IDD problem in Zimbabwe has been rapidly changing following the first national survey of 1988 and the launching of the National Universal Salt Iodination programme. A national survey by NNU in 1988 of school children showed total goitre rate in the whole country was 44%. Goitre rates were found to be high in 20 districts, moderate in 24 districts and mild in 11 districts. Mashonaland East showed the highest degree of severity of IDD, closely followed by Mashonaland Central and Masvingo East. The cities of Harare and Bulawayo registered the lowest level. Goitre levels in Zimbabwe are higher in females and tend to increase with age (Tagwireyi and Greiner, 1994). Among school-age children, goitre prevalence increases with age for girls in Grade 4-7, and decreases for boys.

Zimbabwe now records a major improvement in iodine status attributed to Universal Salt Iodination (USI) and the increased intake of reasonably priced sea fish from Namibia. Legislation guaranteed that all imported salt for both human and animal consumption should be iodised and a salt monitoring system was put into place. Follow-up studies conducted in 1993 and 1995 indicated that IDD has essentially been eradicated in Zimbabwe, except for a few districts (UNICEF, 1998).

b) Vitamin A deficiency (VAD)

Vitamin A deficiency in Zimbabwe has not been rated a public health problem, although clinicians were reporting severe clinical signs. Severe Vitamin A deficiency was almost never seen unless connected with measles or PEM. The World Bank (1983) cites evidence from several sources that indicate Vitamin A deficiency occurs in various parts of the country. Clinicians continue to observe eye signs of Vitamin A deficiency, mainly in the drought prone provinces of Matebeleland. A survey of 6,000 children, between 6 months and 6 years of age from 50 villages randomly selected from all districts confirmed that Vitamin A is not severe enough to be considered a public health problem (Tagwireyi and Greiner, 1994)

c) Nutritional anaemia

Few studies on the causes and extent of nutritional anaemia are available and none at national level. Buchanan (1968) showed that the prevalence of iron deficiency anaemia was 3% in male and 8% among women. Fifty percent of pregnant and lactating were anaemic and 30% of children (Nemapare, 1989). Iron deficiency anaemia requires a full survey to define the extent of the problem (Todd, personal communication).

d) Pellagra

Niacin deficiency or pellagra commonly seen at health facilities has not been studied, although it is known to increase in drought times. It has been reported in hospitals and clinics from some provinces, possibly linked to the increased use of highly refined maize. Shaw reported that 1/5 of the children and 1/3 of adults presenting at Buhera health centre had signs of pellagra during the 1991-1992 drought. The problem is reported to be on the increase in Harare and is probably due to the abuse of alcohol as well as high consumption of maize without sufficient vitamins (UNICEF, 1998).

7. The relevance of TFNC and NNU

This Chapter presents a broad overview and analysis of the major programmes carried out by each institution. To the extent possible, the analysis of the programmes will include an assessment of the relevance of each programme to the nutritional problems of the country described in Chapter 6, the mode of operation, and the process by which the programmes were developed and implemented. Achievements, constraints and sustainability will be discussed briefly. Not all aspects can be covered for each programme since in some cases the information was not available.

The term ‘programme’ is used loosely to represent a group of activities that are intended to address a particular nutrition problem. Activities may range from small-scale pilot projects to involvement in, or implementation of, full national programmes. Over the years, the institutions may have undertaken a large number of activities to address a nutrition problem. It is not the intention of this evaluation to examine in detail each of these activities. Rather an effort will be made to assess in broad terms the appropriateness and adequacy of the range of activities.

Summaries of the activities covered by the in-depth case studies undertaken at each institute (on IDD programmes and activities to improve household food security) are also provided in this Chapter. The full text of each case study is provided in the Annex. Finally, the Chapter will provide a comparison of the two institutions.

7.1 Tanzania Food and Nutrition Centre: analysis of programmes

Data presented in Chapter 6 showed the following trends in nutritional status:

- There is no evidence for a decline in the prevalence of PEM during the period 1976 - 1988 (for underweight), and the period 1991/92 - 1996 (for wasting and stunting). The prevalence of PEM in the two periods cannot be compared since different indicators were used. The levels of both wasting and stunting, especially the latter, remain high.
- Both undernutrition and overnutrition exist among women and men. Among schoolchildren, stunting is a serious problem. However few data exist on groups other than young children, and trends cannot be assessed.
- Trends in micronutrient malnutrition also cannot be determined. However, there is evidence that serious problems of IDD and VAD exist. No useful information on the prevalence of nutritional anaemia could be found, but there is no reason to suppose that Tanzania is any different from other developing countries where high levels of anaemia have been documented.

It is against this background that we examine the relevance of TFNC’s programmes and activities.

a) Protein Energy Malnutrition (PEM)

i) Nutrition rehabilitation

TFNC, ever since its formation in 1973, has addressed the problem of PEM in various ways and with varying intensity. Indeed, Tanzania’s Third Five Year Plan instructs TFNC to ‘find and cure people with nutrition problems’. Initially, activities to reduce PEM (including activities to identify the causes of malnutrition) fell under TFNC’s then Medical Nutrition Department. Perhaps because of this location, there was a strong emphasis on curative rather than preventative approaches. Efforts were made to provide convalescent care at low cost in nutrition rehabilitation units (NRU), to children treated in hospitals for severe PEM. NRUs have also been used to rehabilitate children with moderate PEM. An evaluation conducted in 1978/9 found that NRUs were failing to meet

their objectives, that children were returning soon after discharge afflicted again with PEM and that there was little impact on the nutritional status of the community. A workshop held in 1986 recommended the establishment of community-based rehabilitation, and TFNC was assigned the role of developing guidelines for this.

The treatment and prevention of childhood PEM currently functions, more or less adequately, through the primary health care system. In the case of severe PEM, with or without disease, the child is referred to the health unit for treatment, then returns home for convalescence. Nutrition education and counselling (on breast feeding and weaning diets) is provided and attendance at clinics encouraged. Follow up is carried out by the village health worker. Children with PEM are identified through the growth monitoring system, clinic-based (barely functional) in non-CSPD areas, and community-based in CSPD districts. In reality however, only severe cases of PEM (marasmus or kwashiorkor) are picked up. The system works better in districts covered by the UNICEF's CSPD programme.

ii) Improving weaning practices

TFNC has conducted a number of activities aimed at preventing malnutrition. The peak prevalence of malnutrition in young children occurs during the weaning age group. It is associated both with high morbidity as the child is increasingly exposed to its environment and with an inadequate weaning food of poor nutrient density. Since its early years TFNC has had a strong emphasis on the improvement of weaning foods. Considerable research has focused on ways to improve the energy and nutrient density of the weaning food: using food-to-food methods by developing appropriate recipes based on locally available foods, germination and fermentation, pre-prepared weaning food mixes (in collaboration with the National Milling Corporation). These have had only partial success. The success of programmes to promote improved weaning foods assumes on the one hand that nutrition knowledge rather than the household budget is the limiting factor, and on the other hand that the changes recommended are culturally acceptable. For example, the cost of the pre-prepared and pre-packaged weaning mix (Lisha) proved higher than the cost of a good home-made weaning food, and this activity was discontinued. A very wide range of educational and promotional material has been developed to support efforts to improve home-made weaning foods. Most have not been adequately pre-tested and evaluated.

TFNC investigated the causes of unsatisfactory adoption of improved weaning foods using germinated flour. Lack of good information and sensitisation emerged as major reasons for non-adoption. However, no new approaches were developed as a result of these findings. No adequate monitoring system is in place, and no efforts have been made to integrate the activity with on-going regular programmes, such as the MCH programme, which could have assisted in its promotion nationally.

iii) Improving breastfeeding practices

Improved breastfeeding practices play a major role in the prevention of malnutrition. Tanzania has a good record on breastfeeding: early initiation and prolonged breastfeeding are common. However, the recommendation of exclusive breastfeeding for the first six months of infancy is less well adhered to. TFNC has played a major role in advocacy, the provision of training to health workers, training at the community level, and the review of the curriculum for the training of traditional birth attendants. The training activities were mostly funded by SIDA. The promotion of breastfeeding has gone hand in hand with the Baby Friendly Hospital Initiative. Forty-five hospitals have been covered so far. This involved the training of doctors, nurses and MCH co-ordinators.

In 1996, Tanzania signed the International Code of Marketing of Breastmilk Substitutes. TFNC has produced a great deal of promotional material, but good evaluations of these materials are lacking. Research is also needed on the impact of the breastfeeding campaign. On the whole, it seems that the activities related to the breastfeeding campaign and the Baby Friendly Hospital Initiative have been appropriate and well implemented. Certainly the involvement of TFNC is appreciated. Activities needed in the future include the further training of new staff (which does indicate that the original training was not well institutionalised in the health sector), closer monitoring of adherence to the Code, stronger efforts on improving complementary feeding (weaning practices). A major concern for the future of breastfeeding in Tanzania is the impact of the increasing incidence of HIV disease.

iv) Links with the UNICEF-funded Child Survival, Protection and Development Programme

The CSPD programme has its roots in Tanzania's WHO/UNICEF Joint Nutrition Support Programme that was implemented in the Iringa region. CSPD activities began in selected villages in six districts then spread to other regions. Currently, the CSPD programme covers a varying number of districts in 11 regions on the mainland. Initial activities involve village mobilisation (by district staff), the establishment of village health committees and the identification and training of village health workers. Subsequent activities are health days when children are weighed and immunised, and a range of other activities selected by the villagers. TFNC's role depends at least partly on the problems and activities identified by the specific districts. It has also provided training to extension workers (on weaning diets for example), developed an integrated planning manual, and held a number of seminars (for advocacy). No research agenda is associated with the CSPD programme.

The approach of the CSPD programme, with its emphasis on community participation and integrated planning is excellent. It seeks to move away from vertical programming and is in line with Tanzania's process of decentralisation. Community mobilisation is however time-consuming and positive results are not generally forthcoming in a short time. To be done well, it also needs the investment of considerable resources: communities need time, training and access to good technical advice for a considerable period of time if they are to develop the skills needed to identify their own problems and solutions, and for the approach to become truly institutionalised. It is not clear whether such investment has been made by UNICEF or by the Government of Tanzania, and whether it has been adequate in all communities. UNICEF claims remarkable reductions in the prevalence of malnutrition, especially severe malnutrition, among children in CSPD communities. These claims are not supported by data from the DHS surveys (see Section 4.1.2).

v) Malnutrition in other age groups

Malnutrition in women has received inadequate attention. Arguably, activities to reduce women's workload are intended primarily to increase the time that mothers may devote to child care rather than to reducing maternal energy expenditure and hence improve nutritional status. However, these activities are interesting and commendable in that they were carried out (as a pilot project) with the full participation of the communities: assessment and selection of solutions, followed by implementation by the communities (see case study on household food security). The pilot project was conducted in three villages only, and there is no clear indication at present whether (and how) it is to be extended to other communities. As part of TFNC's vitamin A and anaemia programmes, women receive iron supplements during pregnancy and a vitamin A supplement at delivery. These activities could serve the dual purpose of improving iron and vitamin A status in both women and children.

In collaboration with the Ministry of Education, TFNC has undertaken activities to improve the nutrition of schoolchildren. Since there is no real national school feeding programme, TFNC's activities are limited to the development of educational materials (see case study on household food security). There is no vision or strategy as to how to proceed beyond this stage.

The nutrition of men and of elderly people has received no specific attention, other than as members of households concerned with household food security activities. In summary then, malnutrition in groups other than young children has received scant attention. Activities are sporadic with no obvious follow-up, or efforts to promote or initiate national programmes.

b) Micronutrient Programmes

i) Vitamin A Deficiency (VAD)

Serious efforts to reduce vitamin A deficiency in Tanzania began in 1985, as a result of information from the hospital-based sentinel xerophthalmia surveillance system (started in 1982) and spot surveys, which found vitamin A deficiency to be a problem of public health significance.

Information on the extent of the problem was limited to the identification of clinical (eye) signs initially, then later expanded to include the assessment of serum and breastmilk retinol levels. Monitoring retinol levels is not an easy task: until recently at least it required the drawing and storage of blood, and its transport to a specialised laboratory for an expensive analysis. The method has been simplified somewhat now, but still requires the laboratory analysis.

Tanzania's Vitamin A programme, designed and spear-headed by TFNC, was initially limited to capsule distribution through the Essential Drug Programme (EDP), using disease targeting. Other early efforts included nutrition education, the production and distribution of IEC material, and some horticultural activities. In 1991, TFNC secured World Bank funding, and the medium and long-term activities assumed greater importance. Specifically, the horticultural component focused on encouraging schoolchildren to grow fruits and vegetables and on solar drying methods for carotene-rich fruits during the high season. Such activities could improve the intake of other nutrients (such as vitamin C and iron) as well as carotene.

Another potentially important long-term measure under investigation by TFNC is the promotion of red palm oil consumption. Red palm oil has been used in all institutions in Tanzania since the colonial era; it is therefore not unfamiliar to Tanzanians, but its consumption could be improved. The availability in the country is good, and the potential for increased production is also good. The problem being addressed at the moment is its processing, which is currently very crude and inefficient and results in a product with low consumer acceptability. Machines exist for improved processing, and one has been ordered, but it is expensive. Hence processing must be limited to a very few co-operative commercial enterprises.

Initially Vitamin A capsules were funded by DANIDA, distributed by clinical officers trained by TFNC (in 1987). Initially too there were a number of problems with the activity (noted in Sida's 1991/92 evaluation of TFNC) related to dosage, and accumulation of capsules at health centres because of poor understanding by health staff and because capsules were given only to children with eye signs of VAD or specific diseases. In 1996, TFNC secured funding from the Micronutrient Initiative (through UNICEF) to improve the supplementation programme by using the Expanded Programme of Immunisation (EPI) for capsule distribution, in addition to disease targeting. All children should now receive a supplement at 9, 15 and 24 months, and mothers are supplemented at delivery. Coverage may be limited however, partly because coverage of the EPI is falling, and partly because women fail to bring their children to the clinic after infancy.

TFNC is very eager to put in place sustainable long-term measures to reduce dependency on an expensive programme of capsule distribution, which in any case is likely to continue to have limited coverage. TFNC has taken a lead role in the programme: as initiators, co-ordinators, facilitators and joint implementers (through the provision of training and conduct of surveys). Early partners were the Ministries of Health and of Agriculture and Livestock, followed more recently by World Vision, Sokoine University, the Horticulture Institute in Arusha, and regional and district authorities. A National Vitamin A Consultative Group (NVACG) exists, and TFNC has been very active in its international counterpart (IVACG). They have also been proactive: they wrote the proposal for funding from CIDA, and proposed and secured the inclusion of vitamin A activities under the World Bank loan to Tanzania. The list of contributors is impressive (a reflection perhaps of donor interest in micronutrient programmes): DANIDA, UNICEF, OMNI, MI, CIDA, IDRC, the World Bank.

TFNC's development of the vitamin A programme has been exemplary: they have assessed the situation, collaborated closely with partners, identified long and short term solutions, provided technical advice and training, secured funding. And yet the sustainability of the programme is now in question. World Bank funding has come to an end, and funding for capsule distribution will likely end soon. Long term measures (horticulture, red palm oil, and nutrition education) continue to need serious inputs, as do training and retraining of health staff. The question needs to be asked as to why TFNC have been unable to persuade the Ministry of Health to include capsule distribution as an integral component of the MCH programme; with the acknowledged link between VAD and high young child morbidity and mortality, justification need not be on the basis of nutrition alone. A similar question could be asked of other government ministries in relation to the red palm oil and horticultural activities. This evaluation feels that TFNC, perhaps in collaboration with NVACG, should investigate this issue. Could it be that TFNC's proven ability to secure funding has in fact played against itself? And that ministries with tight budgets are unwilling to assume responsibility for activities that can attract donor funding, no matter how deserving the cause?

ii) Anaemia

Anaemia, at least among pregnant women and children, is the deficiency with the highest prevalence world-wide, except possibly IDD in IDD-endemic areas. Yet it has received the least attention of the three major micronutrient deficiencies (iron deficiency, VAD and IDD). This may be because it has few dramatic clinical signs and symptoms, as well as because it has proved relatively unresponsive to interventions. In addition the international consultative group on nutritional anaemias has been the least active of the micronutrient consultative groups. Tanzania's (and TFNC's) programme on anaemia is similarly the least advanced of its micronutrient programmes.

A hospital-based monitoring system has been established, where haemoglobin levels are routinely measured among young children and pregnant women. The limitations of this system are discussed in Section 4.1.2. Effectively we do not know the extent of the problem, but it is likely to be substantial. Recent research has brought to light the serious impact that even mild anaemia can have on mental development, school achievement and adult productivity, all factors that can have an impact on the national economy. Such findings may persuade governments to take anaemia more seriously.

Tanzania, like most countries, has had for many years a supplementation programme targeted to pregnant women attending ante-natal clinics. Poor attendance, poor compliance and problems with

the supply and delivery system have limited its impact. In addition Tanzania has a programme of young child supplementation. The production and consumption of iron-rich foods and fruits containing vitamin C (to aid iron absorption) has been promoted, through limited horticultural activities (related vitamin A activities contribute to this), and nutrition education. The impact of these programmes is unknown. TFNC is also investigating alternative supplementation dosages and regimes which if successful, could reduce costs and increase compliance.

TFNC cannot be faulted in the process by which it set about tackling anaemia. An impressive multi-disciplinary workshop was held in 1991 which brought together regional and national representatives of line ministries as well as international and other organisations. This led to the development of an excellent five year programme. Funding for the programme has proved the limiting factor, reflecting perhaps donor priorities within the micronutrient area.

iii) Iodine Deficiency Disorders

In 1986 a national IDD control programme was launched with the objectives of virtual elimination of IDD by the year 2000 and universal salt iodisation by 1995. Two approaches were devised to address the problem: iodised oil capsule (IOC) administration in 27 highly endemic areas as an interim measure, and the manufacture and sale of iodised salt as a long term strategy. Accordingly IOC distribution commenced in 1986, and continued in some districts until 1998, while salt iodisation was introduced in 1995 following appropriate legislation.

Many useful lessons have been learned from the planning and implementation of the programme. Some reduction in the prevalence of IDD has also been observed in the highly endemic areas, which could be attributed mainly to IOC distribution. However, owing to a poor monitoring system, the failure of many concerned bodies to fulfil their mandates, and a number of other reasons, there has been a serious decline in the iodised salt production and distribution system. Urgent action is needed if the programme objectives are to be achieved and sustained. The following measures are proposed:

- enforce the legislation for salt iodation at the production level;
- assure a regular supply of potassium iodate;
- establish a good system for monitoring the iodine content of salt;
- intensify consumer awareness and demand for iodised salt.

c) Food processing and preservation

Cassava is the staple food of about 30% of the population of Tanzania. It is also a highly perishable crop, and post-harvest losses can be high. TFNC therefore initiated a pilot project in two districts with the aim of introducing and promoting a simple, cheap and effective technology for the preservation of cassava, to benefit both households and traders. The project was implemented in close consultation with community members, especially women, and the agricultural extension and community development workers. It was well monitored, and uptake by the communities was good. Another simple technology promoted was solar drying, as a contribution to the VAD control programme. In both cases, the TFNC's efforts to promote the technologies have been commendable. Efforts should now focus on linking the activity to community programmes.

d) Policy and planning

Tanzania was the first country in the ECSA region to develop a Food and Nutrition Policy. This has been achieved almost entirely through the efforts of TFNC. The process has been a lengthy one: it

began in 1976 when the Secretary General of the ruling party requested TFNC to construct a policy for Tanzania, and ended in 1991 when it was passed by the Central Committee of the Party.

Initial activities involved a situation analysis and problem identification, a consideration of the alternatives and the formulation of a first draft that was submitted to the government. Consultations ensued, followed by numerous revisions to the original draft, culminating in 1990 with the holding of a multi-sectoral workshop organised by TFNC. At the workshop, Tanzania's food and nutrition problems and possible solutions were discussed and incorporated into a Medium-Term Plan of Action. This, and the goals set by the World Summit for Children (1990), guided the ninth and final revision of the document.

Reasons for the delays in declaring the policy are given by Kavishe (1993):

- being multisectoral, the Policy had implications for the policies of a number of government ministries, who then had to re-examine and perhaps re-adjust their own policies;
- there was some concern that the Policy was attempting to establish a form of 'superstructure' (TFNC) to oversee and control sectoral activities;
- wide consultation takes time, especially when one has to wait for the right fora and opportunities to discuss the issues;
- there was a limited capacity within the Ministry of Health in processing a policy since it was the Ministry's first such experience;
- the government at that time had other major concerns, the economy and structural adjustment, for example.

A lengthy gestation is by no means unusual - the Norwegian Nutrition Policy also took a long time to be processed - and it is also not entirely undesirable since it allows time for broad consultation and full adoption and internalisation of its elements within sectoral priorities. However, the impact of the policy on current sectoral priorities is not clear; in the face of serious economic constraints, ministries may shirk their responsibility for nutrition, on the assumption that TFNC (with its good record of securing external funds) could handle it. Indeed a point made in earlier evaluations of TFNC was that the Government itself had failed to meet its commitment to increase its funding of TFNC as SIDA withdrew.

Other policy and planning activities have included the preparation of a National Plan of Action for Nutrition (following the International Conference on Nutrition in 1992), the development of five-year programmes for each priority identified in the Policy and the establishment of a number of national problem-based consultative groups. Nutrition planning efforts have included the introduction of nutrition into district-level development plans, with technical advice (and where possible funding assistance) provided to identify suitable activities. Such district-level efforts occur sporadically at the request of the district, but TFNC is proactive in initiating requests.

e) Information gathering

This area covers all activities associated with the gathering, analysis and interpretation of information needed to describe and monitor the food and nutrition situation of Tanzania. It includes surveys (national and local), nutritional surveillance, growth monitoring (if the data are to be used for assessing nutrition trends), and monitoring and evaluation of programmes.

The whole area is acknowledged to be weak and inadequate within TFNC, as is clear from section 4.1 of this report. Occasional sub-national surveys have been undertaken, but on the whole too much reliance has been placed on clinic-based growth monitoring data. TFNC has undertaken a

series of regional situation analyses, but the data included in these are limited. This evaluation does not recommend the establishment of a full-scale food and nutrition surveillance system, which in any case has proved unsustainable in most countries. However, some serious effort could be made towards established a very simple low cost system. A number of these have been used effectively in other countries: sentinel site surveillance, a height census at entry to primary school (this would miss an important section of Tanzania's children), annual measurement day (for two-year olds only, for example). None of these systems is perfect, all require a good training (and re-training) programme, but they could provide the basic data needed. TFNC's recent initiative, that of including a nutrition module within the Household Budget Survey is also excellent. Another important and cost-effective source of information is monitoring and evaluation systems within programmes. Most programmes will have sufficient field resources to accommodate this, and which can be used with training to collect simple anthropometric data.

There was mention of an intention to improve the growth monitoring system. This may be a useful aim, if the intention is simply to use it as a tool for the growth promotion of the young child. But as a source of information for nutrition trends it is not useful, and could in fact give a totally misleading picture. A similar comment probably applies to the community-based growth monitoring in the CSPD areas.

A final comment is needed with regard to computer, data analysis and interpretation skills within TFNC. On the whole these are very poor, leading to a lack of analytical depth in reports of nutrition situations, possibly even some erroneous conclusions. Reliance on external technical expertise is not a good compromise since non-nutritionists will have no understanding of nutrition data. TFNC should make serious efforts to develop the skills of some of its professionals at least in statistics, data analysis and interpretation, epidemiology and research design.

f) Support activities: training, research and development of IEC material

Most support activities are linked to specific programmes, and thus need no further comment here. Some IEC material and other publications are however produced outside the programmes, and are distributed widely. The range is good, and they have probably played a significant role in raising awareness on nutrition issues. What is lacking for all IEC material are good evaluations.

In addition to programme-linked training exercises, TFNC runs a six-week course once a year on the management of food and nutrition programmes at district-level. The course was developed with inputs from international experts after the findings of a needs assessment. The course teaches the basic concepts of nutrition and management skills. It seems that the course has been well received, and has also provided training to non-Tanzanians from the ECSA region. The Tanzanian clientele is largely district personnel from the Ministry of Agriculture, who have basic training in nutrition and food production. Currently approximately 50% of districts have at least one trained person. However TFNC is unable to say where exactly the trained people are, and whether in fact they are in positions where their training can be put to use. In short TFNC is not clear if the right people have been trained.

The course fees are US\$2900, and if more than 15 students enrol, the course makes a profit for TFNC. Teachers come from TFNC itself and from Muhimbili, Sokoine and other institutions. It is acknowledged that the course could be marketed better, and should be evaluated in the near future. TFNC is also designing a training package for trainers, and discussions are underway regarding the sharing of the package and the development of national courses in the ECSA region.

g) A note on gender incorporation in TFNC's programmes

By their very nature, nutrition programmes have until now been targeted primarily to women (and poor households), though mostly in their role as carers rather than specifically for their own benefit. TFNC's SIDA-funded programme on women's workload, for example, is a programme that is intended to free up time for caring responsibilities, but could also benefit the mother. No programme has been specifically targeted to men, although they have been included in focus group discussions in the community. Indeed adults, both men and women, the latter other than in their reproductive and caring roles, need attention (as do elderly people). Data gathering exercises frequently, but by no means always, disaggregate by sex.

7.2 National Nutrition Unit, Zimbabwe: analysis of programmes

Information on the nutrition situation of Zimbabwe (see Chapter 6) can be summarised as follows:

- The literature suggests that PEM was reduced during the 1980's. However data from the two DHS surveys (1988 and 1994) show that while the prevalence of stunting has declined, that of wasting has increased. Rural areas, especially commercial farms, have the highest prevalence of stunting. Zimbabwe however compares well with other countries in the region, although there are indications that the situation may have deteriorated in recent years.
- Problems of overweight also exist in Zimbabwe, especially in urban areas, where an increase in diabetes and cardiovascular disorders is also reported.
- Micronutrient deficiencies also occur in the country, although VAD is not considered to be a problem of public health significance. The prevalence of IDD was high in 20 districts and moderate in 24 in 1988, but recent studies (1993,1995) indicate that IDD has been largely eradicated in Zimbabwe. No recent data exist on the extent of anaemia, and there are reports of cases of pellagra, increasing in drought years, but also associated with alcoholism.

Major nutrition programmes of the NNU include: a) Development of a Food and Nutrition Policy and Nutritional Surveillance; b) Community-based nutrition programmes; c) Infant and young child nutrition and, d) Control of Micronutrient Deficiencies. Supporting activities undertaken include in-service training to several cadres implementing nutrition-related activities, development of IEC material and research for planning and monitoring of programmes.

a) Food and nutrition policy and nutritional surveillance

i) Policy Development

Over the years, the NNU has worked hard to set the stage for an effective multi-sectoral policy framework. It has sought and achieved the collaboration of many sectors, recognising almost since its inception that nutrition activities could never be the responsibility of any one sector. The collaboration is not limited to the national level; it extends into the districts with their multi-sectoral food and nutrition co-ordinating committees. Linked to the activities surrounding the ICN in 1992, an inter-ministerial National Food and Nutrition Committee was established in 1993. NORAD has now provided funding for the establishment and activities of a Food and Nutrition Council, to be situated in the Office of the President and headed by the current Director of NNU. Its main task will be the construction and implementation of a national food and nutrition policy.

ii) Nutritional surveillance

Nutrition surveillance in Zimbabwe is through occasional nutrition surveys, routine household surveys and the National Health Information System. A national surveillance system was set up in 1987 based on clinic-based growth monitoring. The Department of Epidemiology and Disease Control of the MoHCW compiles an annual National Health Profile, in consultation with NNU. Sentinel sites for community-based growth monitoring were established in Matabeleland and Manicaland in 1992 during the drought years, initially as a system to target and monitor the feeding programmes in severely affected provinces. Sentinel sites were established later in other provinces. Data on food availability and anthropometry are collected quarterly from randomly selected feeding points. The information is used mostly at the district-level for planning and identifying trouble spots for further investigations.

The capacity to gather and manage data has been rather limited at the NNU. The Unit has however employed several strategies to access surveillance systems and obtain data for programme activities. The Unit has participated in several national surveys as well as reviews and evaluations of ongoing programmes. It has commissioned studies to evaluate programmes such as the CSFP, to assess needs such as Primary School Nutrition and Health Assessment and the Nutrition Training Needs Assessment for training health workers. Regularly conducted surveys by other agencies or programmes including the DHS and the UNICEF Country Programme and Sentinel Surveillance for SDA Monitoring have been used for policy and programme planning. NNU has used these household surveys to determine trends and identify most vulnerable groups.

Community-based growth monitoring is still very limited in scope. Initially there was the problem of quality, but through training this is being rectified. There is delay in getting the data from sentinel points to the province to complete the analysis because the district management team is working voluntarily.

The NNU needs to extend and improve the community-based growth monitoring as a nutritional surveillance system. NHIS data is based on clinic-based growth monitoring with its inherent biases and inaccuracies. Data collected by any system should be disaggregated by gender to allow better programme selection and management.

iii) Growth monitoring

Growth Monitoring (GM) is an integral part of PHC carried out as part of maternal and child health (MCH) services at health centres and hospital out patient services in Zimbabwe. GM, mostly clinic-based, made excellent progress in the 80s. Young children with at least two weight points on their cards increased in number in the 1980s, and by 1985 three quarters of rural mothers could correctly recognise the signs of good growth on the growth curve (Tagwireyi and Greiner, 1994). Periodic evaluations of the PHC system in the 1980s and early 1990s helped to improve the GM programme. The NNU used PHC evaluations to develop tools, such as guidelines for in-service training and community providers. NNU has effectively used other surveys such as the MCH/EPI to generate information to improve training guidelines for health workers to ensure that mothers get accurate messages, adjust the frequency of weighing and make appropriate modifications to the child card (MCH/EPI Survey, 1988). There is a strong education component. Clinic-based GM where integrated with other services become more attractive to mothers: in urban areas GM coverage was 90% because children received free medical care.

More recently, community-based growth monitoring (CBGM) has begun, but the pace is very slow. Group volunteers chosen from the community provide intimate knowledge of problems in their

neighbourhood. Nutrition rehabilitation has been integrated within CBGM and a follow-up system for more severely malnourished has been identified. CBGM started as a pilot 1994 but by January 1999, only nine wards were covered. Lack of weighing scales, supplied by UNICEF, was given as the main reason and NNU did not use SIDA funds for this purpose. Other operational constraints were lack of nutritionists at district level for monitoring and co-ordinating CBGM. Mothers conducting the weighing were inadequately motivated as witnessed by the evaluation team on a field visit. Attrition rate of trained volunteers is high and has necessitated continuous training. There was no evidence that this issue was being positively addressed, and the sustainability of the programmes may be threatened.

Strategies to speed up implementation of CBGM should be a priority to NNU in view of the urgency for setting up an effective strategy for community participation in nutritional programmes. Such a strategy would be key to reducing the prevalence of malnutrition and achieving a degree of community organisation that permits community empowerment to occur. Health education messages in CBGM need to be refined targeted and improved because GM has the potential not only for education but also for targeting that education to those most in need. Operational research could be useful in this role. Discussions with communities should explore more innovative ways of motivating and retaining volunteer workers and GM should be linked with other health activities and development activities to ensure sustainability.

b) Community-based nutrition programmes

i) Community Food and Nutrition Programme (CFNP)

The programme emerged in 1989 as a modification of the the Supplementary Food Production Programme (SFPP), which itself began in 1982. The programme targets women, who are central to food production. The objective of the CFNP is to assist communities to assess and act on their food and nutrition problems. The programme was targeted to communities vulnerable to food shortages. The components of the programme were food production, the breeding of small animals and other initiatives to improve access to food. Groups were formed to enhance food production, and these have received technical and material support. More recently, a traditional approach involving all members of the community, known as the 'Zunde raMambo' (Chief's granary) has been adopted. Records are few to assess whether the programme has helped families improve their household food security, but it has been instrumental in creating awareness on the multi-sectorality of food and nutrition issues.

The process of implementing CFNP has developed useful strategies and tools for the development of sustainable programmes of food and nutrition, for example the multi-sectoral food and nutrition committees. Such links into established management structures have helped to propagate nutrition on the development agenda. Similar structures at sub-national levels have become development sub-committees and CFNP activities form an integral part of several sector plans. CFNP activities have enhanced community collective decision-making and self-reliance and revived traditional communal methods of food production and coping strategies for food insecurity in the communities.

The programme has experienced some shortcomings as well. It has focused more on food production and less on other ways of improving HFS, such as income generating activities, and food storage, processing and preservation. The community dialogue component was weak, as was monitoring. Although there was vulnerable area targeting, there was no special focus on the very poor families in the vulnerable areas.

ii) Child Supplementary Feeding Programme (CSFP)

The CSFP began in 1980/81 in response to drought. It was phased out in 1982, and replaced by the SFPP, but re-instated in 1992 on a much larger scale, again in response to drought. At its peak CSFP fed a total of 1.2 million children from 25,000 feeding centres, averted deaths and may have helped to prevent deterioration in nutrition status, though the extent could not be determined (Walker and Ncube, 1997). It has been phased out now on the recommendation of the most recent evaluation (1996/97). A system of take-home dry ration in Matebeleland North Province will be maintained. Some CSFP activity continues to exist through self-help community inputs, an initiative that should be encouraged and possibly linked to the CFNP.

c) Infant and young child feeding (IYCF)

Programme activities have been relevant to identified problems. Key activities focus on three aspects, breastfeeding, weaning and feeding. Nutrition education has been intense through IEC and sensitisation, through seminars and workshops. Programme implementation has been flexible to address new challenges, for example, implementing the Code in the face of HIV transmission through Breastfeeding. For this, voluntary counselling centres have opened in the country, which will give guidelines for formula feeding and breast milk feeding, and guidelines for staff are being developed.

A decentralisation approach has been adapted in implementing the Baby Friendly Hospital Initiative (BFHI) to speed programme implementation, given the human resource constraints. Regional assessors were trained to assess hospitals, co-ordinate and monitor the initiative in the region and ensure appropriate supervision. Programme implementation for BFHI and converting the Code into law was slow due to NNU's small staff. The Code was drafted in 1984, revised after 10 years, passed as law in 1997 and enacted in mid 1998. Of the 213 targeted hospitals, 42 hospitals are currently rated as Baby Friendly, but the Programme has not developed a mechanism for regular reassessment of hospitals.

KAP studies have been undertaken to examine weaning practices in a few districts. This has been followed by the development and promotion of improved weaning practices based on local foods. Further studies to develop area-specific recipes and educational materials are underway.

d) Micronutrient Programmes

i) Iodine Deficiency Disorders (IDD)

The IDD national control programme offers the best example of a co-ordinated programme implemented by the NNU, with well-developed sub-national multi-sectoral network to implement the programme. An inter-ministerial National Committee for the Control of IDD (NCCIDD) has been entrusted with planning, guiding and overseeing the implementation since 1989 with NNU as its Secretariat. The private sector has been tapped to speed up salt distribution, ensure a steady flow, and stabilise the price of salt. The monitoring system has been integrated with the Social Dimensions of Adjustment (SDA) annual surveys.

The national IDD control programme was initiated in 1989. Its objectives were to achieve universal salt iodisation and the virtual elimination of IDD. Initially iodised oil capsules (IOC) were distributed in one district. However, owing to early introduction of iodised salt (1992), IOC distribution was stopped.

Zimbabwe does not produce salt. Most of its salt is imported from one Soda Ash plant in Botswana, and iodisation is done there. Zimbabwe enacted legislation on the use of iodised salt in 1995, and negotiated with the plant in Botswana to secure compliance with its national standard (30-90 ppm). The programme has made impressive progress and is almost at the stage of achieving its objectives. The process has been facilitated by the importation of salt produced by one factory, good management, and systematic and regular monitoring.

ii) Other Micronutrient Control Programmes

The finding that 90% of pregnant women were anaemic has led to a 4-week prophylactic iron and folic acid supplementation programme, and the supplement is part of the Essential Drug Programme. Monitoring of cases in district hospitals was initiated and a national baseline survey to determine the nature and scope of these deficiencies will soon be done. Vitamin A capsules were also included in the Essential Drug Programme to be given to children through disease. Some food companies carry out voluntary fortification of maize with Vitamin A and iron, the fortified maize reaching only the urban population.

The country needs an accurate assessment of the extent and nature of nutritional anaemia and Vitamin A deficiency and some effort should be taken to quantify the problem of pellagra in the country.

e) Support activities: training, research and development of IEC material

i) Nutrition Education and Training

A number of in-service training activities have been implemented led by NNU. NNU commissioned a Nutrition Training Needs Assessment (Ogle, 1993) to strengthen in-service training for field staff, develop more long-term training strategies to improve staff competence and overcome shortage of manpower. The Department of MCH has developed a Nutrition Guidelines Manual for Clinic Staff for Nutrition Education (MoHCW, 1995). Refresher courses were conducted to strengthen the nutrition competence of different members of the health teams in institutions, provinces and districts and for cadres from other sectors involved in nutrition work. Staff of the NNU regularly lecture on nutrition topics in many basic and post-basic courses. In-service training curricula for many professional cadres involved in the implementation of nutrition relevant programmes have been reviewed and strengthened and a nutrition component was included Agritex training. Vocational professional training is offered to several cadres implementing nutrition programmes and village health workers. A 'pyramidal training' is organised for provincial and district officials at the national level, who in turn organise similar training within their districts.

ii) IEC Programme

NNU collaborates closely with the Health Education Unit in the development of IEC material, and is responsible for the distribution of the material. The IEC co-ordinator reported that IEC materials have been produced on all components. IEC activities have been used in several programmes to introduce new concepts at all levels and in efforts to change nutrition practices and behaviour. Pamphlets and posters on breastfeeding are produced in the two common local languages and English. IEC messages are delivered from training sessions and World Breastfeeding Week activities. Printed IEC material is produced, generally through the Government Printer, but the production process is lengthy, delays common, but quality good. SIDA funding has been used to support printing IEC materials outside government. The usefulness of material has not been evaluated, beyond occasional checks during field visits. NNU has no library; NGOs and students from teacher colleges use available reading material at the Unit.

IEC activities have lagged behind; funding is not a constraint but capacities are inadequate at national and sub-national. IEC should be put higher on the NNU's priorities, IEC documentation strengthened at national level and more skills developed to identify, design, produce, distribute and evaluate IEC materials. The IEC strategy of decentralisation to provinces and districts is underway but needs strengthening.

iii) Research at NNU

There has been little emphasis on research. Research conducted has been mostly baseline and KAP studies for programme design. The NNU rarely contracts out research projects because it is not common government practice, though needs assessment and evaluations have been commissioned out using SIDA funds. There is no mechanism for quality control, national research bodies dealing with the registration of research projects only. Research accomplishments are in IDD-related studies (Baseline Survey of in 1988), and studies on breastfeeding, BFHI, Vitamin A and Iron Deficiency and anaemia.

Research capacity in the Unit is inadequate; most basic training does not expose staff to research or when it does research training tends to be theoretical. Post basic training may offer the development of research skills but few individual staff members have benefited in this way. The Blair Institute has a research mandate for the health sector but it does not address the research needs of MoHCW. The NNU's efforts to work with the University have not met with success, perhaps owing to heavy workloads or conflicting roles and priorities. According to the University sources, NNU has not tapped them as often as they should as a source of data or research expertise.

The NNU could strengthen its capacities for programme design and implementation by using the research resources of the country, in particular the University, in the same manner they have achieved inter-sectoral planning. A quality control mechanism should be set up in the Unit and research documentation and dissemination should be strengthened. The Institute of Nutrition, Food Science and Family Sciences at the University of Zimbabwe felt it could contribute to the monitoring and evaluation of food and nutrition programmes.

f) Gender Incorporation in Programmes

The NNU has not consciously addressed gender in programme design and implementation, but has always focused on vulnerable groups, the women and children. A few staff members have been trained at a regional workshop and a gender-planning meeting has developed a training module for staff. Gender is a new concept at the NNU and the Unit hopes to recruit gender-trained personnel. Food and nutrition roles at the grass root are traditionally women's roles in Zimbabwe and programmes developed have thus focused on women. Food and Nutrition committees throughout the country are three quarters women.

Data sets from MCH surveys and CBGM are not analysed for gender. FAO has recommended that NHIS data be gender disaggregated. Agritex has a pilot gender project in 8 districts, a 3 day training for creating gender awareness among rural extension workers. So far it has proven useful for sensitising providers about the importance of easing women's heavy workload and will support the food and nutrition management teams in their work. NNU did not collaborate with Agritex on these issues.

Gender should be incorporated more deliberately in NNU programmes, to examine the role of men, for example in the Zunde project, women's work load and especially on the commercial farms, where no time may be allowed to feed babies on demand, and in the decision-making process at household level.

7.3 A comparison of nutrition activities of TFNC and NNU

TFNC has a primary responsibility for advocacy, policy development, training, promotion, and operational research in the area of food and nutrition. It is also expected to undertake analyses of the food and nutrition situation of the country. It provides advisory and laboratory services as and when requested by government departments. It has neither the field presence nor the mandate to implement full-scale national programmes. Rather it is expected to undertake pilot projects, to assess their impact, and to collaborate with appropriate governmental, non-governmental and private sector partners in the implementation of national programmes. Its role in national programmes is generally to provide technical advice and training, to develop IEC material and to meet any research needs as they arise. It is likely too that TFNC should have a major role in the monitoring and evaluation of national programmes, but this does not seem to be clearly articulated. And indeed, adequate monitoring and evaluation is often lacking, or at least badly under-funded.

This modus operandi has not been without its problems. Persuading government ministries to address nutrition issues has not always been easy, especially when it has involved the use of the ministries' resources. In some cases, such as perhaps the IDD and the Vitamin A programmes, TFNC has in fact assumed somewhat of an operational role. If indeed TFNC is supposed to monitor the progress of the programme, it needs resources at the regional or district levels, or the ability to call upon the resources of government at these levels.

Tanzania has undertaken decentralisation, and districts are now semi-autonomous. Donors too now go straight to the district to carry out projects and programmes. For example, 80% of UNICEF's funding goes directly to the district. Since TFNC has no human resources available at the regional and district levels, and a limited mechanism for linking to districts, it is increasingly likely to be bypassed. These are issues that relate across the board to all areas of TFNC's activities.

The activities undertaken over the years by TFNC to reduce PEM in young children have been very much in line with the perception of nutrition problems and solutions of the time. The shift from curative approaches to preventive ones, either through technology or through the primary health care system, has been seen in many countries. TFNC activities have also been in line with the political ideology of the country. PEM is so intimately linked to poverty and level of development that successes are hard to come by when the country's economy is stagnating or deteriorating. In the face of this, it is easier to turn to the 'quick fixes' offered by micronutrient supplementation programmes. This is indeed what many UN and other funding agencies have done. Not surprisingly, national institutions or government departments have been compelled to abandon or reduce efforts to tackle PEM, and move into micronutrient programmes that were more fundable. TFNC's own priorities, reflecting the main nutrition problems of the country, are indeed well laid out in their Plan of Operations, but since only some of the projects are funded, their effective Plan of Operations can become a reflection of donor priorities. SIDA is to be commended for placing few restrictions on the use of its funds.

While there is no evidence to suggest an improvement in levels of PEM (except perhaps a slight decrease in the prevalence of stunting), there seems not to have been an actual deterioration. It is important to place this finding in a regional context: WHO estimates that in the period 1975-95, the prevalence of both underweight and stunting actually rose in Africa (unlike in other regions). Thus Tanzania's performance could in fact be a success story for the region.

Nonetheless, it is clear that a serious problem of PEM persists. This should not be ignored to accommodate donor priorities. These are moreover likely to change (and may already be doing so). There is increasing recognition that gains from externally funded micronutrient programmes (such as supplementation or fortification) are generally unsustainable.

NNU has a clear mandate for the development and implementation of national programmes to improve the nutritional status of Zimbabwe's population. Its field presence was established very soon after the Unit was formed, when faced with the need to respond to severe drought. It did so in a commendable fashion, organising the procurement and distribution of food aid rapidly and efficiently, thus saving thousands of lives. This achievement laid the foundations for its future field operations.

Although there are few trained nutritionists in NNU, when compared to TFNC, its mode of operation through inter-sectoral collaboration at all levels has enabled it to have an impact on reducing PEM (maybe slightly reversed recently), and to contain the negative impact of the country's economic problems. Inevitably, however, some areas, such as research and addressing malnutrition in groups other than young children, have been neglected. Moreover, targeting and monitoring were not always adequate, and the cost-effectiveness of some of NNU's large-scale operations has been questioned.

NNU has now established district-level co-ordinating mechanisms engaged in food and nutrition activities. These can be strengthened and used as vehicles for the implementation of other activities, such as improving weaning practices and community-based growth monitoring, which would benefit from greater attention in the future. NNU has also been working slowly but steadily towards the formulation of a national food and nutrition policy. The planned establishment of the multi-sectoral Food and Nutrition Council in the Office of the President will promote policy work. If successful, it will raise the profile of nutrition in the country, and serve to formalise the current inter-sectoral collaborative arrangements. Wisely, however, NNU will not be dismantling any of its current co-ordinating structures, which will continue to focus on the initiation and implementation of national programmes.

Our summary conclusions on the nutrition activities of TFNC and NNU are as follows:

Protein energy malnutrition: In the past, TFNC has undertaken some good work on weaning foods, although somewhat fragmented and not properly evaluated to discover reasons for poor uptake by mothers and their children. Their inputs to breastfeeding promotion and the creation of baby friendly hospitals have been good. Other than these activities (breastfeeding promotion and the BFHI), PEM is largely neglected. NNU has also made strong efforts to address breastfeeding and the BFHI, but work on improving weaning foods is limited. PEM receives continued but variable attention: the CFNP is likely to have a positive impact on the nutritional status of young children.

Iodine Deficiency Disorders: The programme initiated by TFNC was well thought through, and there were significant early achievements. However, quality control has not been maintained and serious logistical problems have arisen. Unless these are resolved soon early gains will be lost. NNU's IDD programme has been generally good. It should be noted however that the situations in the two countries differ dramatically: Tanzania must work with all its salt producers to fortify salt and monitor quality. This requires the import and distribution of equipment and fortificant. Enforcing legislation on fortification is not easy in a large rural country like Tanzania with poor communication. Zimbabwe on the other hand imports all its salt, in iodised form. Monitoring can take place at ports of entry.

Vitamin A Deficiency: TFNC has made an excellent start to tackling this problem. It has been proactive in seeking funding. TFNC has taken a multi-pronged approach, beginning work on long-term solutions at the same time as starting short-term measures. Sadly, the process has been a long one, and funding from at least one major funder has now ended. Continuity of the programme is in question. Zimbabwe claims its VAD problem is not of public health significance, and thus limits its activities to a disease-targeted supplementation programme. We feel that the extent of the problem may not have been fully investigated.

Nutritional anaemia: TFNC's efforts in this area have been limited, possibly by lack of adequate funding. A basic monitoring system is in place. The NNU has made no real efforts to address anaemia, nor yet to assess the extent of the problem

Monitoring nutrition trends: Until recently, TFNC had made almost no efforts to establish any form of nutritional surveillance. The inclusion of the nutrition module in the national household budget survey is a major step forward. Clinic-based growth monitoring is very poor, and community-based growth monitoring (linked to the CSPD programme) is variable at best. NNU has made some efforts on surveillance, namely the establishment of sentinel sites. As in Tanzania, clinic-based growth monitoring is poor. A start has been made in establishing community-based monitoring, but progress has been slow. There is no serious monitoring and evaluation of programmes in either country.

Policy formulation: TFNC has had a long and close involvement (largely as the initiator) with policy construction, culminating in 1991 with a multi-sectoral policy passed by government. It is yet to be seen whether the existence of the policy will improve the status accorded nutrition by the relevant sectors. NNU's policy activities began more recently. It is anticipated that they will move forward rapidly now, with the formation of the Food and Nutrition Council.

IEC material, training, research: Production of IEC material has been high in both organisations, especially TFNC, but in neither country is there any effort to evaluate the products, or monitor distribution. TFNC has played a very important role in training in Tanzania, and has conducted considerable research. NNU too has provided a great deal of relevant training, but its research output is very limited.

Gender consideration in programming: Neither organisation has seriously considered gender in the selection and design of its programmes. Women only are included in their reproductive and caring roles. There is however a higher level of gender awareness in NNU.

8. The sustainability of TFNC and NNU

In this chapter we shall discuss the prospects for sustainability. Using a SWOT analysis we examine the strengths and weaknesses of TFNC and NNU, as well as the threats and opportunities they face in the foreseeable future.

In a previous chapter we tried to assess how far both organisations had come in terms of establishing themselves as strong organisations able to meet any future challenges they face. In this chapter we carry this discussion a little further. What are the specific strengths and weaknesses of TFNC and NNU? What opportunities do they have and what are the possible threats they may face in the future. From a method point of view we used the SWOT analytical format to structure our discussion⁴. We would like to emphasise that although we use a comparative approach, there is no attempt to rank. The history of the two organisations is quite different, as are their present national contexts, for any such attempt to be meaningful.

The first variable is strength. In Figure 8.1 below we have summarised the main features, which we think, give the respective organisations their current strength.

Figure 8.1 Strengths

TFNC	NNU
Human resources 1) Large professional and well-qualified staff 2) Leadership concerned about sustainability 3) Reasonable research capacity 4) Fair consideration of staff development Institutional profile 1) Reasonably strong national profile 2) Established international reputation. Ability to attract research collaboration and funds 3) Strong regional role Mode of operation 1) Semi-autonomous status within Government 2) Good experience with pilot programmes 3) Experience from conducting programme specific surveys	Human resources 1) Committed, active staff and adequately trained 2) Strong leadership with a good international reputation 3) Fair consideration of staff development Institutional profile 1) Strong national profile (focused on leadership). 2) Leadership internationally well known. Ability to attract funding for operations. Mode of operation 1) Strong field experience 2) Embedded in government structure 3) Links to all administrative levels 4) Access to MoH staff at all levels 5) Good vertical communication

In terms of human resources, TFNC and NNU are well equipped. Both possess, although there is a significant difference in size, a professional and well-qualified staff. Traditionally the staff has always been quite committed to the mandate of the organisation. We feel though that there are signs of weakening staff commitment in TFNC, mainly due to perceptions of a difficult future. For NNU this is less the case, although the uncertainty about what will happen to NNU after the formation of the Food and Nutrition Council can create some nervousness at the central level.

⁴ SWOT stands for “Strength, Weakness, Opportunities and Threats”.

TFNC has a research capacity, which NNU, partly due to its small size, does not possess. NNU has a strong leadership, with a good international reputation. TFNC has a well-qualified management staff, which is particularly concerned about sustainability issues. In both organisations, staff development is a prioritised area.

TFNC is today an internationally renowned organisation. This has given the organisation a good opportunity to attract research collaboration as well as funding. The NNU is perhaps less known internationally as an organisation, though its Director is an internationally well known nutritionist. In Zimbabwe, NNU has managed to establish a strong profile for itself. Again the dynamism of the leadership plays a significant role in establishing the NNU on the national arena.

In terms of mode of operation there are differences between the organisations. NNU is a part of the Ministry of Health, while TFNC has a semi-autonomous status within the Government structure. Both forms have their advantages. Being embedded in the government structure has given the NNU direct access to an implementing organisation. Being somewhat autonomous certainly means much more freedom in terms of organisational decision-making. NNU has a strong field presence where it is making use of the existing Government structures to run regular programmes. TFNC has good experience from pilot programmes, as well as from conducting programme specific surveys. The latter is explained by TFNC's capacity for applied research.

Let us then turn to what we have perceived as the major weaknesses of the organisations.

Figure 8.2 Weaknesses

TFNC	NNU
Human resources 1. Centralised staff 2. Limited operational capacity, particularly at field level 3. Desk-bound professionals 4. Limited data analysis skills Mode of operation 1. Totally dependent on other actors for operational action 2. Uncertainty and lack of clarity vis a vis operational role 3. No systematic national surveillance data collection and management. 4. Poor monitoring and evaluation of nutrition status and effects. 5. Difficulties in sustaining quality of programmes, e.g. IDD 6. Organisational restructuring difficult because of semi-public status	Human resources 1. Few and overworked staff members 2. Poor time management ability 3. Vacant professional posts 4. Limited data analysis skills Mode of operation 1. A succession problem may arise when the present Director leaves. 2. Emphasis on large-scale, costly, unsustainable programmes, e.g. supplementary feeding programme 2. Failure to sustain quality of some programmes, e.g. supplementary feeding, growth monitoring 3. Poor monitoring and evaluation 4. There could be better collaboration with the University

In Figure 8.2 we have listed a number of weaknesses, which we think need to be considered if the organisations are to develop further. If TFNC and NNU shared some similar strength, they differ greatly when it comes to weaknesses.

Looking at human resources, TFNC's major weakness is the limited field presence. The staff is centralised in Dar es Salaam. The professionals appear as rather deskbound, although this has not

always been the case. NNU, on the other hand, has a staff that is not very deskbound and has quite an active field presence. The problem is rather that they are overworked. To a large extent this reflects the fact that they are very few. We also suspect that there would be room for some management skills upgrading.

Their respective mode of operation carries with it both strengths and weaknesses. The major problem with respect to TFNC is that it is totally dependent on other actors for operational action. Furthermore, the semi-autonomous status is a blessing in disguise. It imposes significant restrictions to organisational change and restructuring. NNU, on the other hand, has to deal with a different set of weaknesses. First of all, the Unit is dependent on its strong leader. When the present Director leaves to take up a position at the newly established FNC there might be a succession problem, which may paralyse the organisation for some time, although we received assurances to the contrary. In terms of programme activities, the emphasis on large-scale, costly programmes such as the supplementary feeding should be reduced. Common to both organisations is that they have a poor monitoring and evaluation function. There is little by way of systematic analysis of the status of nutrition and the impact of various programmes.

There are also opportunities to be exploited.

Figure 8.3 Opportunities

TFNC	NNU
1. Decentralisation of TFNC improves field coverage, which increases relevance of TFNC 2. Link more closely with national or regional programmes (such as UNICEF's CSPD), to establish a field presence. 3. Internal restructuring can lead to a more focused strategy with clear key areas. 4. Collaboration with national and international research institutions.	1. Successful Food and Nutrition Council (FNC) increases the relevance of nutrition. Hence easier to co-operate with all stakeholders 2. Donors are willing to provide assistance to a successful FNC 3. Collaboration with the Institute of Food Nutrition and Family Studies (IFNFS) 4. Utilisation of traditional practices, e.g. Zunde raMambo 5. Established framework for drought response can be used for other programmes of a development nature 6. Tap into the national poverty alleviation plan and similar opportunities

For TFNC it is a matter of increasing its field coverage. This would in one stroke add significantly to the relevance of TFNC in the eyes of the public. There is otherwise an imminent danger that TFNC becomes portrayed as a research oriented organisation working on policy and planning issues in Dar es Salaam. TFNC is largely the same organisation as in 1974. It has not really changed in order to adapt to new circumstances. Still, an internal restructuring aiming at a more focussed strategy with clear key areas could offer a lot of opportunities for the organisation. Finally, TFNC has an international network that most probably could be exploited much more to result in concrete collaborative projects.

If the new Food and Nutrition Council in Zimbabwe becomes a success, it will elevate nutrition issues even further on the national agenda. This will most likely have a positive impact on the NNU and its activities. Among other things, donors would be interested in offering assistance to a successful FNC. Instead of continuing with costly large-scale projects, NNU should continue its

utilisation of traditional local food security practices. It offers an excellent opportunity to reach down into the districts. Zunde raMambo is a good example of how traditional food security practices can be combined with nutritional work.

What are the threats facing the two organisations? In Figure 8.4 we have listed what we have observed during our study of TFNC and NNU.

Figure 8.4 Threats

TFNC	NNU
1. Lack of alternative strategy in the wake of withdrawal of Sida and other donor funds 2. Loss of qualified staff because of low salaries and low morale 3. Failure of business ventures lead to further donor dependence, or close-down 4. Influence of UNICEF limits the possibilities to a long-term perspective due to the campaign nature of UNICEF's work 5. Decentralisation of public sector can lead to marginalisation, if TFNC do not follow suit.	1. Loss of leadership to FNC might weaken the NNU 2. Loss of other staff 3. NNU's role unclear within the new "Council" structure 4. Failure of FNC might discredit the multi-sectoral nutrition approach 5. Loss/freezing of posts due to Government action to comply with structural adjustment 6. Scaling down of some programmes due to loss of Sida funds, especially capacity building

Unless TFNC manages to develop a new strategy that takes into account the diminishing donor funds, 25 years of institution building will soon be lost. The effects of such a failure will be a loss of good staff and generally low morale among those who stay behind. The planned business ventures are somewhat outside the professional competence of TFNC. Hence, there is a great risk of failure, which may quickly erode the financial strength of the organisation. Part of a future strategy must be to secure long-term programme commitment from external funders. If TFNC is forced into a situation where it will have to adapt to the short-term "campaign" nature of some donors, it will be difficult to maintain its own strategic agenda.

In conclusion, the factors determining sustainability of TFNC are largely internal to the organisation.

For the NNU the threats are of a different nature. First of all, the new structure for nutrition work that is now being established has not yet defined a clear role for the NNU. Failure to do so might lead to a marginalisation of NNU and hence a loss of qualified staff. If FNC fails, it might very well be that the whole idea of a multi-sectoral approach to nutrition becomes discredited. Each actor will then withdraw to his or her own territory. This will reflect upon NNU since it is associated with establishing it and derives much of its present strength from being recognised as a lead agency in the field of food and nutrition.

In sum, the future of NNU depends a lot on circumstances outside the organisation itself.

9. Conclusions and Recommendations

This evaluation has focussed on the effectiveness of institution building. It is now time to summarise the results from our study. We shall do this by returning to the Terms of Reference and the two key questions guiding our study.

- What is the institutional capacity at TFNC and NNU and what is their basis for continuing effective activities after the phasing out of Sida funding?

Both organisations have, in terms of human development, developed a considerable capacity. From this perspective only, they should be able to look at the future with a lot of confidence. There are, however, other factors that need to be taken into account when making such a prediction. Both organisations have reached a stage where they have the capacity to produce their services on a regular basis, and with quality. They differ, however, in the extent to which the management has full control over all aspects of the organisation. We have judged NNU as somewhat better placed in this regard, mainly since it has a better control over available government budget resources. Furthermore, the GOZ is providing much more in terms of resources for programme activities than the GOT. This obviously enables the NNU to deal more effectively with changes in donor financing.

The NNU is fully integrated into the Ministry of Health. Within this context, with all its limitations, the NNU has managed to play a central role in changing the whole organisational context for food and nutrition work in the country. The formation of a new body, the Food and Nutrition Council, should, however, enable greater independence and flexibility in terms of organisational change. What this might entail for the NNU is difficult to say, but for nutrition work in Zimbabwe it contains many possibilities. The change process that has taken place in Zimbabwe in this area is quite impressive and promising for the future.

TFNC, on the other hand, has a semi-autonomous status from the Government giving it some freedom to control its resources. The arrangement is, however, a half-measure, as it does not allow full control over the available budget resources. As matters stand at the moment, there is little to expect in terms of change and adaptation at TFNC. In terms of organisational structure, little has changed since 1973. TFNC is still the same, even though its external context has changed dramatically. There has been no response to the decentralisation strategy in Tanzania, and TFNC's field presence remains insignificant. Internally, TFNC is spending a comparatively large proportion of its resources on administration and Food Science and a laboratory. Comparatively less is allocated to departments with a stronger field orientation.

It is very unfortunate that there seems to be very little creative thinking on how to change and adapt to a situation where the role of the state, and the development philosophy of Tanzania, has changed dramatically.

- How have the form, modalities, scope and size of Sida co-operation helped TFNC's and NNU's activities, research/development within their respective national government systems?

There is no doubt that Sida's support, and the way it was administered, has been crucial, and successful, in building technical capacities in nutrition. It has also been instrumental in helping Zimbabwe and Tanzania to set up national programmes. From the perspective of long-term sustainability, Sida's support has not been very effective. The major reason for this is that it is largely beyond the control of Sida, or any other donor, to address the factors critical for sustainability.

Sustainability is much more determined by factors found within the two organisations and their national environments, for example, trimming the organisation and providing a framework for them to operate within. These are factors that Sida can do little about.

Still, it should be noted that little thought has gone into the issue of sustainability. Sida's support has been almost entirely focused on human development and programme activities. There seems to have been a strong belief in well-trained individuals as the main basis for creating a sustainable organisation. The institutional collaboration, initiated by Sida, has not contributed towards strengthening the organisations. It has been a framework for inter-personal exchange between researchers. We would venture as far as saying that Sida, and ICH, have almost totally disregarded the broader organisational issues necessary for sustainability. Furthermore, the way Sida decided to withdraw its support is a good example of the lack of understanding of what institution building requires to be effective.

Our first set of recommendations are directed to Sida:

1. TFNC and NNU currently possess a considerable capacity in terms of human capacity and experience. Sida should change its relationship to both organisations from that of a funder to that of a client. None of them should be seen as a subject receiving assistance. The phase of institution building is now over. Rather, they form an important resource which could be used for implementing programmes and other activities in Tanzania and Zimbabwe. Simply speaking, TFNC and NNU should be considered as one of many consultancy organisations whose services Sida is buying.
2. There are good reasons for Sida to consider this option. First, there is a need to give the country programmes, particularly in Tanzania, a stronger poverty profile. Second, nutrition is an area which directly concerns the target group for Swedish development co-operation – poor women and children. Thus, nutrition is not a matter of health, it is a matter of poverty reduction. Furthermore, nutrition work in both countries is still in need of strengthening.
3. There is a need for “inter-sectoral”, and even “intra-departmental”, co-operation within Sida. The Health unit has managed the support to TFNC and NNU. Naturally, this implies that health issues have been in the forefront when thinking about the orientation of institution building. The experience from departments and units, with a specific expertise on institution building, could have been helpful in bringing in a different perspective on the process of building sustainable organisations.
4. We recommend that the process of phasing-out should be planned already from the beginning of an institution building project. Furthermore, such a decision should be based on a careful analysis of the situation of the organisation and the prospects for sustainability. It is not very helpful to the organisation to phase out with reference to internal Sida administrative reasons.

Our second set of recommendations concern the NNU:

1. The NHIS need to desegregate data to reflect school age categories and not group together all children above 5 years. The National Food and Nutrition Policy should include concerns of schoolchildren. There has to be some deliberate efforts to target the under-five programmes to more vulnerable geographical areas and populations groups, so as to consolidate impact and rationalise the use of ever-diminishing resources. More epidemiological data on nutritional status among adults (including the elderly), particularly women during times of rapid tissue change such as pregnancy or lactation is needed to estimate the extent of malnutrition in this group. A related issue is the need to incorporate good monitoring and evaluation systems within NNU's programmes.

2. The continued presence of a well-trained, committed core staff in the Ministry of Health is needed, to define its role vis a vis the FNC and decentralisation of social services in the country. The sub-national human resources need to be specifically addressed to have professionally trained nutritionists in all provinces and adequately trained nutrition co-ordinators in districts, for a more smooth and systematic decentralised programme implementation and monitoring.
3. Care-giving aspects of food and nutrition have to be addressed. Findings of the infant feeding study in Makoni suggested mothers have time constraints. Improvements of women's nutrition should also be through the introduction of appropriate technologies to reduce energy expenditure while improving their productivity.
4. Operational research should be used to improve the effectiveness of existing programmes by examining processes, identifying problems and designing and testing feasibility and sustainability of alternative solutions.
5. The opportunity for Zimbabwe to continue to attract donor funding for development should be optimally utilised to improve food nutrition programmes. A number of NGO's support nutritional projects in provinces and the proposed Food and Nutrition Council (FNC) is going to be funded by the NORAD. The major challenge to the FNC will be establishing effective co-ordination and pushing forward a nationally driven agenda.
6. NNU needs to address the gender imbalance in its staff . There is a need to involve more men in the organisation. Efforts should also continue to ensure that programmes should consider the needs of not only women and children, but also men.

Our third set of recommendations concern the TFNC:

1. The TFNC needs to develop an organisational strategy that takes as its point of departure the expertise and competence of the organisation, rather than linking its future existence to uncertain business ventures.
2. There is a need to renegotiate TFNC's status as a para-statal in order to give the management more control over the organisation.
3. TFNC needs to consider very seriously internal re-organisation of professional, technical and administrative staff to better reflect programmes priorities, responsibilities and workload. This may involve some re-training of staff, or the recruitment of new skills in place of ones that are over-represented for present priorities.
4. The question of Tanzania's process of decentralisation needs serious attention. TFNC should consider how it can have a presence at the sub-national level. One possibility is the out-posting of technical and professional staff to the regional level. This is a fairly drastic measure, and indeed may prove unsuccessful since a lot of decision-making is happening at the district level. Another alternative is to link out-posting to pilot activities of TFNC, namely to have staff based in the region and/or districts where pilot activities are in progress.
5. Related also to Tanzania's decentralisation programme is the issue of TFNC's mandate. TFNC should re-examine its mandate with a view to including an implementation component. Simply put, TFNC should consider playing a more important role, perhaps even a leading role, in the implementation of national nutrition programmes.
6. Expertise in data handling, analysis and interpretation is lacking in TFNC. This deficiency leads to difficulties in describing and understanding nutrition trends in Tanzania, a key requirement for successful advocacy, as well as planning. We recommend that staff at TFNC acquire these skills, and the necessary computer hardware and software. TFNC should also make efforts to ensure that all national nutrition programmes include a strong monitoring and evaluation system.

7. Efforts to secure national and international consultancies should continue. It should be accompanied by efforts to improve report-writing skills, and to develop computer-literacy among all professional and technical staff. However, the consultancy policy needs to be re-examined; a policy is needed such that the organisation benefits to a larger extent than at present from consultancies (which are likely to be limited to a few individuals).
8. Every effort needs to be made to improve the IDD programme, so as not to lose the gains of the past few years. Efforts to secure funding for the Vitamin A programme should continue. At the same time, TFNC should consider how it can address the persistent problem of PEM. One possibility is to become more involved with UNICEF's CSPD programme, possibly in a limited number of districts, to pilot activities that address malnutrition in a more aggressive fashion.
9. TFNC needs to address the gender imbalance in its staff . Women should be offered opportunities for training when they arise. The staff should be exposed to gender issues, possibly through an awareness-raising workshop. Efforts should continue to ensure that programmes should consider the needs of not only women and children, but also men.

10. Lessons learned

What are the lessons learned from these examples of nutrition work and organisation development sponsored by development aid? The lessons learned can conveniently be placed in four different groups:

1. The effectiveness of institutional co-operation.
2. Sida's co-operation strategy
3. The danger of aid dependency.
4. Working with nutrition

1. The effectiveness of institutional co-operation

- The mode of institutional collaboration has in both cases been characterised by a rather informal personal interaction. This has allowed for a flexibility that has been well suited to the circumstances of both organisations. Still, another approach, which more systematically worked with all parts of the organisation, would most likely have led to a stronger impact.
- The thrust of the institutional collaboration has been on technical issues and the building of a capable staff. Both are important aspects of institution building. Still, the long-term sustainability of both NNU and TFNC would have required an equally strong emphasis on organisational issues. Support to sustainable institution building needs to pay much more attention to the difficult art of initiating and managing processes of organisational change.
- The supported organisation should preferably have an independent status, i.e. the management should be in full control of all aspects of the organisation. Being subordinated and included in a government structure does not facilitate the necessary processes of change and adaptation to new external circumstances.

2. Sida's co-operation policy

- Swedish aid policy needs to pay much more attention to the issue of sustainability. Such concerns need to be incorporated very early into the appraisal of project proposals. Tanzania is a good example. When the support to TFNC started in the early 1970's development optimism prevailed and the support was designed accordingly. No one ever considered the possibility that development could go wrong in Tanzania and that TFNC would continue to need donor support for a prolonged period. These two events are closely linked.
- Any decision to phase out from an institution building project needs to be properly planned already from the start of a project. The institution building strategy should focus its strategy on that particular point in time and design its activities accordingly. A decision to phase out cannot come as an add-on rather unrelated to the thrust and focus of the institution building strategy.
- Sida should be commended for its stamina and long-term perspective. The period of support given to both organisations may seem excessively long. Still, this is the time perspective required to build a cadre of professionals that can form the backbone of an organisation. It is also the time perspective required to develop programme activities that are both efficient and effective.

- Equally valuable has been Sida's "hands off" approach, i.e. not interfering in the organisation's priority setting. Sida has refrained from pushing its own agenda and has also resisted the temptation of launching "campaigns" according to what is currently fashionable. Taken together this has allowed for the two organisations to develop their own programmes according to national needs.
- The case of nutrition demonstrates that there is a need for organisational re-thinking within donor agencies to catch up with an increasingly complex reality. For most donors, the sector is a major organising principle. Nutrition is an area that demonstrates how incorrect it is to talk in terms of sectors. In both Tanzania and Zimbabwe it is clearly understood that nutrition is a multi-sector issue. They have also organised themselves accordingly.

3. The danger of aid dependency

- Financial sustainability appears as a very relevant concept for both TFNC and NNU. It should be put on par with technical or professional sustainability when designing institution-building projects of this kind.
- Neither Tanzania nor Zimbabwe can afford to maintain the requirements of nutrition work in terms of organisational capacities, equipment and supplies. Dependence on external funds is more or less unavoidable. This poses a dilemma for donors if they maintain that they can never contribute to meeting the current costs of organisations such as TFNC and NNU. This policy position will effectively mean that very few of the human needs in these countries can be addressed. The host governments only have the resources to finance the most basic of public services. The current cost issue needs to be tackled very early on in a development co-operation project.
- The strength of an organisation depends very much on the independence and freedom it has to develop its own strategy and core set of activities. External funders should as far as possible avoid short-term "campaigns" and instead offer core budget support to the organisation.

4. Working with nutrition

- Nutrition work requires extensive experience from field operations. A nutrition organisation cannot limit itself to issues of policy, planning, advocacy and training, unless there is also has a strong implementing body it can collaborate with. Alternatively, the organisation itself has to have a presence in the field to be able to work effectively. The usefulness of having direct access to a structure for implementing nutrition work is demonstrated by the case of the NNU.
- Advocacy and awareness making is made much more effective if one uses local, traditional practices. The concept of "Zunde raMambo" in Zimbabwe is one good example. The use of local food recipes is another.
- Food security and nutrition are multi-sectoral issues. The experiences of both Tanzania and Zimbabwe show how important it is to create such awareness among decision-makers and extension workers.
- When programme operational strategies have been varied and flexible, some times combined with each other, they have achieved good results.

- Programmes must be based on local information about the nature of the problem and the feasibility of alternative solutions. The solution must be carefully designed to meet the needs of the target population and to accommodate the resource constraints backed by a local data collection effort.
- It is not always possible to design interventions that target the poor directly. This can lead to lack of participation of the poor. Geographical targeting may often lead to fewer conflicts at the local level.
- Effective nutrition work requires a feedback on what works and what does not work in the field. Functional evaluation and monitoring systems are indispensable components of a nutrition strategy.

List of References

- ACC/SCN (1997) Third Report on the World Nutrition Situation. ACC/SCN: Geneva.
- Agreement between the Ministry of Health and Child Welfare and the University of Uppsala, 1992/93.
- Agreed Minutes for the joint Sida/TFNC annual review meeting, 16 March, 1995
- Agreed Minutes for the joint Sida/TFNC annual review meeting, 19 June, 1996.
- Agreed Minutes for the joint Sida/TFNC annual review meeting, 17-20 January, 1998.
- Andersson, G. (1997) Capacity building, institutional crises and the issue of recurrent costs. The micro perspective. Report to the Ministry for Foreign Affairs, February.
- Burgess, L., et.al. (1986) Tanzania Food and Nutrition Centre. A joint TFNC/Sida evaluation. Sida:Stockholm
- Carlsson, J. (1998), Swedish Aid for Poverty Reduction: A history of policy and practice. Working Paper 107. ODI: London.
- Chilima, D.M and Ismail, S.J. (1998) Anthropometric Characteristics of Older People in Rural Malawi. European Journal of Clinical Nutrition 52: 643-649.
- Demographic Health Surveys (DHS). (1989). Zimbabwe Demographic Health Survey 1988. Central Statistical Office and IRD/Macro Systems Inc: Columbia, Maryland:
- DHS (1995) Zimbabwe Demographic Health Survey 1994. Central Statistical Office and Macro International Inc: Calverton, Maryland.
- DHS (1996) Nutrition and Health Status of Young Children and Their Mothers in Zimbabwe: Findings from the 1994 Zimbabwe Demographic Health Survey. Macro International Inc., Ministry of Health, Zimbabwe, University of Zimbabwe, October.
- Embassy of Sweden (1998) Semi-annual report Tanzania, 28 October.
- Embassy of Sweden (1997) The Child Supplementary Feeding Programme. Lessons learned from the period July 1 1992 to June 30 1996. Harare
- Food and Agriculture Organisation (FAO). (1988) ESN Nutrition Country Profile, Tanzania. FAO: Rome.
- FAO (1990) ESN Country Profile: Zimbabwe. FAO: Rome.
- FAO (1996) Food Balance Sheets: 1992 – 1994 average. FAO: Rome.
- Forss, K. (1998) Institutional Development promoted by Norwegian Private Companies and Consulting Firms. Ministry of Foreign Affairs: Oslo.
- Government of Tanzania and UNICEF (1985) Analysis of the Situation of Children and Women. Volume 1. Government of the United Republic of Tanzania: Dar es Salaam.
- Greiner, T. (1988) A follow-up of the 1986 joint TFNC/Sida evaluation. April 26.

- Greiner, T. (1989) The Building of Nutrition Institutions: a search for guiding principles based on Sida experiences in Africa. Paper prepared for the Advisory Group on Nutrition, Administrative Committee on Co-ordination – subcommittee on nutrition.
- Greiner, T. (1990) Report on follow-up visit to TFNC. November 12.
- Greiner, T. (1993) Coordination of the ICH – Zimbabwe Nutrition Unit Co-operation, June.
- Kavishe, F.P. (1993) Nutrition Relevant Actions in Tanzania. UN ACC/SCN: Geneva
- Kinsey, B. H. (1992) Nutritional monitoring in resettled populations: Long-term economic and social adaptations in Zimbabwe. A paper presented at the SADCC regional Conference on Household Food Security and Nutrition Monitoring, Lilongwe, Malawi.
- Kittle, L.B. and Mundy, K. (1997) Zimbabwe Primary School Nutrition and Health Assessment. Report Commissioned by the Nutrition Unit, Ministry of Health and Child Welfare, February.
- Knutsson, K-E, Gebre-Medhin, M., Hulcrantz, G., Tobisson, E., Wallstam, E. (1979) Food and Nutrition in National Development. An evaluation of the Tanzania Food and Nutrition Centre. Stockholm, Sida.
- KPMG Chartered Accountants (1997) Financial Audit of the Child Supplementary Feeding Programme, 1 July 1995 to 30 June 1996. Harare
- Latham, M.C., et.al. (1992) Thoughts for Food. An evaluation of the Tanzania Food and Nutrition Centre. Sida:Stockholm. Evaluation report 1992/2
- Lindahl, C. (1995) Health Under Stress. A study of the health sector in Zimbabwe. November.
- Lindahl, C. (1995) Sida Support to Health in Zimbabwe. A study commissioned by Sida. November.
- Lishe (1997) Volume 8, Number 2.
- Madzima, R.C., Nyatsanza, J.N. and Peters, A (1991) Nutritional Status of primary school entrants in Tsholotsho and Makoni Districts, Zimbabwe. Results of the Community-based Growth Monitoring Pilot Projects. Ministry of Health Nutrition Unit, Harare, March.
- Marindo, R. and Hill, K. (1997) Trends and Differentials in Child Mortality: Zimbabwe, 1970-1994. Macro International Inc., Calverton, Maryland, USA, October.
- Mathe, S., and Mossop, R.T. and Matovu, H.L. (1985) The Nutritional Status of an Urban Community in Zimbabwe. Central African Medical Journal 31 (3).
- Ministry of Health (1982) Feeding Practices and Nutrition Status of Young Children in Urban and Non-urban areas in Zimbabwe. Harare.
- Ministry of Health and Child Welfare (1988) MCH/UEPI Survey.
- Ministry of Health and Child Welfare (1997) National Health Strategy for Zimbabwe, 1997-2007. Harare.
- Ministry of Health and Child Welfare (1996) Zimbabwe Health Service Indicators Handbook. Second Draft. Harare.

Ministry of Health and Child Welfare (1999) Five year IEC/Health Education Strategy 1995-2000, 1995, March.

Misigaro, R.D. (1996) Maternal Education, Total Number of Children, Household Food Security, and Malnutrition of Children under Five Years of Age in Tanzania. Results from a Baseline Study in Areas Implementing the Health and Nutrition Project in Tanzania, 1993. Centrum for Folkhalsövetenskap, Umeå Universitet.

National Nutrition Unit (1982). Feeding Practices and Nutrition Status of Young Children in Urban and Non-urban areas in Zimbabwe. Harare.

NNU (1995) Towards the Reduction of Hunger and Malnutrition in Zimbabwe. September. Ministry of Health and Child Welfare: Harare

NNU (1992) Annual Report, July 1991 to June 1992. Ministry of Health and Child Welfare: Harare

NNU (1995) Annual Report, July 1994 to April 1995. Ministry of Health and Child Welfare: Harare

NNU (1996) Annual Report, July 1995 to April 1996. Ministry of Health and Child Welfare: Harare

NNU (1993) Plans of Operations for Nutrition – Sida Support, 1993 – 1996. Ministry of Health and Child Welfare: Harare

NNU (1997) Plans of Operations for Nutrition Unit – Sida Support, January – December 1997. Ministry of Health and Child Welfare: Harare

NNU (1997) Plans of Operations for Nutrition Unit – Sida Support, January – December 1998. Ministry of Health and Child Welfare: Harare

NNU (1996) Plan of Operation for Nutrition 1997 – 2001. Proposal for Sida Support. November. Ministry of Health and Child Welfare: Harare

NNU (1997) Mission report. Visit to Norway by representatives of the Task Force for Food and Nutrition in Zimbabwe, 6 – 17 September. Ministry of Health and Child Welfare: Harare

NNU (1998) Development of Institutional Capacity for Food and Nutrition Security in Zimbabwe. Project request to NORAD. November. Ministry of Health and Child Welfare: Harare

Nutrition (1973) no. 2

Ogle, B. (1993) Nutrition Training Needs in Zimbabwe with special emphasis on in-service training of Different level cadres – Report for discussion with the Nutrition Unit, Ministry of Health, May.

SDA (1997) Inter-Ministerial Committee on Social Dimension of Adjustments (SDA) Monitoring, 1997. Findings from the Seventh Round of Sentinel Surveillance for SDA Monitoring, Ministry of Public Service, Labour and Social Welfare, Harare, Zimbabwe, December.

Sida (1997) Hälsosektorstöd till Zimbabwe, 1997-1999. Bedömningspromemoria. Stockholm.

Sida (1997) Zimbabwe: Fiscal management review. Promemoria. March. Harare.

Swedish Government (1996/97) The Right of the Poor . our common responsibility. Poverty reduction in Swedish development co-operation. (Regeringens skrivelse. De fattigas rätt – vårt gemensamma ansvar. Fattigdomsbekämpning i Sveriges utvecklingssamarbete)

Task Force for Food and Nutrition (1997) Food and Nutrition Security in a Shared Economic Growth: A Policy Framework for Achieving Food and Nutrition Security in the Context of Economic Development in Zimbabwe, April.

Tagwireyi, J. (1994) Time for a Change? A fields eye view of donor agency support for nutrition. Martin J. Forman Memorial Lecture. National Council for International Health Conference, Arlington, Virginia.

Tagwireyi, J. & Greiner, T. (1994) Nutrition in Zimbabwe. An update. World Bank: Washington.

Tanzania (1973) Food and Nutrition Act.

Tanzania (1995) Written Laws Act.

TDHS (1992) Tanzania Demographic and Health Survey 1991/92. Bureau of Statistics and Macro International Inc: Columbia, Maryland:

TDHS (1997) Tanzania Demographic and Health Survey 1996. Bureau of Statistics and Macro International Inc: Calverton, Maryland:

Tanzania Food and Nutrition Centre (TFNC). (1980) Data Report on the Food and Nutrition Situation in Tanzania 1973/74 – 1977/78. TFNC: Dar es Salaam.

TFNC. Surveys and Analysis of Food and Nutrition Situation in Various Regions (1989-97). TFNC: Dar es Salaam.

TFNC (1998) Physical and Financial Utilization Report for Sida Supported Projects, 1997/98.

TFNC (1993) Nutrition Newsletter, December.

TFNC (1998) Manpower strength as of July 1998.

TFNC (1994) Budget and Plan of Operations for the year 1994/95

TFNC (1995) Budget and Plan of Operations for the year 1995/96.

TFNC (1996) Budget and Plan of Operations for the year 1996/97

TFNC (1997) Budget and Plan of Operations for the year 1997/98

TFNC (1998) Budget and Plans of Operation for the year 1998/99

TFNC (1995) Annual Report, 1994/95

TFNC (1996) Annual Report, July 1995 – June 1996

TFNC (1997) Annual Report, July 1996 – June 1997

TFNC (1998) Annual Report, July 1997 – June 1998.

Thomas, D. (1990) Household Resources and child health in Zimbabwe. University College, London, and Yale university, December.

TFNC and World Health Organisation (WHO). (1992) The Food and Nutrition Situation in Tanzania. Country Paper for the International Conference on Nutrition, Rome 1992. TFNC: Dar es Salaam.

United Nations. Demographic Yearbook (various years 1974-84). United Nations: New York.

United Nations Children's Fund (UNICEF). State of the World's Children (various years 1984-99). Oxford University Press: Oxford and New York

UNICEF (1998) Gaidzanwa, R.B. and Mate, R. Structural Causes of Unrealized Rights: Report on Situation Assessment and Analysis of Children and their Families in Zimbabwe. Report to UNICEF for the 2000-2005 Country Programme.

Walker, S. & Ncube, T. (1997) An Evaluation of 1995-1996 Child Supplementary Programme. UNICEF: Harare.

Wohlgemuth, L, Carlsson, J. & Kifle, H. (eds.) (1998). Institution Building and Leadership in Africa. NAI: Uppsala.

World Bank. World Development Report (various years 1978-86). World Bank: Washington.

World Bank (1983) Zimbabwe population, health and nutrition sector review, vol.2, June.

World Bank (1992) Zimbabwe – Nutrition Review. June 30. Washington D.C.

World Bank (1997) Sector Strategy Paper: Health, Nutrition and Population. Human Development Network. Washington D.C.

World Bank (1998) Final Aide Memoire for the Health Sector Mission, 17/8 – 4/9. Washington D.C.

World Health Organisation (WHO). (1997) WHO Global Database on Child Growth and Malnutrition. WHO: Geneva.

WHO/Ministry of Health and Child Welfare/Health Education Unit (1999) Comprehensive School Policy of Zimbabwe: Latest Draft, February.

Annex 1. Terms of reference

EVALUATION OF THE COOPERATION BETWEEN Sida, SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY, TFNC, THE TANZANIAN FOOD AND NUTRITION CENTRE

AND

NNU, THE NATIONAL NUTRITION UNIT, MINISTRY OF HEALTH IN ZIMBABWE

15 October 1998

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Terms of reference

1. INTRODUCTION

Sida wishes to carry out an independent external evaluation of the Swedish support to the Tanzanian Food and Nutrition Centre (TFNC) and the National Nutrition Unit in Zimbabwe's Ministry of Health (NNU) in connection with the phasing out of these collaborations during 1999. Sida's stated main aims are to analyse and compare the experience of collaboration between Sweden and each of the nutrition institutions, and to draw lessons for future work in the area of institutional development.

2. BACKGROUND

2.1 Nutrition in Tanzania and Zimbabwe

In both Tanzania and Zimbabwe the immediate causes of much child malnutrition both before and after independence include variable household access to sufficient food of adequate quality, low energy density of weaning foods, and poor water quality and health conditions. However, the historical, social, economic, political and infrastructural contexts for these particular signs of poverty have differed markedly, leading to different patterns of nutritional problems, and to different approaches to assessing and tackling them.

In addition to other problems relating to malnutrition, Tanzania has had overall food supply problems throughout, since before TFNC was established in 1973. This led to a more universal nutritional concern than in relatively more productive Zimbabwe. NNU in Zimbabwe has from the start (1981) focused on identifiable groups, starting with families adversely affected by dislocation, landlessness or absence of income due to war, and, more recently, communities in areas badly affected by the 1992 drought. The poverty maps in the two countries differ also: poverty in Tanzania is more widespread, while issues of inequality have been more important in Zimbabwe. Even specific nutritional problems like Vitamin A deficiency and Iodine deficiency disorder (IDD) have been more widespread in Tanzania, compared to Zimbabwe's pockets of severe malnutrition and deficiency problems. In Zimbabwe these have been associated with disadvantaged populations like the families of farm-labourers in the ex-settler economy. Equally important are the differences in health status and health services over the period: the situation in Zimbabwe improved after 1981, while after initial improvements, this sector in Tanzania stagnated.

The overall trend in the 90's in both countries has been improvement in nutritional status of pre-school children as measured by anthropometry. There has been relatively little information gathered or work done on the diet and nutritional status of older children, adults, especially women, and the aged. The evaluation could review differences of priority and approach in this area, particularly with regard to women.

Both institutions are aware of the critical influence of the economic situation on nutritional status, and in Zimbabwe in particular, the effects of structural adjustment and food shortages during the recent drought are considered to have compromised significant improvement. NNU and TFNC see their own major roles in nutrition programming as actively improving diets (NNU) and reducing the effect of specific deficiencies (TFNC).

Both institutions acknowledge the symbiotic relationship between health and nutrition. Disease threats to improved nutrition and household food security in both countries include AIDS. The evaluation might review similarities and differences in approaches used.

Government support for nutrition work has been clear since independence in both countries. However, national resources for the two institutions have been meagre, and intersectoral work has been no easier than elsewhere. Up to now the two institutions have relied on external donor support for some core funding as well as for significant technical assistance and programme finance.

Please find further information in a separate background document.

3. AIMS AND OBJECTIVES

The overall aims of the evaluation should be to analyse the history and long-term collaboration with Sweden of the two nutrition institutions within their respective national contexts and to draw out lessons for future institutional development.

The following are the major overall questions to be addressed:

- What is the institutional capacity at TFNC and NNU and what is their basis for continuing effective activities after the phasing out of Sida funding?
- How have TFNC's and NNU's activity, research and development within their respective national governmental systems been helped (or hindered) by the form, modalities, scope and size of Sida support?

Elaboration of the objectives, specific questions to the evaluation, and the terms of reference, are derived from a desk review of key documents and an interpretation of the history of nutrition and of Sida's support for NNU and TFNC over the past 17 and 24 years respectively. The evaluation need neither prove nor disprove this interpretation. Rather, by answering the questions they give rise to, the evaluation can help the two institutions and Sida to establish a critical history of the processes, modalities and outcomes of Sida's support. It should also allow them, other donors and nutrition institutions and the world of international nutrition draw lessons for future work and collaboration in the field of nutrition. The evaluation should also be seen as a practical opportunity for TFNC and NNU to learn from each other's experience.

4. FOCUS

The overriding concerns are that this evaluation should;

- review the whole process of institutional development in TFNC and NNU,
- assess the effects of the forms, modalities, scope and size of Swedish support in each case,
- give as much weight to the historical and political context as it does to the planning and management of specific inputs,
- highlight comparative aspects whenever this is fruitful.

In this way each of the partners - Sida, TFNC and NNU, will naturally and equally be the object of the evaluation process as well as interested party.

These concerns lead a focus on process and relevance rather than one of outcome or effect. This is warranted by the fact that it is neither realistic nor appropriate to evaluate the performance of any nutrition institution solely in terms of its impact on nutritional status in the country. In addition, process rather than impact is essential because there have been changes in goals and objectives as well as in economic context and forms of aid and support during the long period of collaboration.

The institutional focus will increase the burden on the evaluators to specify the contexts for decision-making around these programmes and their implementation. It also suggests that an examination of the pace of capacity-building is a central element in the examination, as is the relevance of the capacity building and management training to each institution's need not only to do their own effective planning but also to develop survival and development strategies beyond the period of Sida funding.

5. SCOPE AND APPROACH

The evaluation will consist of a main study and three sub-studies. The main study will set the framework of the whole evaluation, make an overview of the nutrition activities and nutrition-related research in the two countries, produce a synthesis report on the basis of the sub-studies and elaborate findings and recommendations. Whenever possible a comparative perspective should be applied.

Within the overall framework the institutional development as well as the substantive nutrition work of the two institutions will be covered through sub-studies of specific issues in both countries.

The institutional development perspective will be covered by a separate sub-study (see annex 6). The substantive nutrition work will be covered through sub-studies of selected issues. These are common to both countries, and represent different types of programming, research, collaboration and need for interaction with other sectors and agencies. The following issues have been selected as being suitable for such sub-study:

- IDD
- household food security

The study of these issues should be used to exemplify similarities and differences in approach in the two countries and in the relative importance of external influence and types of support offered. The overall assessment of institutional support and institution building will be based on and will use examples from or related to these selected programming areas. The focus should be on the relevance of external institutional support to the development and success or otherwise of each activity, while also noting the impact achieved. The evaluation should also be used as a practical opportunity for TFNC and NNU to learn from each other's experience.

Social equity and Gender equality issues shall be assessed throughout the evaluation and in particular in relation to:

- organisation/management
- selection, design and monitoring of programmes/projects
- target groups/beneficiaries
- training/human resource development
- participation of staff and stakeholders in programme development.

6. EVALUATION QUESTIONS

The questions are subdivided into two major areas; the first one to be applied to the institutional development sub-study and the second to be applied to the two sub-studies of selected nutrition issues. In both cases there is a sub-set of questions addressing the external issues or development cooperation aspects. In addition the comparative aspects give rise to another set of evaluation questions.

The same questions should be included in the checklists for each country in order to ensure comparability between NNU and TFNC and subsequent synthesis.

6.1 Institutional development

For further information on analytical tools to be used, see annex 6, a memo by Jerker Carlsson “Issues of relevance for institutional development”.

6.1.1 Internal issues

- i. Role and mandate as defined in the appropriate government documents.
- ii. Establishment and development of the institution including reorganisations.
- iii. Structure.
- iv. Staffing and human resource development including internal/on the job training, external training and research as well as IEC training, in particular regarding gender equality.
- v. Financial administration and financing.
- vi. Capacity to implement policies and to interact with other organisations.
- vii. Capacity of the organisation to adapt activities to changing needs, new scientific knowledge or otherwise changing circumstances.
- viii. Institutional preparedness for a future without Swedish support.

6.1.2 External issues

- i. Mechanisms and modalities of the Swedish support including demands for reporting and evaluations.
- ii. Institutional and other consultants and their utilization for institutional development.
- iii. The role of training in the institutional collaboration. In particular the scholarship programme should be evaluated.
- iv. Swedish support in relation to the government budget and other external inputs.
- v. Implications of the Swedish development cooperation policies.
- vi. Other donor cooperation arrangements.

6.2 Substantive nutrition work

6.2.1 Internal issues

- i. Assess the initial and continuing relevance to each country’s needs, the timing of the activity, the priority accorded to this activity over/after others in the context of the resources available. Who took part in discussions of relevance, timing and priority, and how were/are decisions arrived at?
- ii. What previous and current implementation problems are there? What is their cause? How is the programme and the institution handling them?
- iii. Review the research agenda, or lack of it, related to this activity. What is/was the justification for this in relation to national needs and in relation to other activities? What connections between research and action were formulated at the start of the research programme, or since?
- iv. Are programme activities selected, designed and monitored to take into consideration social and gender equity aspects?

- v. How coherent is programmes, research and advocacy/policy work on this issue? What specific support for this type of planning has been provided through the Sida programme?
- vi. What adaptations in the programme have taken place? What prompted this? How were the changes decided? What role did Sida (advisors) play?
- vii. How was the issue first raised in each country? By whom? In what context?
- viii. How has each institution presented the issue, in their government system, and in other contexts? How did each formulate and gain acceptance for its role in this issue?
- ix. What collaboration with other institutions and agencies on this issue has arisen, and how?
- x. How has each nutritional concern been handled in each country in relation to intersectoral issues? What was the role of the nutrition institution? and Sida's?
- xi. How has the institution guided or supported changes and adaptations in each programme?
- xii. How has the institute worked through massmedia?

6.2.2 External issues

What role has Sida or Sida-advisors had in influencing the programming of the institutions?

- i. Which parts if any of the programme (activity or research) were selected for Sida support? How were they devised? How was the form of the Swedish support decided? How does implementation match programming?
- ii. How has collaboration with other national institutions and organisations, international organisations and agencies on this issue come about? How have intersectoral issues been dealt with? How has the Sida programme supported and trained for this?
- iii. How far has Sida-supported training for planning and management equipped each institution to plan for, implement and finance future activities in this field?
- iv. What national and international advocacy and policy aspects of these nutrition issues has been undertaken? What role did Sida support play?
- v. How has the increasing Sida emphasis on social equity and gender equality aspects influenced the programming?
- vi. Which aspects of work on this issue constitute "good collaboration practice" between donor and institution?
- vii. What role did Sida (advisors) play in providing or identifying funding?
- vii. What role other external actors have played?

6.3 Comparative perspective

The comparative perspective should be applied whenever possible in the substudies and in the synthesis reports. It will include i.a.

- i. Relevance of the work of TFNC and NNU respectively in their national contexts taking into account their different roles and mandates.
- ii. External influences on TFNC and NNU.
- iii. How the specific nutrition issues selected for this study have been dealt with in relation to the national needs.
- iv. How the Swedish support has been utilized and how it has influenced the work of TFNC and NNU respectively.

- v. Institution building aspects.
- vi. Collaboration with other government and other external agencies and organisations.

7. IMPLEMENTATION

The following process is foreseen:

- i) Study of available documentation and collection of additional material from TFNC and NNU as required.
- ii) Descriptive overview of each institution and its nutrition work.
- iii) Preparatory work for and detailed planning of the two sub-studies including the development of protocols together with TFNC and NNU.
- iv) Two sub-studies in each country:
 - IDD,
 - household food security.
- v) Synthesis and preliminary report on findings
- vi) Discussion of findings including seminars in each country
- vii) Final report writing including findings and recommendations.

8. ORGANISATION AND TEAM MEMBERS

Three international experts will compose the evaluation team. Between themselves they will possess an expertise in: Organisational and economic analysis, evaluation theory and nutrition programming, public health and research.

The team leader will be a professional of internationally acknowledged stature in the field of organisational development and capacity building, with practical experience of developing country organisations, preferably in Eastern and Southern Africa. The teamleader shall also have a documented knowledge in evaluation theory and experience from evaluation management.

The other two members of the international team shall have a documented knowledge in the field of nutrition, nutrition programming, public health and research in developing countries,

All members of the team will have responsibility to look at the gender equality aspects in relation to their areas of responsibility.

All team members should have excellent command of English and preferably experience from Eastern and Southern Africa.

External national or regional consultants in each country will assist the international team. For each country it is expected to have an external consultant involved in each of the sub-studies: institutional development, IDD and household food security.

One senior management staff member with a long institutional memory from each of TFNC and NNU will take part in the team's introductory and preliminary discussions and will assist the team in arranging meetings and visits to the most relevant persons and places.

9. ESTIMATED TIME REQUIREMENTS (in person-weeks)

This adds up to a total of 33 man weeks for the international team, and 18 man weeks for the national consultants. The staff members of NNU and TFNC are each expected to contribute a total of 6 man weeks.

10. TENTATIVE TIME SCHEDULE

Provided that it is convenient to TFNC and NNU, and that it is possible to recruit the national consultants with fairly short notice, the following time schedule should be feasible.

October	Planning and reading of reports and other types of written material. Interviews with involved persons.
November	Field visits to Tanzania and Zimbabwe.
December	Preparation of draft report.
January 1999	Submission of draft report
March 1999	Discussions of draft report in Zimbabwe and Tanzania
April 1999	Preparation of final report.

Annex 2. TANZANIA – case studies

The programme for the control of iodine deficiency disorders (IDD)

The existence of goitre, one of the manifestations of iodine deficiency disorders (IDD) was noticed in the highland areas of mainland Tanzania early in the 1920s. A few fragmented studies followed, undertaken by medical professionals and the Ministry of Health (MoH). However, the first scientific publication appeared only in the 1960s. Systematic work on IDD did not begin until 1976, when TFNC began the process of establishing an Inter-ministerial Expert Committee.

The establishment of the International Council for the Control of Iodine Deficiency Disorders (ICCIDD) in 1986 was timely in that it provided technical support and boosted the country's efforts. A series of systematic surveys (10 primary schools per district) were carried out between 1980 and 1990 to define the magnitude of the problem, and to map out the endemic areas. A small-scale study was also conducted to test the efficacy and operational aspects of the delivery of iodinated oil capsules (IOC) in the rural areas. The various surveys undertaken indicated that:

About 10 million (40%) of the total population live in areas deficient of iodine and hence at risk of developing IDD;

27 districts were rated as highly endemic (>10% visible goitre), mostly highland districts in the northern and southern parts of the country. They are densely populated, very fertile, agriculturally rich and food sufficient. They also grow plenty of cabbage, millet, cassava, which contain goitrogenous substances;

The total goitre rate was about 37% and visible goitre 5.9 %;

There were an estimated 160,000 cretins and 450,000 cretinoids;

The information gathered was presented and discussed in a series of workshops at district, regional and national levels attended by decision-makers, planners, managers, etc. from all governmental and non-governmental organisations and the community. The proceedings of the workshops helped to enrich the information to serve as a basis for the development of a National IDD Control Programme in 1985.

Tanzania adopted the global objective of virtual elimination of IDD by the year 2000 as endorsed by the 43rd World Health Assembly in 1990. The specific objectives were:

To ensure universal salt iodisation and distribution in the country by 1995;

To strengthen and establish laboratories for I-salt monitoring countrywide by 1995;

To provide training on IDD control, salt monitoring and other related issues to all participating agency staff.

The main and the specific objectives were clear. However, considering aspects such as the co-ordination, cost, logistics, difficulty in monitoring the production and consumption of I-salt, financial constraints and the weak infrastructure of the country, the attainment of the objectives within the given time frame was ambitious. As a result, they had a negative bearing on the implementation processes and sustainability considerations of the programme.

Management and Co-ordination of the Programme

Since the control of IDD involves many agencies, a National Council for the Control of Iodine Deficiency Disorders (NCCIDD) was established with high level representatives drawn from various relevant government ministries, parastatals and NGOs: Governmental Institutions: The Ministries of Health, Energy & Minerals, Trade & Industry, Justice, Finance, Economic Affairs and Planning, Education; Labour and Social Affairs, Information, Community Development, Women and Children Affairs. Parastatal organizations: TFNC, Medical college, National Food Control Council (NFCC), Tanzania Bureau of Standards (TBS), Medical Stores, BIT, Tanzania Salt Producers Association (STAMICO,TSPA), Women's Organization and others.

UN organizations and other agencies: UNICEF,WHO, SIDA and other bilateral donor agencies.

The NCCIDD is chaired by the MoH and TFNC acts as its Secretariat. Four technical sub-committees/task forces were also formed chaired by different agencies for each of the following: IEC, task force chaired by TFNC; Salt iodisation by the MEM; IOC distribution by MoH; Research, Monitoring & Evaluation (RME) by the Medical College. But, there was no clear mechanism of co-ordination of the programme at the sub-national levels. This later created a problem during implementation.

The functions of the NCCIDD and its sub-committees and participating institutions at the central level were clearly defined. The principal role of the NCCIDD was to guide and co-ordinate the programme with technical support and advice from the task forces. The function given to TFNC as a Secretariat was to play a pivotal and proactive role in the initiating and follow up of actions. The NCCIDD and its task forces were expected to hold two regular meetings a year each and more if necessary. For example, the NCCIDD committee met seven times in 1994. In the last three years the frequency has been once yearly. The last time the NCCIDD met was in February 1998 (almost a year ago) and the task force with the fewest meetings was the RME.

Strategy

Two strategies were adopted for the implementation of the IDD control programme: supplementation with IOC, every two years in the highly endemic areas as an interim strategy, to be phased out gradually with the introduction of I-salt as a long-term strategy. Intensive information, education and communication (IEC) through seminars, workshops, print and electronic media was considered an important component of the strategies. Extensive training of all professionals in the social development sectors at various administrative levels was a vital element.

Implementation

Implementation of the programme started in 1986 with IOC distribution in the 27 highly endemic areas, with an in-built IEC component. Capsule distribution was administered jointly by staff of TFNC and health units. Goitre surveys and KAP studies on IDD were incorporated within the IOC distribution. After the introduction of I-salt, monitoring of I-salt at retail and household level was also incorporated in the survey. This approach demonstrated a good example of packaging of supportive activities and wise use of funds.

There was no technical problem in the distribution of the capsule as it did not require special professional skill. However, logistics and compliance problems were faced. Community members associated the capsule with sterility, impotence and AIDS. This was recognised to be because of inadequate sensitisation and education. The problem gradually diminished through the intensification of the educational component, but it was not totally overcome in some villages.

There was also reluctance on the part of the health workers who viewed the programme as being vertical. That attitude still persists and has affected the monitoring of the I-salt at the district level.

The cost of the baseline surveys, the capsule, training, seminars, workshops, educational materials production & distribution, and other activities related to the monitoring of the IOC was all covered by SIDA for all the years until 1998. IOC procurement was done through TFNC. To-date about 12 million capsules have been distributed to over 5 million people.

The total phase out of the capsule distribution was planned for 1995 assuming that by then I-salt would be successfully introduced. To that effect, there has been a substantial phasing out of capsule distribution and a gradual introduction of I-salt. However, the procurement of IOC may not be totally withdrawn before the results of the evaluation in progress are known. There could still be some localities, which have not been reached for IOC distribution due to inaccessibility or other reasons. For some districts what has been given may not have had the desired effect and may have to be continued for some time.

Salt fortification

After many years of efforts led by the TFNC, I-salt production was started in the country in 1990. The necessary iodisation machinery, quality control laboratory equipment, chemicals, packing materials, rapid test kits, and other related technical and financial support to large and small scale production plants were provided by UNICEF. As part of the mechanism to streamline the I-salt production and distribution, the Tanzania Salt Producers Association (TSPA) was also formed in 1994 with voluntary membership. TFNC in collaboration with UNICEF, the salt iodisation task force and the TSPA conducted a series of workshops to all producers at district level on IDD and salt quality assurance. Laboratory technicians working under the MoH and the production plants were given the necessary training on I-salt quality control. Health workers and other relevant professionals were trained on I-salt monitoring using the rapid test kit and other related aspects.

I-salt distribution commenced in 1991 in the high endemic areas, gradually replacing the IOC. By 1994, the salt iodisation and the monitoring system was “thought to be in place”. Subsequently, the momentum of inspection and follow up declined gradually except for some activities by TFNC.

Iodised salt legislation

The TBS in consultation with TFNC, NFCC and the MEM set the national iodised salt standards at 75-100 PPM at factory level, 35-50 at retail and 25 at household level. On the basis of this, salt iodisation legislation was passed in 1994 and incorporated as part of the Mining Act Section 104 of 1979-Salt production and iodisation regulations 1994 and the Food Act (Control of Quality) Section 16 of 1978- Iodised salt regulation 1992. The penalty for failure to comply was three years imprisonment. It is believed that the sensitisation efforts made to involve the parliamentarians had contributed a lot to this break through.

Salt Production and Importation

There is sufficient capacity in the country to produce salt exceeding the domestic requirement, which is estimated at 100,000 metric tonnes per annum. There are 68 registered large and small-scale production plants in different parts of the country provided with all necessary equipment and supplies to produce I-salt. However, currently their exact status is not clearly known as will be explained under the section on monitoring and evaluation. There is also I-salt importation from other countries: Eritrea, Kenya, India, Iran, United Arab Emirates, USA etc. Currently no one

seems to know the exact amount due to the various formal and informal channels through which they are being imported and distributed. It is estimated to be about 30% of the total distribution in the country. Some of the imported I-salt especially that of Kenya and Eritrea is said to be of better quality and may be cheaper entry compared to locally produced salt, but due to transport costs the price increases in some areas. It is said that the rural people prefer the coarse salt. Therefore, the imported salt, which is usually, fine is mostly consumed in urban areas and may not reach the endemic rural areas where it is needed.

The importation of salt was envisaged to sensitise the national salt producers to improve their quality so as to compete with the imported salt in the long run. But the local producers are not happy with it. This was bitterly expressed by some producers and the TSPA leaders who were of the opinion that the Government should block importation. But, according to the MEM, the Government follows a liberal market policy.

Information, Education and Communication (IEC)

Well-formulated IEC is key to the success of an IDD control programme. The IDD control programme in Tanzania had the advantage of the experiences of the JNSP and CSPD programmes in this respect. Sensitisation and mobilisation started with the Parliamentarians and Ministers, then administrators, planners, managers, technicians, salt producers, extension workers and the general public throughout the country. Seminars, workshops, interviews, print (leaflets, posters, stickers) and electronic media were all used. Furthermore, the Head of the State as part of the social mobilisation venture officially inaugurated some I-salt production plants.

Questions raised during seminars have been useful in developing educational materials. For example, in the seminar conducted for the parliamentarians, 35 questions were raised and clarifications given by professionals. Those questions and answers were synthesised by TFNC and made into a booklet in Kiswahili and distributed widely. Similarly, questions and answers from seminars for community members were compiled and made into of educational material for use by the public.

Training programmes were organised at all levels starting from programme managers at central level to extension workers and community members at the grass roots level on the problem of IDD and the importance of I-salt. Between 1991 and 1996, the NFCC with financial assistance from UNICEF and technical support from TFNC provided training to over 2700 professionals of various categories. Their current status is not known.

Monitoring salt quality, accessibility and consumption

Fortification of salt with iodine has been a major public health success in many countries. Once I-salt production, distribution and quality is assured, sustainability is almost certain, firstly because salt consumption does not require a change of habit, and secondly, because the costs are mostly covered by the private sector. The struggle to achieve and maintain the assured quality level is however not easy.

Probably the biggest problem confronting IDD control programmes in many developing countries today is the inefficiency of the salt monitoring system, and Tanzania is no exception. In spite of the systematic planning and programming approach used in the design of the IDD control programme in Tanzania, the monitoring and evaluation system had not been clearly spelt out in the initial plan and what was later developed by an ICH consultant in 1994 was not incorporated either.

The quality of I-salt must be assured all along the chain from production to wholesale warehouses, retailer shops and the household level. Based on the review undertaken by the evaluation team from records and interviews, currently the monitoring system is not satisfactory at all levels. Again, based on this review the reasons could be summarised as being:

- lack of commitment and attention by concerned agencies
- financial shortages and logistics
- and to some extent, other socio-political factors.

The need to strengthen the monitoring system has been indicated several times and recorded in various TFNC reports and documents. For example, it has been stressed by the SIDA and TFNC review team in 1994 (TFNC Annual Report 1994 n.1719), by the TFNC external evaluation team in 1992 . Internally, it was a major agenda item in the July 1997 and February 1998 NCCIDD meetings as well as the meeting of the I-salt task force sub-committee meeting of September 1998. But, according to the records and the interviews, no concrete actions were taken. The following observations are presented below as cases for argument:

In the annual report of 1994 (TFNC Report # 1641 pp 21) it is stated “... The monitoring and evaluation component of the programme was further developed in collaboration with the ICH, Uppsala, Sweden.....Process monitoring especially at the plant level will be strengthened first”. No action followed.

In 1995 a team made up of TFNC, NFCC, MEM, TSPA visited plants in Tanga, Dar Es Salaam and Bagamoyo and reported the following: “With regards to quality control of iodisation at factory level, it is observed that most of the technicians relied mostly on test kits (qualitative) rather than using the recommended standard titration method (quantitative) for confirming iodine content in salt at factory level. It was also observed that packaging materials were not lined with inner plastic lining to protect salt from moisture and loss of iodine” (TFNC Annual report of 1996 # 1766 pp. 20). The reasons why the producers failed to comply with the regulation was not indicated in the report and no concrete actions were taken to correct the observed problems.

Similarly, in 1997, the team visited plants in Tanga, Moshi, Bagamoyo and Dar Es salaam and reported the following “...It was observed that quality control of iodised salt was no longer efficient due to lack of technicians. Previously trained technicians on iodine assessment laboratory methods were no longer working with the factories and have been replaced by inexperienced technicians ”. Again no action was taken.

In January 1998, a team did I-salt monitoring from TFNC in salt production sites, retailer shops and at household levels in Kilwa, Lindi, and Mtwara districts (TFNC Report No. 1842). The study was very systematic, highly analytical and critical. It summarised the whole problem of iodisation and quality control as it is now. It was interesting to note from the assessment report that big machines and laboratory equipment provided for a group of producers in Lindi and Kilwa districts in 1994 were still not installed in 1998. For example, on the big machine in Kilwa, the team reported the following: “ Mr. “X”, one of the group members, spent Sh 1.2 million and installed the machine in 1995 to serve 15-18 saltworks. But, since the others failed to share the cost, the machine was never made operational and at last in 1998 he dismantled the machine into pieces and kept them in store. Other parts of the plant were still lying and rusting at the site of the installation.” Another observation made by the team was that although seven saltworks in Lindi district were provided with one rotary drum each in 1995, all the drums were functional but never used. Salt samples were tested from 347 households from the near-by villages and only 6% were

found to have some iodine. According to the team, preparation and sensitisation made before the installation did not seem to have been sufficient. Producers did not seem to be convinced or they did not care to iodise because there was no inspection.

In November 1998, one member of this SIDA evaluation team with a staff member of TFNC visited one big and two small production plants in Bagamoyo about 40 km on the main highway from the capital, Dar es Salaam. The findings confirmed beyond doubt the above reports as elaborated below.

The team first visited the H. Stanley Salt Works, one of the four biggest plants and the oldest in the country producing up to 10,000 metric tones a year, more if necessary. This plant was provided with one big and one small iodisation machine, complete laboratory equipment, and all other necessary supplies from UNICEF in 1994 and has since 1995 never been inspected by any agency. The laboratory was not working, the big machine was said to be broken and not operational for over a year. The small machine is functional but not in use because according to the production manager it was “cumbersome and slows production”. The plant is currently using sprayers for iodisation, test kits to control the quality, and packing is made in sacks without plastic lining inside, but labelled as “iodised salt”. The team took two sacks of what were said to have been iodised from the production centre for determination of iodine levels. The samples were test at the TFNC laboratory, and not surprising the result was only 27 PPM (National standard at factory level is 75-100) (Laboratory Report # 1898 of 20.11.98). The salt from this plant goes to wholesalers some 1300 km away from the factory and with the kind of packaging indicated above, the iodine content will be negligible by the time it reaches household level.

In the view of the General Manager (owner), the pre-conditions for assured salt quality in the country are not yet in place. He believes that some serious work has to be done and more efficient and easy to use calibrated laboratory methods should be made available. In his opinion, unless a mechanism is created for producers to secure sustainable, cheaper and easy access to potassium iodate (although he has no problem), and regular inspection of all producers, the salt iodisation initiative may never be a reality. He was not happy with the way the TSPA and its leadership has been created, nor was he satisfied with the arrangements made by UNICEF and TFNC to give potassium iodate revolving fund to the association with its current weakness and with no accounting system.

The second person interviewed was a small producer. He said he iodised only because it was the law, although he knows about the dangers of IDD. He felt that it has affected his market and that it was tiresome to iodise using the sprayer. He was provided with a rotary drum which he said broke in 1995 after serving only for 6 months and he had then to buy a sprayer. He received a supply of potassium iodate for one year only from UNICEF. After that, he has been buying from Mombasa in Kenya. He could not show us the potassium iodate nor was he willing to give us a sample his salt. He indicated that in 1994/5 health inspectors visited him and told him that his product did not have the required amount of iodine, but in spite of that, he did not make any changes and nobody has visited him since. He shared the same opinion as the former producer, that unless something is done about the potassium iodate supply, the majority of producers may never be able to comply with the regulation of iodisation. Similarly, he was bitter about the TSPA misuse of the potassium iodate given for the revolving.

The third owner by chance was the vice-chairman of the TSPA. His laboratory is functional, but has not been used for over a year because he said he had no salt due to the El Nino. His iodisation plant was one of those inaugurated by the President in since 1994/5, and never inspected since

then. With regard to the TSPA, he said that the association exists only in name and has not been active. There were a series of workshops for all salt producers and training for technicians on quality control at the start in 1994, but nothing after that. The association does not have much linkage with the MEM other than the collection of revenue.

Among the problems he identified were weak institutional links, lack of supervision, absence of a forum for discussion, shortage of potassium iodate and uncertainty of its continued availability. UNICEF provided a two years' supply of potassium iodate to all producers in 1994/5, and the association was later given some (about 3 tons against the annual requirement of 20 tons) to be sold to members and serve as part of a revolving fund. Accordingly, it was sold to a few members, but declined to comment where the money had gone. This confirms the dissatisfaction expressed by the other two producers and what the team gathered from some reports. He stressed the need for a workshop to discuss issues seriously, especially the fate of the association and the procurement of potassium iodate. But, other members strongly believe that unless forced to do so, the TSPA leadership may not want the meeting to be held for known reasons.

In our opinion, if the very big plants within the vicinity of the capital city have not been inspected and put in order, it is unlikely the situation is any better in remote areas. The Lindi and Kilwa district assessment indicated above seems to have given the answer. If so many machines are found to be never installed, or never in use after 5 years only in two districts, what could the situation be if all the 68 participating production plants were to be visited? If at factory level sprayers and test kits are only being used and no plastic lining is used for packaging, what is the situation at a household level? If the installation and utilisation of the equipment has not been assured, it is premature to talk about quality. It is worth noting at this juncture that some I-salt monitoring done at household level have indicated a finding of about 70%-80% adequacy. However, those surveys were mostly done in 1994/5, when potassium iodate was available free from UNICEF and some laboratories were functioning. Besides, the surveys did not indicate the source of the salt, locally produced or imported. If there had been a serious follow up of the programme management, the three studies done by the TFNC staff were sufficient enough to take the necessary action.

In general, since 1995 there has been no systematic inspection of I-salt production and distribution, and where some assessment has been done by TFNC, no concrete remedial measures were taken. There is still no established system for the procurement of potassium iodate, a crucial pre-condition for sustainability of I-salt production.

The following facts gathered from the various interviews and documents, provide clues to some of the causes for the shortcomings indicated earlier.

The first problem seems to be the management system of the programme as a whole. No system was established for the management and co-ordination of the programme at the regional and district levels. The programme is vertical with the NCCIDD only at the national level with no replica at the regional nor at the crucial district level. It is hard to imagine how routine inspection and required action could be handled only from a national level in this large country.

Salt production in the country is under the MEM and hence, the Ministry has the responsibility to inspect the plants and help them to improve quality. In recognition of its function, UNICEF provided three vehicles to the Ministry for supervision of the salt plants, which however have not been used for this purpose. The fact that there is no section in the Ministry to deal with salt issues has undermined the importance and value of the product. This view was shared by the TSPA. Three reasons have been given for inadequate inspection. Firstly, the Ministry deals with so many other precious minerals, the possibility of less attention given to salt could not be ruled out.

Secondly, the MEM's structure is mostly in regions where mineral mining is dominant. Thirdly shortage of manpower and operational cost to support the supervision was mentioned as a constraint by those interviewed in the Ministry.

The other problem facing quality assurance is the issue of the TSPA. The association is weak, the members are not happy with the leadership. The TSPA was given potassium iodate to be distributed through a revolving fund. Its officials are of the opinion that the sensitisation of the members was not sufficient. There is need for further workshops and training. This problem has already been recognised by the I-salt task force, and UNICEF has provided funds for a workshop to be held in 1999.

One of the basic and necessary conditions for an IDD control programme is the existence of an independent laboratory to control the quality of I-salt. In Tanzania the TBS, a parastatal agency under the Ministry of Trade and Industry (MTI) is the agency that has both the responsibility to set standards in consultation with other concerned agencies and to undertake quality control. Accordingly, as stated earlier TBS did set the standards and followed it up until the legislation was passed in 1994. But it has never performed a single quality control since, owing to cost involved. The TBS being a parastatal organisation charges for all the services it renders. The normal practice is that a producer comes to the TBS, pays an annual fee, registers as a client and then gets the service. This happens with other products because producers and traders want to compete in the market, but so far this has not been the case with salt. Not one, even among the large scale producers, has entered this agreement and they may never do so unless a law is enacted requiring every producer of salt to make a pre-payment to the TBS annually. Besides, the payment is said to be expensive and many may not be able to pay individually. It could possibly be done through co-operatives or the TSPA, if it is strengthened.

The monitoring of I-salt at wholesale and retail levels whether locally produced or imported is the responsibility of the NFCC through its network of laboratories in the regions. Accordingly, the inspection had started very well. The NFCC has been doing it efficiently through its regional laboratories and the district health officers until the end of 1996 with financial assistance from UNICEF. There was regular supervision by the NFCC. The districts regularly submitted a comprehensive monthly inspection report. When the financial assistance from UNICEF for operational cost was interrupted, the supervision and the regular reporting system also ceased. So although the regional laboratories and health units at the district level were supplied with rapid test kits, the NFCC could not confirm testing now. The responsible officer admitted that he has lost most of his contact due to lack of funds.

TFNC has been undertaking some I-salt quality assessment along with IOC distribution e.g. surveys in Songea and Mbinga in 1995 and a follow up in 1997, Sumbawanga and Mpanda districts in 1995 and the more systematic and critical one in the three districts mentioned earlier in 1998. The assessments made in all cases were of good quality and highly critical, but it is unfortunate that none of the observations made were used to take remedial action.

The above analysis of the possible causes and solutions leads us to the question: Who makes the final decision on what actions should be taken? According to the programme document, the body which has the authority to take action is the NCCIDD, but looking at the deficiencies in the whole monitoring system, we tend to question the seriousness of the NCCIDD or the powers vested in it, and also the extent to which TFNC as a secretariat can influence decisions and actions?

Lessons learnt

Many useful lessons have been learnt from the IDD control programme in Tanzania:

A systematic approach was used to build up the programme, with sound assessment, appropriate use of the information collected, setting of relevant though ambitious main and specific objectives; Crucial to success is wide participation of all stakeholders, social mobilisation and sensitisation of the higher government officials including the Head of State, the parliamentarians and others at national, regional and district levels;

Extensive training programmes and intensive IEC of the public are essential;

The co-ordination mechanism through multi-sectoral, multi-disciplinary national committee and technical task forces was very centralised and as a result not so efficient;

The formulation and passing of Legislation on salt iodation and the methods used to get it through the parliament was an achievement;

The work done to install I-salt production machinery and to establish quality control laboratories was good, but needs adequate follow up;

The phased approach (interim and long-term) was correct, with priority to highly endemic areas and the packaging of activities: IOC distribution, goitre survey and KAP studies to assess progress of intervention, I-salt quality monitoring at household level applied by TFNC. However the time needed for the establishment of the long-term strategy should not be underestimated;

The experiences shared by the programme to the similar programmes in the region were useful;

A long period of donor support is needed to build up a programme; On the one hand, this creates a dependency which affects sustainability.

Concerns

The team has the following concerns to share which may have already been noted by TFNC and the NCCIDD, but where action has not been adequate.

The programme lacks the management/co-ordination structure at the regional and district levels. It is controlled remotely from the central level making it difficult to monitor closely. TFNC as a Secretariat does not seem to have been proactive and aggressive in the follow up of required actions and in bringing up the issues forcefully to the NCCIDD or its line Ministry.

Three most crucial and inter-linked aspects of the programme have not been sufficiently been addressed. These are the issues of monitoring & evaluation, accountability and sustainability.

It was noted that there has been more of assessment and less of problem solving action. The Triple "A", which is said to be the main programming and implementation approach of TFNC, has not been effectively used as a management tool in the IDD control programme. This indicates the lack of a well designed, in-built monitoring and evaluation system on the one hand and the absence of a mechanism of accountability on the other.

From the various interviews and reports it appeared that there has been too much enthusiasm to implement the programme without serious consideration of some of the issues and insufficient time to establish firmly some activities: the installation and pre-testing of the various machines and equipment, and a system for procuring potassium iodate. It is likely that there was an enthusiasm to reach the target of universal iodisation by the year 1995. This was evident from the heightened activity between 1993 and 1995, which then gradually diminished even with respect to sensitisation.

The programme has not yet consolidated itself, and only two years remain to achieve the stated objectives. It is at a crossroads, a crucial stage of make or break. It can easily slide back, in which case all the many years efforts and expenses will be lost, but it can also easily be made sustainable if given serious attention by concerned bodies and provided with funds for consolidation to reach a level where:

All salt producing plants have a sustained production of I-salt with the desired level as certified by an independent laboratory/body.

Over 80% of households especially at the highly endemic areas have sustained access and consume I-salt with required iodine levels.

Recommendations

Revision of the programme management System and of the Secretariat: While technically the programme may be adequate (if attended to by TFNC), management aspects must be re-visited particularly linkage with the sub-national levels (regions, districts). To what extent TFNC's mandate and responsibilities influence actions (be it through its legislated mandate, through its role as a Secretariat of the NCCIDD, or as delegate of the MoH or a combination of all), should be clearly understood.

Act on the already identified problems and re-vitalise the salt iodisation system. Although much remains to be known about the salt production and distribution issue, we believe that what is already known is sufficient to act and take serious measures. There is no doubt that the salt iodisation system is not working efficiently and no time should be spent in further studies. An efficient system for the procurement of potassium iodate should be put in place, be it through UNICEF, the TSPA or private companies. The evaluation team has done some assessment of the latter and discovered that there are some private agencies like SEIFI Chemical Company which has some experience, but there is a need for a cheaper solution.

Ensure commitment. The concerned government agencies responsible for the production and quality control of I-salt especially the MEM, the TBS, NFCC and TFNC should be committed and serious. The MEM needs to create a unit, which will be solely responsible for the co-ordination and supervision of salt production and marketing. It is worth noting that that the mental, physical and social disabilities to be prevented and the lives to be saved by a pinch of iodised salt is in the long run a greater wealth for the nation than precious minerals.

Enforce Accountability. The NCCIDD should be more aggressive in its actions to ensure accountability by participating agencies. It must see to it that the legislation, which has taken so much effort to formulate and pass through Parliament, is enforced. Likewise, TFNC as a Secretariat of the NCCIDD should follow up seriously decisions made by the NCCIDD. It must be more proactive to indicate timely solutions to problems that arise in implementation.

Integrate programme at district level. One of the possible solutions to improving supervision of the programme is to integrate it with district level development programme management systems where they exist, as in the CSPD areas and establish some kind of a management system, a replica of the NCCIDD where they do not exist.

Strengthen TSPA. Efforts to organise, strengthen and support the TSPA should not be undermined because ultimately the production and distribution of I-salt will be in the hands of the private sector. The domestically produced I-salt should be of high quality because it will not only encourage local producers, but is the basis for self-reliance and sustainability. Thus, it is not enough

to monitor and ensure the availability of I-salt at retailer shops and households. It is equally important to monitor trends in the marketing of the locally produced I-salt.

Increase consumer awareness and demand and expand the use of test kits. A mechanism to force I-salt producers to comply with the requirements is to create consumer demand for “the right stuff”. This may not be easy to achieve, but education and sensitisation on the dangers of IDD and the importance of iodised salt should be intensified so people pressurise retailers to bring in only iodised salt into their locality. School children and others with direct contact with families could be agents for such change of attitude. In order to do this, efforts should be made to distribute test kits widely through formal and informal institutions other than the health infrastructure, such as schools and community organizations.

Study the salt distribution system. In 1991 and 1992 salt distribution pattern and salt journey studies were undertaken by TFNC and a consulting firm to serve as a basis for iodisation. Now, another study may be required, to identify the source of salt going to the high endemic areas, so that priority for inspection be given to those plants and wholesalers distributing to these areas.

Sustainability: The issue of sustainability has often been associated solely with the availability of funds. Sustainability has to do with the whole of a programme management system. All the recommendations given above are elements of sustainability. But, funds are of course necessary and must be mobilised from within and outside. In view of the dwindling funds, priority should be given to the most crucial activity: Putting the salt iodisation production and monitoring system in place.

The programme to promote household food security

In assessing the contribution of TFNC to HFS related interventions, two factors were taken into account: the definition of HFS and the mandate of TFNC on the other. Since the 1980s, TFNC has moved from the “Food Cycle” conceptual framework it promoted the first 10 years of its existence to the “Unified Multi-Causal” conceptual framework which places HFS as the central concern to achieve nutritional security. As point of departure to the present evaluation on the role of TFNC in HFS, the proceedings of the National Conference on HFS conducted by Centre itself in 1990 was examined to see how TFNC views its role in promoting HFS. The role of TFNC in HFS has been identified as being mainly of initiating relevant actions, acting as a catalyst in monitoring of implementation, educational material production, training, operational research, providing technical support to HFS related interventions in the country. So the approach used by the evaluation team was to look at the HFS and nutrition related activities and examine if TFNC has been able to comply with the functions outlined above. Emphasis was given to the issue of relevance of the projects, their linkages with national programmes, sustainability concerns, monitoring and evaluation, the adequacy and quality of the technical inputs of TFNC, and to see if the technical inputs had influenced meeting the projects’ objectives towards achieving HFS and nutritional goals.

In all cases, all relevant available project documents and reports were carefully reviewed. More important, discussions were held independently with most concerned officers on a particular project at TFNC and concerned agencies and departments outside TFNC in order to clarify arising from the documents.

TFNC has done much in co-ordinating the formulation of the National Food and Nutrition Policy and then the development of the National Action Plan for Nutrition. It has provided support to various sectoral programmes related to HFS and nutrition. However, for purposes of this evaluation, a few projects that fulfil the following criteria were selected for an in depth review. They included those projects:

- with most direct impact on HFS and nutrition;
- that are directed to women and children and other vulnerable groups;
- that are part of a wider national programme;
- and had financial, material and technical support from SIDA.

Accordingly, the following programmes and projects were selected:

1. Food Processing and Preservation:
 - Cassava processing pilot project
 - Solar dryers
 - Development and promotion of traditional weaning foods
2. Child Nutrition:
 - Breast feeding, infant and young child nutrition
 - School feeding programme
3. Maternal Nutrition

1. Food Processing and Preservation

In 1992 TFNC initiated a project to assess the problems related to commonly used staple foods in the country. The assessment involved communities, extension workers, teachers, womens groups. The assessment rated cassava as the leading crop with a problem of processing and preservation, followed by vegetables and fruits.

Cassava Processing: a pilot project

Cassava is the staple of about 30% of the population of the country in the coastal and Lake Regions. It is also a cash income-generating crop with high yield per hectare. Unfortunately it is highly perishable (shelf life of fresh cassava is 3 days maximum) and thus has very high losses. Besides, it contains goitrogenous substance. Processing and marketing of cassava is traditionally the work of women in the country.

In its efforts to promote and adopt appropriate technology, TFNC worked closely with the Natural Resources Institute (NRI, UK), which had introduced the technology in some countries of Africa like Ghana and Colombia in Latin America. So TFNC entered a joint venture with NRI to promote the technology in the Cassava growing districts of Tanzania. One of the technologies was simple and capable of improving the life shelf of fresh cassava from 2-3 days to 7-10 days. The technique was to remove damaged tissue from the roots of the cassava, then soak in water and wrap it in a plastic sheet to maintain the moisture. This technology does not require an input except the cost of a simple plastic sheet. The other technology, although it could preserve fresh cassava for up to 20 days, entailed modern chemicals and higher costs. Both technologies were discussed with potential users and communities. The former was identified as the most feasible to be promoted in Tanzania.

The pilot project was introduced in two districts, Mtwara and Mwanza. A simple manual with illustrations was developed and later improved through testing. A video film showing the application of the technology in communities in Ghana was also used and found to be helpful.

The pilot testing was done in collaboration with the NRI, the agriculture offices in the two districts involving extension agents of the MOA and community development. The project target groups were community members especially women, small cassava traders and wholesalers. The approach used was first to hold discussions with the villagers, extension workers and traders. This would be followed by demonstration on the application of the technology. There was a series of sensitisation meetings involving the district officials and follow up visits by the extension workers and staff of TFNC and NRI. A monitoring system with indicators was well established. Frequent follow up meetings was held to get feedback as well as inspections to see how the technology was being applied. It was observed that, although it was simple and cheap, at the beginning there was reluctance from the community members. They were not convinced that the method could make a difference. But, gradually “seeing was believing” and the video from Ghana assisted very much.

After 5 years of implementation, internal and external evaluation exercises were done late in 1998. The report of the internal evaluation was available, that of the external is still awaited. The result was encouraging especially at household level where the amount of cassava was less than the amount a wholesaler would hold. But there is a long way to go before the technology is widely disseminated. More sensitisation and demonstration in different districts is needed. In the long term its inclusion in the curriculum of the training of extension workers may be useful.

Observations

The project was based on need assessment, and it dealt with one of the most important food crops in the country. Its effect on household food security is more direct and focused on women. It had an element not only of minimising food losses, but improving income as well. The technology is simple and manageable with very negligible cost involved. The process of promotion was highly participatory involving the community and relevant agencies and field workers in its implementation. There was an effective built in monitoring system and appropriate use of the information to make necessary adjustments. Besides, there has been yearly evaluation in which the community members and extension workers fully participated. Therefore, the likelihood of it being disseminated, sustained and expanded is high.

The initiative taken and the measures employed by TFNC to this project have been appropriate and satisfactory. The agricultural services, womens groups and community development services should however do further promotion and expansion. TFNC should be involved only in developing monitoring tools and providing necessary technical back up support if and when needed. This seems to have been realised as stated in the internal evaluation report “To disseminate the technology more widely it would appear to be vital to integrate dissemination activities into the existing programmes of the agricultural extension services and to involve relevant NGOs in the dissemination process”. The next step is to provide more training based on the newly tested manual for extension workers in selected districts and hand over the expanded promotion to the agriculture sector at the district level.

Most of the funds were secured from NRI but there was SIDA funding too especially at the initial stage. Whatever the source of the funds, it was worth the expenditure. TFNC has in this case provided the necessary professional guidance and advice, and its efforts are clearly reflected from the performance of the project so far.

Solar Dryers

With the formulation of the vitamin A programme, dietary diversification was considered a sustainable approaches to solve the problem. So TFNC took the initiative to make improvements on the traditional vegetable and fruit processing and preservation practices to enhance dietary diversification in support of VAD control.

The direct sun drying method for preserving vegetables and fruits has been common practice in Tanzania, but has some shortcomings. It requires a long time to dry, cannot be used during the rainy season (when vegetables and fruits are plentiful), there are some nutrient losses and hygiene problems. In its efforts to improve on this traditional technology, TFNC came across the experience of Haiti with simple solar dryers and through the support of USAID called invited experts from Haiti to assist. In 1992, aided by the Haitian consultants, a pilot project was initiated in Singada district focused on women groups, as women are responsible for such activity.

The solar dryer is not only used for preserving vegetables and fruits for household consumption but also could be an income generating activity. Those who are involved in marketing of vegetables, who happen to be mostly women, could dry more in a relatively short time and sell more dried vegetables and fruits even during the rainy season. As in the case of the cassava processing and preservation project, extension agents were fully involved and played an active part in sensitisation, demonstration and follow up of the production and promotion of the solar dryer.

The project was well monitored and to date over 230 solar dryers have been introduced in the district and about 30 local artisans trained in the construction of solar dryers. A manual for use by

extension workers has also been developed, pre-test and is ready for publication. The technology has been exported to other districts mostly through NGOs like CARE International.

The promotion of the technology is also being linked to other projects. For example, according to information gathered from the Nutrition Unit of the MOA, the technology is being linked to the school gardening project in ten districts supported by UNICEF and technically guided by TFNC, aimed at promoting Vit A rich fruits and vegetables to communities through school children. This linkage was worked out in collaboration with TFNC, district Education administration and agricultural extension services of the MoA. It is expected that both the promotion of the vegetable and fruit production along with the solar dryer will gradually filter to the community through school children and contribute to the control of Vit A deficiency. Unfortunately, no monitoring system has been devised to see the extent to which the school to community transfer is being achieved and document the lessons learnt in the process.

Observations

The project is relevant and has had beneficiary participation at the community level, and the full involvement of concerned agencies like the extension services of the MoA and NGOs.. The involvement of the local artisans was very positive, firstly because it helps the technology to be easily accessible, affordable and sustainable, and secondly, it creates an income generating opportunity for the local artisans whereby they can improve their access to food. Perhaps the most important lesson is the efforts being made to integrate the technology into other programmes like VAD control, and school gardening.

Development and Promotion of Traditional Weaning Foods

The need for the development of appropriate child weaning and feeding foods at household level was justifiable given the problems associated with child malnutrition.

Germination and fermentation as methods of decreasing bulk and improving nutrient quality have been known in Tanzania but not widely used. The use of home-made germinated cereal flour as a method of improving nutrient density of weaning foods has been aggressively introduced in the JNSP and later the CSPD programmes in Tanzania through intensive education, demonstration and popularisation of the method with UNICEF assistance.

In 1994/5, TFNC made an evaluation of the efforts made by the JNSP and CSPD programmes and reported as follows (TFNC Report # 1599 & 1688) “ the community is well informed of the idea of using germinated cereal flour for child feeding.....Yet only few mothers use it on regular basis....promotion of using germinated cereal flour in child feeding in Iringa JNSP did not succeed very well so far and moreover use of fermented porridge is unpopular among the young generation..... one of the constraints was identified to be lack of appropriate educational materials”. The latter statement is hard to accept given the massive efforts and the enormous materials that have been produced by the JNSP. Another study was conducted in some villages of Dar es Salaam in March, 1995 whose aim of which was “to find out why there was poor adoption of the use of improved home made weaning mixtures, germinated and fermented foods in child feeding”. What followed from these studies was nothing new, but the development of more educational materials and feeding guide with no monitoring system attached.

Since its involvement in the subject of germination and fermentation over 12 years in collaboration with various international agencies, TFNC has done some biological studies on the safety and quality of fermented weaning foods. Two PhD. and two MSc degrees have been acquired on the subject. Since the days of JNSP, too many materials have produced and

distributed, transmitted through print and electronic media, many seminars and workshops have been held on the subject, but no satisfactory reports were available to indicate their relevance to promoting the technology. Despite that, even now the 1998/9 plan of action has proposed and budgeted for the production of more materials, more training, more print and electronic media messages.

Observations

Five observations could be made from the review made on this project:

Improving infant and child feeding was needed but little has been achieved on the ground. Given its relevance, the resources spent and the efforts made for over a decade and a half, the technology has not been adopted satisfactorily as indicated earlier. The reasons for the unsatisfactory promotion of the technology do not seem to have been sufficiently and seriously studied. Is the problem the preparation, the food palatability, or the approach to educating parents? Which agency has the leading role to promote it is not clear.

While research on the quality and safety of the germinated and fermented foods is necessary, equal priority should have been given to operational research into the causes of unsatisfactory adoption of the technology.

Dynamism is needed in seeking alternative approaches to promote technology, which does not seem to have been the case in this project. There was nothing to indicate that the evaluations conducted by TFNC in 1994 and 1995 resulted in new approaches.

There has been no link to routine MCH activities, which may have been better entry points for promotion.

Educational materials on the subject are being produced without serious evaluation of their effectiveness in promoting the technology.

2. Child Nutrition

Breast Feeding, Infant and Young Child Nutrition

The existence of child malnutrition problem in Tanzania has been known for many years.

Improper infant and young child feeding practice is one of its main causes. Studies done in more recent years have indicated that while breast feeding is still a common practice (95-98% of mothers breast feed on average up to the age of 21 months), only 44% were found to initiate breast feeding within half an hour of delivery and there was low rate of exclusive breast feeding. The reasons have been attributed to lack of knowledge, traditional practices and inadequate information.

In realisation of this, TFNC in collaboration with the MoH and UNICEF conducted a workshop on the promotion of breast feeding and young child nutrition in 1987. After deliberating on the issues, a National Consultative Group on Infant and Young Child Feeding was formed. A Five year programme on infant and young child nutrition was also developed and implemented with funds mainly from SIDA (later UNICEF joined in).

The objective of the programme was to improve feeding practices in Tanzania. Activities included:

Training of relevant health personnel on lactation management;
Promotion of breast feeding through the implementation of the Ten Steps of the Baby Friendly Hospital Initiative (BFHI) in collaboration with delivery and paediatric wards in hospitals and with the required training;

Development of a national code of conduct on the marketing of breast milk substitute and monitoring of the implementation of the code;
Training on lactation management;
Education to the public and mothers in particular on breast feeding and weaning;
Development of educational and training materials in the support of the above activities.

Implementation

Concerned medical doctors, nurses, mid-wives, MCH co-ordinators, traditional birth attendants in 20 regions have been given training on breast feeding and lactation management with the expectation that they apply their knowledge and that they train other health workers at the lower levels. Several education materials on breast feeding for general use and training manuals for health workers have been developed and distributed. Sensitisation seminars were held at the national and sub-national levels including for parliamentarians. A public rally was held during the celebration of the World Breast Feeding Week in 1996. The Code on the marketing of breast milk substitutes has been legislated. To date 45 hospitals have joined the BFHI after fulfilling the Ten Steps criteria. Lactation management is said to have been included in the training of the medical professionals.

Observation

There was sufficient evidence to justify the need for an intervention. The process of project development was highly participatory in that it involved all relevant national and international agencies and experts in various disciplines from health to justice. It has been able to penetrate the hard line specialists in the Obstetric and Paediatric Wards in hospitals to apply the BFHI. The inclusion of lactation management in medical training and the legislation on the marketing of breast milk substitutes were all significant achievements. However, the programme has probably not been able to capture some of the key programme elements, which could have made its efforts more fruitful.

The objective was too broad and non-specific and there were no clear indicators. There seems to have been no clear vision as to how to sustain and expand the initiative, how to link it up with the existing MCH programmes, how to monitor. The Consultative Group only provided professional training and advice, but had no responsibility for the administrative mechanism at the regional or the district levels to integrate its training efforts. It was assumed that this would be handled by the MoH. However, this was not the case because there is no Nutrition Unit or even a focal person assigned in the MoH to attend to nutrition related activities. This deficiency was acknowledged by the Acting Head of the MCH services in the Ministry, who knew that someone from MCH unit in the Ministry was assigned to participate in the Consultative Group, but had no idea as what the situation looks like currently on the ground, except assuming that the regional and district MCH Co-ordinators “may be doing something because they have been given the training”.

The programme did not have an in-built monitoring system to keep track of processes and outcomes. This has been acknowledged by those who are leading the programme at TFNC and others. In any case, even if the system was designed, the absence of a responsible implementing unit, or at least a focal person at the regional or the district level for nutritional issues, would have limited implementation.

While the planned activities for the 4 years have all been successfully undertaken, and there is information on the number of people trained, seminars held and number of participants, hospitals applying the BFHI, and the kinds and number of educational materials produced, there were no

reports to show whether those trained have applied the knowledge they gained, if they are still in post, whether they have been able to train others as expected, what lessons they learnt, and the problems faced in implementation. Even concerned TFNC staff do not have the information, but there is a plan to conduct an evaluation.

The legislation passed in 1994 on the marketing of breast milk substitute was a step forward and a commendable job done, but its implementation is not easy especially in view of the liberalized market policy. A system should have been developed to monitor and enforce the implementation and take necessary corrective measures.

Where the various activities have not been linked formally to the health care system, and there is no focal person anywhere, from central to the periphery in the health infrastructure to attend to nutritional activities, the efforts made could hardly have a multiplier effect beyond what has been provided by the Consultative Group. In general, the project seemed to have lacked sufficient guidance on how to link the excellent efforts to an existing system and contribute to the improvement of child nutrition on a sustainable basis.

School Feeding Programme

TFNC has worked closely with the MoE on issues related to curriculum development, school gardening, nutritional assessment as in the case of IDD, Vit A, anaemia and using schools as agents in propagating health and nutrition messages as in I-salt, promotion of Vit A rich foods etc. Since 1994, TFNC and the MoE have been working together to develop the school feeding programme, supported by SIDA.

In the pre-independence years, primary school feeding was almost an element of the school system and part of the food aid package in Tanzania as in many other countries. After independence, due to the Government's policy on food aid and due to economic problems, the feeding programme was interrupted. Then some unsuccessful attempts were made to revive it, this time through community self help. Despite this history, the MoE and TFNC wanted to revitalise the programme. As a means of justifying the need for a nutrition programme in schools, TFNC in collaboration with MoE and the USA based Action Group for Health in schools did studies in primary schools. The findings from the studies indicated that malnutrition among school children was widely prevalent and that the poor educational performance of some of the children was partly explained by the poor nutritional status. Hence, the need to develop school-feeding programme (TFNC Report #1839) with an in built nutrition surveillance system to be done by the schools themselves was justified.

The objective of the TFNC project was “ To strengthen management of nutrition and related activities in primary schools in Tanzania by the year 2000 and beyond”. The immediate objectives were to:

- improve knowledge and skills of committee members to be involved in the management of school feeding programmes;
- provide training to artisans on how to construct solar dryers;
- promote skills of primary school teachers in monitoring the nutritional status of school children using anthropometric measurements.

The activities envisaged were training and the production of educational materials. The team had separate discussions with the responsible people both at TFNC and MoE to get a better

understanding of the issue. It appeared that there was a lot of enthusiasm to revive the school feeding programme, but less consideration on the issues related with it.

Observations

Looking at the background information, the justification given, the objectives and the activities, it is hard to see how such project could make a meaningful contribution to HFS and nutritional improvement. In the very first place, according to the people met, in reality there is no operational national school-feeding programme. Besides, most of the questions that should be considered in planning and programming have not been addressed sufficiently. For example, is the TFNC school feeding project a precursor for the development of a national programme? If so, how was it envisaged to evolve into a national programme? Is it necessary to have a feeding programme in all primary schools or could one focus on schools in food insecure areas? Is it necessary to have it all the year or only in the hungry season? Is it likely that by giving one small meal at school the nutritional condition of the child will improve to the extent that his school performance will improve? Where will the food for the feeding come from? How easy is it to convince parents to contribute for school meals? If a family can contribute, why is the child malnourished at all? In such cases is the food or the education lacking? How feasible and reliable is it to get nutritional data from schools, why is it necessary, and how will it be used? The project has not addressed all these and other issues of linkages. Like all other projects no monitoring system is in place.

Therefore, though relevant, the programme was not well conceived and it is hard to see its feasibility or meaningful contribution, unless other HFS problems in the child's family (family food production, income, access) are also addressed, or indeed its linkage with any ongoing national programme. The design suggests it may not go beyond running workshops and developing educational materials.

3. Maternal Nutrition

The project initiated by TFNC was intended to provide some input into the National Safe Motherhood Programme. The entry point selected was to address women's workload and thereby improve their nutritional status. The objective was "To improve maternal nutrition by improving the work load".

A pilot project has been initiated by TFNC in three villages in different regions to identify the types of work affecting the health and nutritional status of rural women, and devise strategies and interventions to alleviate the burden and see the nutritional changes. The assessment was done with full participation of the communities, the findings discussed with the communities, and interventions such as community self help milling machines, provision of clean water near villages, wheelbarrows for carrying water, wood and other items, and improved stoves were selected with them. The implementation was left to the communities, but TFNC has made a few follow up visits (three times in four years) to see what had been done, but nothing has been recorded. They do not know what progress has been made. Now TFNC is preparing for the final evaluation and UNICEF has been asked to finance the evaluation.

Observations

This is a very small study in three villages. It is unlikely to provide adequate information and follow up has not been addressed. One of the villages selected is in Iringa where the JNSP has been so active in such undertakings of women's workload. What happened to that experience? Why was it not used directly instead of conducting another pilot of the same nature in the same region?

The effort is said to be an element of the Safe Motherhood Initiative, but those involved in the safe motherhood programme have not taken the initiative to monitor it and integrate lessons. From the interviews they do not even seem to know about it. In general, one could say that it was not thought through sufficiently and nothing useful is likely to come out of it.

It is hard to visualise what will come out of the planned evaluation. In the first place, to see the effect of improved work load on the improvement of nutritional status of women, one has to make sure that the activities leading to that have been successfully accomplished. But there has not been any report to that effect nor was there a system put in place to record the lessons. The concept is good, but it has to be implemented on a wider scale, systematically monitored and linked to ongoing relevant national programmes.

Annex 3. Zimbabwe – case studies

The programme for the control of iodine deficiency disorders (IDD)

The existence of endemic goitre in Zimbabwe was documented early in 1960s. However, no action was taken until the 1980s. In 1988/89, the MoHCW conducted a nation-wide goitre survey covering 160,000 primary school children in 55 districts. The survey revealed that 53 out of the total 55 districts were affected. The average total goitre rate (TGR) was 44% with a variation between districts ranging from 17-79%. The visible goitre rate (VGR) was 4%. The findings from the goitre survey were later confirmed by urinary iodine studies.

For planning and programming purposes, the areas were classified as highly endemic

(TGR >50%), moderate (30-50%) and mild (<30%). Accordingly, 20 districts were rated as highly endemic and targeted for iodised capsule (IOC) intervention as an interim measure.

Objectives

The country adopted the global objectives :

1. To attain universal iodisation of salt by 1995.
2. To virtually eliminate IDD from the country by the year 2000.

Management

Nationally the programme is co-ordinated by the NNU. At the Provincial and District levels, it is the responsibility of the respective health departments. An interministerial National Committee for the Control of IDD (NCCIDD) entrusted with planning, guiding and overseeing the implementation of the programme was established in 1989. The NCCIDD was made up of members from all relevant government institutions and external agencies such as SIDA, UNICEF, WHO. The Director of Maternal and Family Health Division of the MoHCW was the chairman of the Committee with the NNU as its Secretariat. The Deputy Director of the NNU was appointed the National Programme Co-ordinator and Secretary of the NCCIDD. In addition, four sub-committees were formed for: Salt Iodisation, Monitoring and Research, IEC and logistics. The members of each sub-committee were drawn from various agencies as appropriate. A member of the NNU was also assigned to each to facilitate immediate feed-back to the Co-ordinator.

Functions of the Committees

NCCIDD : To guide the planning and oversee the smooth implementation of the programme, and to co-ordinate sectoral contribution and collaboration to the programme.

The Secretariat: To act as the focal point to facilitate and monitor implementation, mobilise resources, facilitate the work of the committees, prepare the agenda for the NCCIDD, maintain records and reports, establish contacts with national and international agencies concerned with the control of IDD, and solicit technical assistance where necessary.

Salt sub-committee: To deal with salt iodisation, legislation and distribution matters.

IEC sub-committee : Advocacy, sensitisation, advice on the development of educational materials.

Monitoring and Research sub-committee: To monitor implementation, develop an information system, identify areas for operational research on IDD, facilitate research undertakings and ensure utilisation of findings.

Logistics sub-committee: To provide administrative and logistic support to the above committees and the Secretariat.

Provincial/District Health Depts: To co-ordinate and monitor the implementation of the programme at their respective levels.

Government Analyst Laboratory (GAL) : To act as an independent laboratory for iodised salt quality control (salt and urinary iodine analysis).

The NCCIDD and its sub-committees were very active until 1995. But, after the legislation of iodised salt in 1995, the NCCIDD and three of its four sub-committees gradually ceased functioning. According to the Programme Co-ordinator, they had little to contribute after the legislation and also it became increasingly difficult to call them for meetings . The Monitoring and Research sub-committee made up of highly qualified and interested professionals from the MoHCW, GAL and the University remained active and effective. Later, it was decided to designate this sub-committee as the NCCIDD to attend to all matters pertaining to the programme, and to co-opt others as necessary. This arrangement has worked well.

Implementation

The implementation of the IDD control programme started in 1990 with the administration of IOC in one district for population groups aged 1-45 as an interim measure. The plan was to cover all the 20 highly endemic districts with IOC. However, due to rapid progress in the introduction of the I-salt, the IOC administration was interrupted in 1992 after covering only one district. This was a very wise management decision because not only did it speed the implementation process, but also enabled the shift of resources to a more sustainable intervention benefiting the entire population.

Salt Importation and Legislation

Zimbabwe is land-locked and does not produce salt except for what is said to be an “insignificant” backyard production by individuals in some areas classified as mild. Over 80% of the country’s salt needs is imported from one Soda Ash production plant in Botswana. The rest comes from South Africa and Mozambique, mostly in iodised form. When embarking on the IDD control programme, visits were made by concerned officers from Zimbabwe to Botswana to negotiate with the company to iodise its salt. This was achieved without much difficulty. But to date one problem remains unresolved: the iodine levels in the salt being produced by the plant show a very wide variation within and between batches. A consultant from the ICCIDD funded by the Micronutrient Initiative Secretariat is due to arrive in Botswana around mid-March 1999 to help the company improve the quality. There is also a plan to harmonise the levels of iodine in salt in the ECSCA region. The ICCIDD is working with the countries on this issue. These measures will hopefully solve the problem.

The legislation on salt iodisation for human consumption was enacted by the parliament in 1993 as an amendment of the food and food standards act of 1973 article No. 3. and gazetted in 1995. The national standard was set at 30-90 PPM. The legislation did not include salt for animal consumption. Following an increase of cases of hyperthyroidism, experts from the ICCIDD visited the region including Zimbabwe and recommended a lower iodine level. This has not materialised, partly because there was no final word from the ICCIDD and partly because there was a decline in the incidence of hyperthyroidism, said to be a normal phenomenon at the initial stages of the introduction of I-salt.

The other important step taken by the IDD control management was to convince the Ministry of Industry and Commerce to grant more licences to salt importers and distributors in order to ensure a steady flow and stabilise the price of salt. Various seminars were held for salt traders in the country. Major salt manufacturers and traders from the neighbouring countries (South Africa, Mozambique, Botswana and Namibia) were also invited to participate.

Monitoring

The monitoring aspect has been satisfactorily instituted. Training programmes were organised for various cadres, and workshops conducted for all concerned parties in 1994 and 1998. The monitoring system consists of I-salt monitoring and biological impact monitoring.

I-salt Monitoring: Test kits are used for monitoring I-salt at port of entry, wholesale warehouses, retail shops and at household level. This is done throughout the country by the Environmental Health Inspectors of the MoHCW as one of their routine activities. Each district has about 20 of these professionals. The shortcoming is noted to be the recording and reporting. It has not been systematic. Although reports reach the districts, they have not been regularly compiled and sent to the provincial and central levels. This shortcoming was acknowledged by the Programme Co-ordinator. However, since the salt is coming from one source, if the quality could be assured at the factory level, in the long run, it may be sufficient to rely on the annual surveys from sentinel sites.

In addition, I-salt monitoring has also been integrated within the Social Dimensions of Adjustment's (SDA) annual surveys being conducted by the Ministry of Public Services, Labour and Social Welfare. During such surveys samples of salt are collected from retailers and households and sent to the GAL for analysis using the titration method. This has been done since 1995 and results showed satisfactory levels of I-salt and access by households.

Biological Monitoring: 12 sentinel districts (10 in the high endemic and 2 in other areas) and 3 primary schools from each were selected for this purpose. Annually, goitre surveys are conducted on all students from each sentinel school and urine samples collected from 50 students per school. Trained nurses and nutrition co-ordinators undertake the goitre examination and sample collection. The urine samples are sent to the GAL for analysis. On average 2000 urine the GAL has examined samples annually since 1994. Despite a shortage of technicians and delays in getting reagents at times, the GAL has provided commendable support to the programme. There is need to support it with funds to continue its service to the programme. The plan to collect TSH from pregnant women attending antenatal clinics did not materialise.

Sentinel site urine iodine test results (mcg/l) 1996

District	No of samples	Minim.	Maxim.	Median Urine iodine
Chegutu	89	20	1200	210
Centenary	141	300	1200	450
Hurugwe	107	160	1200	290
Churugwi	130	20	1200	560
Nkayi	194	80	1200	615
Total	661	20	1200	450

Urine samples collected from the sentinel sites in 1997 and 1998 showed similar results indicating the stabilisation of the situation. However, the problem of variation still persists. For example, results of 335 salt samples collected as part of the SDA in March 1996, indicated that while 62%

of the samples fell within the national standards (30-90 PPM), 4.2% were above and 4% below the standard limits. This variation partly reflects the variation in the findings of the urine iodine results above. Goitre rate has also shown a remarkable decline.

Research on the IDD programme

Various surveys have been undertaken by the programme. However, only three of them could be classified as research.

Lipidoil Dosage Determination: Before the implementation of the IOC a pilot activity was undertaken to test the efficacy of IOC in Zimbabwe and determine the duration of its effectiveness. Based on the findings of the study and other similar findings elsewhere, a decision was made to provide one oral dose of 480 mg yearly.

Research on hyperthyroidism: Following the administration of the IOC and the distribution of I-salt, medical doctors observed an increase in hyperthyroidism. Research was initiated by a staff member of the University/ IDD research sub-committee member. On the basis of the findings, training was given to medical staff, workshops were conducted, and guidelines prepared (see bibliography) to assist health workers identify cases of hyperthyroidism.

KAP Study: A KAP study was conducted on IDD and I-salt and the results were used to develop educational materials, including a video film for training of health workers and other cadres and for educating the general public.

Financial Support

The programme has been supported by various agencies. The major donor, involved from the early stages of the national survey, is SIDA. UNICEF joined later with funds to assist in sample analyses. The programme still requires financial assistance for training, monitoring, laboratory analysis and related operational costs. As the system is now in place, much less funding is required, especially as the GAL as part of its annual budget covers the cost of reagents for urine iodine determination.

Achievements

Overall, the IDD control programme in Zimbabwe has made significant progress, and it is likely to meet its objectives in a short period of time. The reasons for its satisfactory progress can be attributed to a number of factors:

Strong Management: The Programme Co-ordinator is the Deputy Director of the NNU, who did her post graduate study on IDD in the country. She is a board member of the ICCIDD and regional co-ordinator on IDD for the ECSA region. She thus has good experience and easy access to national and international organizations like the ICCIDD, PAMM, MI, UNICEF.

The use of imported iodised salt: Even though it required some negotiation with the company in Botswana for the delivery of I-salt, the problem was less pronounced compared to problems faced in local iodisation of salt by other countries of the region.

The rapid shift to iodised salt: The fast move from IOC intervention to I-salt distribution has speeded up the implementation greatly and saved resources to facilitate the smooth implementation of the programme nationally.

The integration of some of the programme activities especially the monitoring aspect with other activities like those of the environmental health and SDA improved efficiency.

A functional monitoring system was well designed and established early.

The interest and harmony of the Monitoring and Research sub-committee has been quite instrumental in enhancing and maintaining the programme performance.

Recommendations

To improve further, it is necessary to address the following issues before momentum is lost:

Follow up closely on the quality and stabilisation of iodine levels at the factory level.

Improve the recording and reporting system not only for monitoring purposes, but also for impact evaluation of the programme as the year 2000 approaches.

Strengthen monitoring at port of entry to prevent possible importation of uniodised salt from countries other than Botswana.

No matter how insignificant it may be, the status of backyard salt production should be studied and necessary action taken. The attempts made earlier in 1994 to recruit a consultant to look into that issue should be pursued.

The status of salt for animal consumption should be studied and the legislation amended accordingly.

The programme to promote household food security

Since the late 1980s, food security in Zimbabwe has been affected by recurrent drought, the one of 1992/93 being the worst. As a result of this and other factors, households especially in the communal areas have been unable to recover from chronic food insecurity. Even in years of good rains when the country is self-sufficient at an aggregate level, household food security (HFS) remains uncertain. Recent studies indicated that about 60% of households experience severe food shortages for most parts of the year. The nutritional status has not shown any improvement over the years. In fact, in some areas it has deteriorated.

As part of the national efforts to address some of the food security and nutritional problems, the NNU of the MoHCHW has been implementing community-based programmes with financial support from SIDA and other donors since 1981. The programmes included:

1. Community Food and Nutrition Programme (CFNP)
2. Infant and Young Child Feeding (IYCF)
3. Child Supplementary Feeding Programme (CSFP)

This report highlights the status of these programmes with respect to their relevance to improving HFS and nutritional status, their linkages with other development programmes, the feasibility of the implementation approach and the issue of sustainability.

1. COMMUNITY FOOD AND NUTRITION PROGRAMME (CFNP)

The CFNP emerged in 1987 as a modified and re-named version of the Supplementary Food Production Programme (SFPP). In 1989, a process evaluation of the programme was undertaken which indicated a number of shortcomings leading to several recommendations for improvement.

Objectives

Under the SFPP, the long-term objective was “to support communities meet the extra food needed for children under the age of 5 years”. The objective of the CFNP was “to involve and assist communities in high-risk areas identify their food and nutrition problems and implement appropriate interventions to address the problems”, a broad and non-specific objective.

Activities

Advocacy and sensitisation of decision-makers and development planners through seminars and workshops;

Nutrition education to community members especially mothers;

Provision of agricultural inputs like seeds and fertilisers to enhance food production and develop vegetable gardens;

Enhancing the production and promotion of nutritious crops;

Keeping of small animals and poultry;

Development of appropriate food storage, processing, preservation and other technologies;

Training of extension workers in all the development sectors on food security and nutrition with a focus on the linkages between production, access and nutritional status.

Management

The overall management and co-ordination of the programme falls under the NNU. At the sub-national levels it is the responsibility of the provincial and district health offices. Each province (except Mashonaland East) has at least one qualified nutritionist and most districts are staffed by nutrition co-ordinators.

After implementing the programme for some years, it was realised that the collaboration and input from various sectors and the community was essential. Therefore, in 1987 the NNU managed to bring together “interested professionals” from the relevant agencies to form an Intersectoral National Food and Nutrition Committee (NFNC) chaired by Agritex.

The functions of the committee were to:

Guide and co-ordinate the annual plans and programmes;

Oversee the smooth implementation of the planned activities;

Review periodic and annual reports and take necessary corrective actions;

Organise advocacy and sensitisation fora for higher officials;

Advise the NNU on alternative approaches and assist in mobilising resources.

Similarly, at the provincial and district levels, Food and Nutrition Management Committees (FNMC) were established to assist in the planning, implementation and monitoring of the programme.

Implementation

Basically, the “group food production” approach was used to implement the programme. The process involves several steps. First, there is dialogue between the FNMC and the community members on the food and nutrition problems and their causes in the community. After agreement on what needs to be done, groups are formed.

Although there is area targeting to implement the programme, the criteria for forming a “food and nutrition groups” were based on individual interest, the availability of a plot of land and water for gardening and the provision of some inputs like seeds, wire mesh for fencing, for the initial period. The programme has managed to form hundreds of small groups who produce food crops during the rainy season and a variety of vegetables at other times depending on the availability of water.

In practise, due to shortage of staff, logistical problems, lack of transport and the weakness of the FNMC, the community dialogue has not been satisfactorily conducted. Therefore, the Agritex identified most of the projects.

According to the information gathered from the reports and the interview with the FNMC members, the group approach had some problems. Generally groups start well, but gradually harmony diminishes. As a result, the gardens lack proper attendance. Besides, drought episodes and water logging have been discouraging factors in some areas causing the break up of the groups. The other observation made by the FNMC was that, since the gardens belong to interested individuals, the group members can do what they like with the product they collect. Usually they divide it among themselves; much of it is commercialised, and not integrated in the child feeding programme.

Although the FNMCs had weaknesses, they were key to the successful implementation of the programme. A few sectors like health, agriculture, education and the local government had better interaction and communication.

The nutrition co-ordinators and the Agritex extension workers could not provide the necessary technical back up support due to their small numbers and lack of transport. There is no proper recording and reporting system in place. There are no records to show what has been planted, how much has been produced, how it has been used and who benefits from it. This could have been done in few sites. It is hard to assess how much the approach has improved household food security and nutritional status especially of the poor and malnourished families.

Thus the search for better approaches continued, until in one seminar a local chief proposed to go back to the indigenous practice traditionally known as “Zunde raMambo” (the chief’s granary). In the past, members of a village contributed some portion of their produce to the chief’s granary so that they could use it in the event of food shortages caused by natural or man-made disasters. This was found to be a valuable idea, and a series of seminars were held at various levels to popularise the approach and solicit the co-operation of the local chiefs and village headmen. This movement is now gaining popularity. The evaluation team had the opportunity to observe two such initiatives in two districts where the villagers had planted a variety of crops and organised a central granary (one is still under construction).

In the current version of Zunde raMambo, some changes have been made. A plot of land is allocated to a village community (not to interested group or individuals). All members of the community are expected to participate in the farming activity on the plot under the direction of the village headman. There is a committee to work with him, appointed by the community. Whatever is produced is stored in a granary at the village level and the use of it is determined by the village community and implemented through the committee. Currently, the inclination is to use such food for feeding children, for disabled members and depending on the amount, assist community members in times of food shortage.

The Zunde raMambo scheme appears to be more attractive than the “interested group approach”, but it has yet to pass the test of time. It has a better chance of success because it has its roots in tradition and draws in all members of a village community. Implementation may be easier and better use of the produce for child feeding may be possible. Furthermore, beyond food production, the Zunde approach could be used as an entry point to other community-based activities. It is an ideal opportunity for community dialogue, education, demonstration, and data collection.

There is an enthusiasm and high expectation from the “Zunde” every where, from the central to the grass roots level. Local governments have agreed to allocate land and vowed to fully back it. While such optimism is desirable, it is worth noting that the current “Zunde” version is different from the traditional one. Much has now changed. Thus it has to be treated differently and with care. The “Zunde” will require more efforts to implement, but the efforts are more likely to achieve food and nutrition security. Continuous sensitisation and dialogue is necessary; the provision of inputs like high-yielding drought-tolerant seeds is essential; training, monitoring and technical back-up support is mandatory.

Achievements

Although the CFNP may not have had a significant effect on improving the food and nutritional security in the short term, throughout the process of its implementation, the programme has led to valuable experiences and produced useful outputs:

1. The formation of the multi-sectoral food and nutrition committees at the various levels is a positive achievement because they have been instrumental in:
 - propagating the multi-sectorality of food security and nutrition to decision-makers and development planners in the various sectors;
 - bringing sectors closer together to address the issues of food and nutrition;
 - members of the National Food and Nutrition Council used the experience of the programme to help them formulate the Food and Nutrition Policy.
2. The management structure created by the programme will serve for other development programmes particularly at the sub-national levels.
3. The training given to the extension workers, and the inter-sectoral planning and monitoring exercise developed by the committees at all levels will improve the skills of the members and help them use the experience in other sectoral programmes.
4. The rebirth of the “Zunde raMambo” may have not been thought of if the programme had not initiated community dialogue and active involvement;
5. The awareness created for the need to link CNFP to child feeding is a result of the efforts of the programme.

Major Shortcomings

The programme had more focus on production and paid little attention to food storage, processing and preservation which are crucial elements of food and nutrition security, especially in drought-prone areas. Besides, the programme has adopted only one approach, namely the “group gardens”;

Although the objective of the programme was to help communities to assess, analyze and act upon their food and nutrition problems, this important process has not been effectively undertaken. The Agritex identified most of the projects;

The programme was not able to target the vulnerable households and population groups. It is not known how many of the members in a “group” were from this category ;

Training of extension workers was inadequate; sufficient and appropriate educational materials are lacking;

The monitoring and information system is weak.

Recommendations

1. Maintain the committees but limit membership to only those sectors that have direct role in intervention (Health, Agriculture, Education, Local Government, Social Welfare, Community) and co-opt others as necessary such as in the planning and review exercises. A good example is the action taken by the IDD Control Programme.
2. Recognition and institutionalisation of the Committees: The Food and Nutrition Committees at all levels should be recognised and institutionalised as a sub-committee under the already existing Provincial, District and the Village Development Committees set up in the government development structure, with a clear mandate and accountability.
3. Focus more on poor families: Special efforts should be made to involve poor families in the programme.

4. Develop a feasible monitoring system: One of the indicators of good programme management is its monitoring system. It is the tool which indicates progress towards meeting programme objectives. Where resources are limited, the best approach is to establish sentinel sites selected to represent areas and population groups. The approach adopted by the IDD control programme is a good example.
5. Devote more time and efforts to community dialogue: The ultimate success of any programme is measured first and foremost by its sustainability. To ensure sustainability involvement of the community through dialogue is essential. Time, effort and resources spent on this process is always justified.
6. Give due attention to food processing and preservation: Better food processing and preservation methods will improve food and nutrient availability, particularly in food insecure areas. For example, the provision of a mill to women in a community growing small grains, provides many opportunities: it helps to improve food quality, saves time and labour of mothers, generates income and thereby allows for the development of other income generating activities in the community. The introduction of technologies like solar dryers allows maximum utilisation of vegetables and fruits and reduces wastage.
7. Incorporate other development initiatives: The food and nutrition programme should intensify and support other development initiatives such as dam construction, water harvesting, small-scale irrigation, environmental sanitation and other health care activities.
8. Initiate and promote income diversification activities: Where drought is recurrent and food production is uncertain, it is only logical to diversify income especially of poor families through initiatives such as a credit system. Thus a very close working relationship should be established with concerned agencies, such as the Ministries of Social Welfare, Community Development and others.

2. CHILD SUPPLEMENTARY FEEDING PROGRAMME (CSFP)

The CSFP was re-started in 1992 in response to the severe drought experienced by Zimbabwe and sub-region as a whole. The objective of the programme at that time was “to save lives and to serve as an emergency and recovery measure. What started as an emergency relief measure continued to become one of the major nutrition programmes of Zimbabwe with a new set of objectives, activities and management system.

The overall objective of the revised version was restated as “to maintain and/or improve the nutritional status of children under 5 years in food deficit areas”. The specific objectives were:

- a. To provide daily ration for children under 5 years of age;
- b. To provide health and nutrition education to mothers on child feeding;
- c. To provide meals for school children grades 1-3.

The objective has no time limit nor does it state the desired level of “improvement” of the nutritional status.

Management

Until 1996, no less than one million children were fed daily. In view of the magnitude of the operation, a Secretariat was established within the NNU to deal with tender issues, procurement from abroad and within the country, storage, transportation and delivery, payments, and maintaining records.

Organisation of Feeding

Easily accessible feeding points have been established to facilitate mothers bringing their children. School children are fed at school. Cooking and feeding is done by mothers but this has not always been easy. Nutrition workers are supposed to supervise at the district level, but they are too few for the hundreds of feeding points, and the task is left to the mothers. It is hard to assess the adequacy of the feeding in terms of quantity and quality. Furthermore, there is no accountability for wastage and misuse of food. There are reports which indicate that often too much food is prepared, with leftovers either wasted or taken home by some mothers.

Problems faced at the feeding points include lack of co-operation from mothers, delays in the delivery of food (often of inadequate quantity and quality) and a shortage of utensils, and in some case even clean water for cooking.

Targeting and Screening

In principle, the programme had a guideline on targeting which was based on the Agritex classification according to the severity of drought and food production levels. Accordingly the following criteria were laid down:

In red zone areas (severely affected by drought): Feed all children under five years of age.

In yellow zone areas (mildly affected by drought): Feed all children if the prevalence of malnutrition is over 15%.

In the green zones area (not affected) : No feeding, but feeding may take place in communities with problems..

In practice however, although attempts have been made to target and screen, it has not been effective for various reasons. Feeding centres have even been established inside commercial farms. The pressure from decision-makers and the community, the serious shortage of staff and equipment like weighing scales, lack of transport facilities, cultural attitudes of mothers not wanting to expose a severely malnourished child, have all contributed their share in the failure to apply effective targeting and screening.

The age recommended for feeding is below 5 years, and schoolchildren in grades 1 - 3. According to information gathered from some reports and interviews with field workers, the very young children, who would benefit most, remain at home, while the toddlers are brought to the feeding centres. This is especially true if the mother has more than one child under 5.

Current Status

With diminishing donor support, most centres have been closed since 1996. Some continue with left over food, and in some cases communities have taken the initiative to contribute from their own resources to maintain the centres. But the food they provide is never enough in quantity nor adequate in quality to meet nutrient requirements. There is a very high demand from communities and a desire by the MoHCW to continue the programme.

Funding and Utilisation

The programme has been supported by about eleven international, bilateral and multilateral agencies. The government too has contributed. Most of the food was imported from abroad, and the rest purchased locally. Due to a shortage of manpower and logistical problems, the supervision of food distribution and utilisation has not been satisfactory. As a result, wastage and misuse have occurred, according to various reports.

Six types of recording and reporting forms were devised, generally too complicated to be completed at the field level. What remained in effect was only the administrative report which deals with food requirements, deliveries and requests. It is thus not possible to determine if the funds actually benefited the children.

These observations demonstrate: i) the difficulties in running an efficient and effective supplementary feeding programme, ii) the issue of a supplementary feeding programme is not only the availability of food, but also how best to utilise it to benefit those who need it most, and iii) that the CSFP has not been able to fulfil its objectives.

Any supplementary feeding programme has negative side effects. It creates dependency, undermines the development of coping mechanisms by households and communities and provides a “false protection”, i.e. a mother may withhold a meal at home on the assumption that the child has been at a feeding centre, when actually the food may not have been of the required quantity and quality.

Observations

The need for a well targeted feeding programme in emergency situations including drought disasters is indisputable. But, the need for a country-wide, all-season feeding programme where there is no state of emergency is debatable. In any case, what is clear from the current review which concurs with previous evaluations of the same programme like that of Walker and Ncumbe, is that it casts doubt on the nutritional benefits of the programme vis-a-vis the time, resources, efforts expended. There is no doubt that more could have been achieved if it was properly targeted to those at risk, and part of the funds were used for drought mitigation through initiatives such as food or cash-for-work programmes.

Recommendations

The Government needs to address seriously the issues raised in this report when deciding on the future of the programme.

Nutritionists, medical personnel and those involved in the management of the programme have a professional and moral responsibility to advise and guide the decision-makers on implementation problems and the negative effects of community-based child supplementary feeding where there is no emergency.

The agencies which have been supporting the CSFP should continue to do so, but redirected towards drought mitigation activities with an in-built drought preparedness strategy to be implemented in times of emergency and serious risk. If funds could be directed to implement the “Zunde”, instead of using them for untargeted feeding; children could benefit more, and sustainability and self-reliance would be better assured.

3. INFANT AND YOUNG CHILD FEEDING (IYCF)

One of the most important programmes in the area of food and nutrition security being implemented by the NNU is the Infant and Young Child Feeding Programme. There are three aspects of this programme: Breastfeeding, Weaning and Feeding.

Breastfeeding Activities

Breast feeding is still a popular practice among Zimbabwean mothers. Studies indicate that over 95 % feed until the age of 24 months. But, there is a declining trend in the urban areas. The problem with exclusive breast feeding between the ages 4-6 months still persists. It is estimated that about 50% of mothers give their children in this age range fluid and solid foods. And this has been one of the causes for the high rates of early childhood malnutrition. Many activities have been undertaken to protect and promote breastfeeding:

- IEC and Sensitisation
- Training and Education
- Implementation of the Baby Friendly Hospital Initiative (BFHI)
- Enacting the Code of Marketing of Breast-milk Substitutes and Infant Nutrition
- Development of guidelines on breast feeding and HIV.

IEC and Sensitisation is achieved through seminars, workshops and the media. The World Breastfeeding Week introduced in 1992 has been instrumental in organising of seminars, workshops, mass media messages on the need for the protection and promotion of breastfeeding and the dangers of inappropriate child feeding practices. The country has been active in this venture since 1992.

Training has been given through the formal and informal education systems for health professionals and other cadres. However, the efforts made are limited due to shortage of qualified trainers. Most of the training has been organised through training of trainers.

The implementation of the BFHI: Initially eight trainers were trained and they in turn trained 30 assessors to be assigned to hospitals to co-ordinate and monitor the implementation of the initiative. To date, of a total of 213 major hospitals targeted to be part of the initiative, 42 have taken up the initiative after fulfilling the required criteria. More will be assessed in the future and made to join the initiative. According to the programme co-ordinator, though the initiative is good, it is very difficult and time consuming. Patience, understanding and skill is needed to convince hospital staff, especially the paediatricians and obstetricians. In order to facilitate smooth implementation, some doctors were sent abroad to participate in training programmes and workshops. They then provided training to others in the country. The nurse tutors have been trained on BFHI, but the training will be integrated in the curriculum.

The constraints faced in the implementation of the BFHI include:

- lack of appreciation and understanding by the medical staff;
- The enormous time and efforts required to complete the process of assessment, dialogue with the hospital staff and the implementation. The assessment form is long and complicated, and efforts are underway to modify and simplify it to suit to the local needs and capabilities;
- Lack of continuity by some hospitals, unless closely monitored.

The Code of Breast-milk Substitutes and Supplementary Foods was drafted in 1984, revised after 10 years in 1994 and enacted only in mid 1998. The NNU in collaboration with other concerned parties has started the process of implementation of the Code.

Breast feeding and HIV is currently high on the international agenda. There remain many unresolved scientific and technical questions surrounding this issue. Zimbabwe has opted to continue promoting breastfeeding but, to provide counselling on alternative for mothers who are identified as HIV positive. The NNU has been working with concerned units of the MoHCW, UNICEF, WHO and other agencies to identify alternative infant feeding for HIV positive mothers. After a series of consultations with experts, guidelines are now available on alternative feeding, starting in the antenatal period. The mother will also be given counselling on other aspects of the disease.

Weaning and Feeding: The Unit's main pre-occupation in this area has been to study the KAP in child weaning and feeding in rural areas in order to design appropriate interventions. To that effect, studies were undertaken in four districts, followed by an intervention study in Makoni district, Manicaland province, undertaken by the senior provincial nutritionists and the FNMCs. The evaluation team had the opportunity to attend the presentation of the study to members of the district FNMC. The study was designed in such a way that after identifying the KAP of the mothers, the researchers prepared an educational message, a recipe from locally available foods and instructed mothers on how to apply it. Then they returned after a week to get the mothers' reactions in order to make the activity more practical. The acceptance by mothers was encouraging.

The study will be further extended to different areas to develop area and culture specific messages and recipes as opposed to the traditional universal approach. Then the educational component will be integrated into other activities like growth monitoring. The researchers intend also to work on the processing, preservation and preparation aspect of weaning foods.

Observations

Given the limited staff and logistic constraints, the NNU has made commendable efforts in the area of IYCF. Notable achievements include the wide sensitisation on BF, the finalisation and legislation of the Code, the development of a guideline on BF/HIV, the operational research on child weaning and feeding, and the progress made in the implementation of the BFHI.

There was perhaps less achieved in the areas of training, the production of educational materials and the evaluation of the effectiveness of those already developed.

Recommendations

There should be planned and continuous training programmes to health personnel in the area of IYCF. Unless these cadres are knowledgeable and convinced, they could become part of the problem rather than the solution by passing wrong messages as indicated in the study in Makoni district.

The need to revise the curriculum of health professionals to include the BFHI and other aspects of child feeding should be given a priority. It may not be effective to do it by organising short courses and workshops. The latter can at best complement but not replace the basic training that is more accepted by the trainees.

Annex 4. Persons met

TANZANIA

Dr. W. Lorri	Managing Director, TFNC
Mr. B. Jeje	Director, policy and Planning , TFNC
Dr. S. Kimboka	Director, Health and Nutrition, TFNC
Dr. B. Sanga	Team Leader, IDD Control Programme, TFNC
Mr. B.E.Bunga	Senior Nutritionist, Project Officer, IDD, TFNC
Dr. G. D. Ndossi	Director, Food Science and Nutrition, TFNC
Mrs. H.H. Missano	Director, Nutrition Educaton & Training , TFNC
Mr. G.T.Ndunguru	Head, Food Preservation and Product Development
Mrs. Pauline Kisanga	IBFAN, Mbabane
Mrs. B.F. Kunsindah	Principal Standard Officer, TBS
Mr. G.L. Mwakalukwa	Commissioner for mineral resources, MEM
Mr. P. Ngereja	Geologist, MEM
Mr. Shiraz	Managing Director, Seifi Chemical Importers, DSM
Mr. A. Somboja	Port Principal Health Officer, DSM
Mr. R. Stanely	General Manager, H.J. Salt Works, Bogamoyo, DSM
Dr. F. N.Njau	Project Co-ordinator, Health and Nutrition, MoH
Dr. A. Massawi	Lecturer, Muhumbili College of Heath Sciences
Mrs. J. Safe	Principal Nursing Officer, Ag. Head MCH Unit, MoH
Mr. E. D. Kadete	Principal health Officer, NFCC, MoH
Mr. R. M. Rutengwe	Chief Nutritionist, Food and Nutrition Unit, MoA
Ms. S. Lweno	Nutritionist, MoA
Mrs. E. N. Yona	Head, Management and Coordination Section , MoE
Dr B. Lundquist	UNICEF Representative
Dr. A. Bekele	Nutrition Project Officer, UNICEF
Mr. J Sendaw	Production Manager, Stanley Salt Works-Bogamoyo
Mr. A. Raes	Private Individual Salt Producer-Bogamoyo
Mr. A. Manji	V/Chairman TSPA & Salt Producer, Gwazo

ZIMBABWE

Mrs. J.Tagwireyi	Director, National Nutrition Unit
Mrs. J. R. Mutamba	Deputy Director/ MM Programme Coordinator, NNU
Dr.Todd	Lecturer, University of Zimbabwe, member, NCCIDD
Mrs. J. Chanesta	Senior Nutritionist, NNU
Mrr. A. Kruger	Embassy of Norway
Mrs. Rufalo Madzima	Principal Nutritionist, NNU
Mr. Mandibaya	Project Co-ordinator, CSFP, NNU
Mrs. T. Musizvingoza	Provincial Nutritionist, Mash-West
Mrs. Thokozile Ncumbe	Senior Nutritionist, Mat-North
FNMC members	Makoni District, Manicaland
Dr. Boniface Manyame	Health Project Officer, UNICEF
Mr. Hakutangwi	Chief Training Officer (Agritex) Chairman to the National Food and Nutrition Committee (2 years) Previously Provincial (Manicaland) Chairman of The Food and Nutrition.
Mr. Edgar Chigundu	Director of National Economic Planning Commission.
Mr. Gonzo	Ministry of education and Culture
Mrs. Bhowa	Senior Nutritionist, Training, IEC, and Gender
Dr Lomamy Shodu	Director, MCH and F/P Department, Ministry of Health and Child Welfare
Dr Lillian Marovatsanga	Institute of Food and Nutrition and Family Science, of Zimbabwe.

SWEDEN

Mrs. Gunilla Essner	Sida DESO, Health Unit
Mrs. Maragreta Tullberg	SidaDESO, Health Unit
Mr. Sten Rylander	Embassy of Sweden, Dar es Salaam
Mr. Lennart Bondesson	Embassy of Sweden, Dar es Salaam
Dr. Jan Lindström	Embassy of Sweden, Dar es Salaam
Mr. Abdi Fom	Embassy of Sweden, Harare
Mr. Per-Ulf Nilsson	Embassy of Sweden, Harare
Dr. Ted Greiner	International Child Health Unit, University of Uppsala
Dr. Mehari Genre-Medhin	International Child Health Unit, University of Uppsala
Dr. Britta Andersson-Ogle	Swedish Agricultural University, Uppsala
Dr. Hans Rosling	Karolinska Sjukhuset, Stockholm

Annex 5. Authors of the report

Jerker Carlsson, Ph.D

ANDANTE – Tools for Quest
Järnvägsplan
S-331 30 Värnamo, Sweden
Telephone: +46-370-30 14 30
Fax: +46 – 370 493 31
E-mail: jerker.carlsson@quest.se

Suraiya Ismail, Ph.D

London School of Hygiene and Tropical Medicine
Department of Epidemiology & Population Health
49/51 Bedford Square
London WC1B 3DP
United Kingdom
Telephone: +44-171-29946 96
Fax: +44-171-2994666
E-mail: s.ismail@lshtm.ac.uk

Jessica Jitta, M.Med.

Child Health and Development Centre
Makere University
P.O. Box 6717
Kampala
Uganda
Telephone: +256-41-541684
Fax: +256-41-531677
E-mail: JITTA@CHDC.uu.imul.com

Estifanos Tekle

Independent consultant Nutrition and Food Security Programmes
P.O. Box 22027
Nairobi
Kenya
Telephone: +254-2-576555
Fax: +254-2-576555

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Department for Democracy and Social Development

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S-105 25 Stockholm, Sweden
Tel: +46 (0)8-698 50 00. Fax: +46 (0)8-20 88 64
Telegram: sida stockholm. Postgiro: 1 56 34-9
E-mail: info@sida.se. Homepage: <http://www.sida.se>