Unit 1 – Learning from the Nutrition Situation Worldwide

Welcome to the first unit of the *Public Health Nutrition: Policy and Programming* module. Unit 1 introduces you to a basic understanding of the nutrition situation in the world and offers you the opportunity to learn from successful nutrition programming and policy in different countries. Through country studies, we will explore and identify some of the factors that contribute to improving the nutrition situation.

Unit 1 contains three Study Sessions:

Study Session 1: International Trends in Nutrition
Study Session 2: Context and History of Public Health Nutrition Policies and Programmes
Study Session 3: Success Factors in Country-specific Case Studies

Learning outcomes of Unit 1

By the end of Unit 1, you should be able to:

- Outline the extent and distribution patterns of malnutrition in the world.
- Describe factors that contribute to the nutrition situation.
- Summarise the impact of nutrition and malnutrition on health, disease and development.
- Describe a broad range of interventions that address the different nutrition problems and their contributing factors.
- Summarise the historical development of nutrition interventions.
- Differentiate between policies and programmes and understand their inter-relatedness.
- Identify contextual factors that contribute to successful nutrition programmes.
- Define programme specific factors that contribute to successful nutrition programmes.
- List features which indicate success in nutrition programmes.

Before you start, take a good look at the two assignment topics, analyse them, and bear them in mind as you study. This will ensure that by the time you have completed the study sessions, you will be ready to embark on your assignment. Good studying!

Unit 1 - Session 1 International Trends in Nutrition

Introduction

In developing countries, the major nutritional problems are generally different from those found in developed countries. They impose a greater burden in terms of mortality and morbidity, affect different age groups and require different approaches for their solution. It is important to understand not only the nature of these problems, but also their causes, in order to plan appropriate, acceptable and effective interventions.

This module will concentrate primarily on the nutritional problems that affect children in developing countries.

Contents

Timing of this session

This session contains five readings and three tasks. It should take you about five hours to complete. A logical place for a break is at the end of section 4.

1 LEARNING OUTCOMES OF THIS SESSION

By the end of this session, you should be able to:
▪ Briefly outline the extent and distribution patterns of malnutrition in the world. ▪ Briefly describe the factors that contribute to the situation of malnutrition in the world including economic, epidemiological, demographic and nutrition transitions. ▪ Summarise the impact of nutrition and malnutrition on health, disease and development. ▪ Explain why nutritional improvement is important.

2 READINGS

There are five readings for this session which are listed below. You will be directed to reading them in the course of the session.

Author/s	Publication details
Gillespie, S., Mason, J. & Martorell, R.	(1996). *How Nutrition Improves.* ACC/SCN State-of-the-Art Series, Nutrition Policy Discussion Paper No 15. UN ACC/SCN.
UNICEF.	(2001). *The State of the World's Children.* UNICEF.
Behrman, J.R.	(1992). *The Economic Rationale for Investing in Developing Countries.* USA: USAID.
Popkin, B.M.	(1998). The Nutrition transition and its health implications in lower-income countries. *Public Health Nutrition* 1(1).
Burkhalter, B.R.et al.	(1998). *PROFILES: A Data-Based Approach to Nutrition Advocacy and Policy Development.* Published for USAID by BASICS, Arlington, Va.

3 TRENDS IN UNDERNUTRITION IN DEVELOPING COUNTRIES

3.1 Understanding trends in undernutrition

Although nutrition has improved for many people in the world, in other regions, including our own, the pace of improvement has not been fast enough. Almost a decade ago, at the International Conference on Nutrition in 1992, governments endorsed the goals of the World Summit for Children of 1990, calling for halving the "1990 underweight prevalence by the year 2000". Some countries have shown rapid improvement and in many, hunger and malnutrition are being eliminated. Study the first two readings in order to develop an understanding of the prevalence of undernutrition worldwide and to gain a clearer understanding of the regions where the situation is most serious.

Readings:
Gillespie, S., Mason, J. & Martorell, R. (1996). *How Nutrition Improves.*
ACC/SCN State-of-the-Art Series, Nutrition Policy Discussion paper No 15. UN ACC/SCN. 1-27.
UNICEF. (2001). *The State of the World's Children.* UNICEF. 75-111.

As you start with the first task, remember that engaging with tasks is crucial in reading and learning actively.

TASK 1 – Summarise trends in under-nutrition

Explore these readings, and summarise nutrition trends in developing countries by following these steps.

a) Note that Figure 2.2 on page 12 of Gillespie, Mason and Martorell summarises "Recent trends in prevalence of underweight children". Using the information from the UNICEF reading, plot the prevalence of underweight children for each of the different countries in the six regions of the world on the relevant charts in Figure 2.2.
b) In your own words summarise the trends that you observe between 1990 and 2000 in each of these countries.
c) Compare the trends between 1975-1990 with those between 1990-2000.

FEEDBACK

We hope you found this task stimulating. It should have helped you to understand not only the differences in a country- or region-specific nutrition situation, but also the reasons for the variation in trends which you read about. What did you note about the trends worldwide?

You should have noted that most of the regions in the world experienced an improvement in the prevalence of underweight children, with the exception of Africa and to a lesser extent, South Asia.

The rate of improvement in South Asia and in sub-Saharan Africa obviously does not match up to the required improvement which would enable us to achieve the United Nations goal of halving the prevalence of underweight amongst children by 2000. Together, these two regions account for 70% of the world's underweight children.

Please check your response to this task against this summary.

Extent and distribution of malnutrition in the world

Region	1975-1990* adapted from Gillespie et al, 1996: 13	1990-2000
Latin America and the Caribbean	There is considerable consistency in the improving trend observed during the 1980's. In this region there is a real prospect that, if progress can be maintained or re-established at the level of the late 1980's, malnutrition is on its way to a problem of the past	There is a slight decrease in the malnutrition rates though the trend for Jamaica, Costa Rica and Trinidad dropped very rapidly.
Near East and North Africa	Similar to Latin America & Caribbean	Tunisia appears to maintain the decline in malnutrition rates, but Egypt experienced an increase.
South East Asia	Rapid progress in nutrition has been made in several countries. In contrast, the Phillipines nutritional situation is lagging, having shown little improvement in the last decade.	Trend in most countries only slightly lower. Thailand experienced a serious increase in malnutrition rates.
South Asia	The trend in South Asia is dominated by that in India.	The downward trend for most countries has been maintained. The trend for Pakistan however seemed to be lower than 1975-90
Sub-Saharan Africa	The trends are substantially different between the different countries with a static regional trend.	Trends for most countries remained at the same level as 1990, which implies that the number of malnourished children is on the increase. Kenya and Zimbabwe appear to have experienced a deterioration in nutritional status.

3.2 Calculating nutrition improvement

Nutrition improvement is calculated by dividing change in prevalence by the period in years.

The calculation of improvement in nutrition using percentage points is useful because the value seems moderately constant across different regions. The rate of change is also easier to calculate directly; it avoids appearing to minimise the progress made in high prevalence countries.

For example, if a country's prevalence of underweight is reduced from 10% to 5%, that is a 50% reduction in prevalence in 5 years compared to a country

showing a reduction of 30% to 25% in 5 years (i.e. a 17 % reduction), both are equivalent to -1 (minus one) percentage point per year. A negative or minus sign for prevalence change means reduction that reflects an improvement.

3.3 The nutrition situation in South Africa

In South Africa, only two national surveys have been carried out to determine the nutritional status of children younger than six years of age: these were the South African Vitamin A Consultative Group (SAVACG) in 1994 and the National Food Consumption Survey (NFCS) in 1999.

Both these studies found the national prevalence of malnutrition as:

- **10% underweight**
- 23% stunting
- 5% wasting

This implies that the nutritional status of children in South Africa did not change over this six-year period. Although South Africa has the lowest prevalence of underweight in sub-Saharan Africa, this pattern of no change is very similar to that of the regional trend for sub-Saharan Africa. Stunting is highest in the poorest households.

Look at the following table to get an overview of the severity of under-nutrition in South Africa.

WHO classification for the interpretation of the severity of the prevalence of under-nutrition in children

Moderate malnutrition: WAZ/HAZ/WHZ below -2SD

	Low	Medium	High	Very high
Underweight (WAZ <-2SD)	<10%	10- 19.9%	20-29.9%	≥30%
Stunting (HAZ <-SD)	<20%	20-29.9%	30-39.9%	≥40%
Wasting (WHZ <-2SD)	< 5%	5-5.9%	10-14.9%	≥15%

Severe malnutrition: WAZ/HAZ/WHZ below –3SD

Let us now review some of the factors that contribute to nutrition as an outcome.

4 FACTORS WHICH INFLUENCE NUTRITION

What are the driving forces behind these nutritional trends? Can you think of any factors that influence nutrition? Make a short list in the margin of your module.

There are several factors which influence nutrition. The two most important ones are the long-term social and economic trends and policies of a country and related investments that are made in nutrition. A conceptual framework developed by UNICEF, first published in 1990, is now widely used to provide a guideline towards the analysis and understanding of the multiplicity of factors impacting on nutrition at the individual, community and national levels.

One set of factors that impacts on nutrition is the continuous evolution and change of human beings and their environment which has taken place over the past few centuries. This evolution has been characterised by various transitions or changes by all societies. These can be termed:

- economic transition
- demographic transition
- epidemiological transition
- nutritional transition.

Let us learn a little about each transition.

4.1 Economic transition

Over the years, there has been a shift from a trade-centered economy to a service economy. Within the recent past, the economy has shifted again and has become more focused on information technology. There has also been a shift from an emphasis on human labour to a more mechanised and industrialised economy. With greater liberalisation of global trade, it was expected that more employment and higher wages would result, but generally this has not happened. Opportunities for highly skilled professionals have expanded, but not for unskilled labour. This has resulted in a brain drain from developing countries and has left a large pool of unskilled people behind.

4.2 Demographic transition

As the mortality rate declines, there is a delayed response in the fertility rate. The move of large populations from rural to urban areas has resulted, to a certain extent, in the inability of populations to grow sufficient food to feed themselves. Urban populations therefore have to rely on a money-driven economy in order to buy food and survive. Research further suggests that in “food-rich” or “resource-rich” environments, the nutritional status of individuals may not be as affected. Children of recent immigrants are an exception to this generalisation, suggesting that their recent arrival in a new environment is a risk factor for malnutrition.

4.3 Epidemiological transition

Disease patterns have changed from a high prevalence of infectious diseases to a low prevalence of infectious diseases, while the prevalence of non-communicable diseases (or diseases of life style) has increased. In some countries, there is a high prevalence of both infectious and non-communicable diseases.

4.4 Nutritional transition

People's dietary intake changed from low fat and low energy (high fibre) to diets high in fat and energy (low fibre). This means that obesity (overweight) has been and is increasing in many countries. These changes in diet, activity and obesity which face lower and middle-income countries are cause for great concern, as they will result in a rapid increase in chronic diseases. This "double-burden" of disease (co-existence of under- and overnutrition and its related impact on health) would most definitely impact negatively on resources in countries that already find it difficult to manage undernutrition (Popkin, 1998).

These are some of the sets of factors which influence the nutrition situation of a country. In the next section, we look at four country studies. Look out for evidence of these sets of factors influencing their nutrition situation.

4.5 Compare the nutritional status of different countries

In order to learn more about the nutritional status in different countries, please do the following task.

Reading:
Gillespie, S., Mason, J. & Martorell, R. (1996). *How Nutrition Improves.*
ACC/SCN State-of-the-Art Series, Nutrition Policy Discussion paper No 15. 13-27 & 29-43.

TASK 2 – Compare nutritional status and identify influential factors

Return to the first reading and read pages13-27 and 29- 43. Write a brief explanation of the factors which influence differences in nutritional status between the countries.

FEEDBACK

How did you do? To better understand the trends in the nutrition status of children and to inform programmatic responses to undernutrition, an in-depth analysis of the socio-economic and demographic trends as well as the immediate and underlying causes as described in the UNICEF Conceptual Framework, is necessary.

Let us now look at some of the social and economic trends that have manifested in some countries. Since 1800, the world's population has multiplied exponentially. The world experienced its most rapid population growth in the 20th century and this has had a tremendous impact on resources. In addition, it is important to realise that changes in life expectancy and fertility rates have also impacted on nutrition.

Combined with adverse environmental conditions, this led to a world food crisis in the 1970's. This was when the term "food security" was first coined. In most parts of the world, policies (mainly agricultural policies) and programmes

were successful in increasing the food supply to be sufficient. This was, however, not the case in Africa and most other developing countries. Africa as a whole is also the only continent where the population growth rate (3.1%) has not yet started to decline. Consequently it has been predicted that in the next decade, per capita food supply will be about 12 600 kJ per day in North African countries, and at the relatively low levels of 9 114 kJ per day in sub-Saharan Africa. Recent statistics indicated that per capita energy available in South Africa was 9 772 kJ per day (Steyn *et al*, 2001).

Data from the *South African Demographic and Health Survey* (SADHS) reveal that the annual population growth in South Africa was estimated at 2.4% in 1995 and has been on the decrease. Forty percent of the South African population is regarded as poor and 30% as ultra-poor. The poorest 40% of households (based on income) makes up 53% of the population, and accounts for less than 10% of total food consumption. The top 10% of households, with only 5.8% of the population, accounts for over 40% of consumption (RDP, 1995: 7).

Now think about other policies, and more specifically economic policies and related investments, and their relationship to nutrition. Measures of national income such as GDP are associated with nutritional status for per capita income levels below $1 000. GDP alone cannot always explain the trends in malnutrition in the different countries. However, the actual control and use of economic resources within a country is a critical determinant of their impact on human development and thereby on nutrition.

In these case studies, average purchasing power increased substantially in all countries except African countries. Countries which experienced the most rapid economic growth have also made good progress in nutrition. Although the association is weak, there seems to be a trend indicating that countries with a greater emphasis on human development, measured as a proportion of government expenditure on health and education, experience a slightly better trend in their prevalence of undernutrition. To confirm this point, look at Figure 2.1 on page 10 of Gillespie, mason and Martorell (1996): “Relation of malnutrition with GNP” as well as Figure 4.1 on page 45: “Residual change in underweight prevalence with share of government expenditure on health and education.”

In line with the rest of sub-Saharan Africa, the population of South Africa is rapidly urbanising. It is predicted that 41% of sub-Saharan Africa will be urbanised by the end of the next decade. Urbanisation will result in a corresponding shift in the demand for food, with greater emphasis on convenience foods and a shift in the dietary supply. This has already been reported to have occurred in West Africa where there has been a shift from locally produced coarse grains such as millet and sorghum to imported wheat and rice. In South Africa, urbanisation is also expected to lead to increased intake of energy and fat (Steyn et al, 2001). This point can be further clarified by looking at the Gillespie, Mason and Martorell reading, Table 3.1 on page 31: “Economic resources, poverty, equity, and food security”.

We hope that you have gained greater clarity about the interrelationship of factors that influence nutrition. Let us now examine the burden of malnutrition more closely.

5 THE BURDEN OF MALNUTRITION

Malnutrition imposes a heavy burden on the government as well as on the people who suffer it. Poor nutritional status diminishes people's potential for growth, health, education and economic prospects and shortens their lives. This burden is particularly high in poor developing countries. The next two readings provide an overview of the impact of malnutrition in developing countries.

Readings:
Behrman, J.R. (1992). *The Economic Rationale for Investing in Developing Countries.* USA: USAID. 1-32.
Popkin, B.M. (1998). The Nutrition transition and its health implications in lower-income countries. *Public Health Nutrition* 1(1). 5-21.

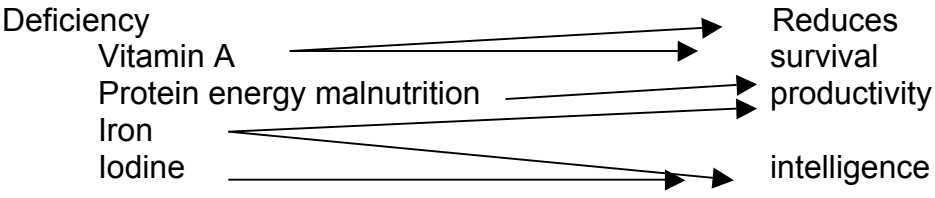
TASK 3 – What is the impact of malnutrition?

Study the Behrman and Popkin readings making notes on the impact of malnutrition. Look out for examples of how the impact of malnutrition can be quantified.

FEEDBACK

The consequences of malnutrition are often unappreciated because they are hidden. Usually there are no obvious signs, and the victims themselves are silent. The main manifestations of malnutrition in developing countries are growth faltering, vitamin A deficiencies, iron deficiencies and iodine deficiencies. The functional consequences of these deficiencies are low immunity, diseases, death, and mental impairment and in the long term, reduced capacity to produce and contribute to the economy and social well-being of a country.

Figure 1: Impact of malnutrition



Protein-energy malnutrition, sub-optimal infant feeding practices, and vitamin A deficiency significantly lower the resistance of children to infections and

dramatically increase the risk of illness and death. These increased levels of child deaths translate into human capital losses, higher fertility rates, maternal nutrition depletion, increased public health costs and loss of productivity among other consequences. A meta-analysis of the findings of eight studies in different countries (Pelletier, 1994) revealed that, in children under five years of age, the risk of death increases exponentially as protein-energy malnutrition becomes more severe.

Table 1: Relative risk of under-five mortality as a result of malnutrition

Malnutrition	Relative Risk (RR)
Mild	RR 2.5
Moderate	RR 4.6
Severe	RR 8.1

Vitamin A deficiency also has an immense impact on child health and survival. Vitamin A is not only essential for eye health and vision, but also for the integrity of the lungs, intestine and other tissues as well as for proper functioning of the immune system. Damage to these organs and systems become apparent long before the damage to the eyes becomes apparent. Sub-clinical vitamin A deficiency is many times more common than the eye symptoms.

Table 2: Impact of vitamin A on mortality and morbidity

Impact		Relative risk
Mortality		RR 1.75
Morbidity	Clinic attendance	RR 1.19
	Hospital admission	RR 1.84

Children in rich countries do not die from the common preventable diseases of childhood. Children in poor countries do. 55% of deaths due to communicable diseases occur in the poorest 20 percent of countries, with only 6% in the richest 20%. 80% of deaths due to non-communicable diseases occur amongst the 20% richest countries and only 30% of deaths due to non-communicable diseases in the poorest 20%. Measles, diarrhoea, malaria, pneumonia and malnutrition kill more than 8 million children a year and account for two thirds of all under-five deaths. These children are being allowed to die from problems that have long ago been overcome in other parts of the world. This situation can be compared to finding cures for heart disease, cancer and AIDS – but not putting them into effect.

Table 3: Percentage worldwide Dalys attributable to each of ten risk factors, 1990

Risk Factor	% of total Daly's		
	Developing	Developed	World
Malnutrition	18	0	15.9
Poor water, sanitation and hygiene	7.6	0.1	6.8
Unsafe sex	3.7	2.	3.5
Tobacco	1.4	12.1	2.6
Alcohol	2.7	9.6	3.5
Occupation	2.5	4.6	2.7
Hypertension	0.9	4.7	1.4
Physical inactivity	0.6	4.0	1.0
Illicit drugs	0.4	1.9	0.6
Air pollution	0.4	1.5	0.5
TOTAL	**38.2**	**40.6**	**38.5**

Table 4: Percentage of deaths associated with specific diseases

Disease	**% of deaths**
Acute respiratory Infections (ARI)	33.7%
Malnutrition	29.0%
Diarrhoea	24.7%
Malaria	7.7%
Measles	9.5%
One or more of these conditions	71.0%

Table 5: Percentage of deaths worldwide in 1990 by age and country group

Mortality (number of deaths and % of total)				
	Age			
	0-4years	**4-70years**	**>70years**	**Total**
Developed	0.4% (214)	8.1% (4,057)	13.2%(6,612)	21.8%
Developing	24.9% (12,443)	34.5% (17,223)	18.9% (9,422)	78.2%
TOTAL	25.3% (12,656)	42.6% (21,280)	32.1% (16,043)	100%

(From Murray & Lopez, WHO, 1994)

These are some examples of quantifying the impact of malnutrition. From this information, it is clear why nutrition needs to be urgently improved in developing country situations. The next section directs you to a computer package that can be used to quantify the impact of malnutrition. Be aware of its existence, but studying the reading is optional.

6 QUANTIFYING MALNUTRITION

This section directs you to a valuable resource which you can read about in the next reading. It introduces a computer package, developed by BASICS, called PROFILES which can be used to quantify the impact of malnutrition as well as the result of an improvement in the nutritional situation in a country.

Reading:
Burkhalter, B.R.et al. (1998). *PROFILES: A Data-Based Approach to Nutrition Advocacy and Policy Development.* Published for USAID by BASICS, Arlington, Va. i-44.

Here is a brief overview of PROFILES and its usage:

PROFILES is a process for nutrition policy analysis and advocacy.

- A process designed to demonstrate the contribution that improved nutrition can make to human and economic development in a given country.
- A process designed to translate technical nutrition data and analyses into terms and arguments that make sense to non-experts.
- A process designed to influence the way policy-makers think about Public Health nutrition issues, and the priority they give to investing in nutrition programmes.
- A process designed to estimate the cost-effectiveness and benefits of nutrition programmes. Cost-benefit and cost-effectiveness analyses are used to set priorities, assess the affordability of proposed interventions, compare alternative programmes and allocate resources effectively.
- A process that uses interactive computer-based models to project the consequences of poor nutrition on mortality, health care cost, worker productivity, mental development, fertility and other parameters.

7 SESSION SUMMARY

Congratulations! You have now come to the end of this first session. In the process, you have studied the relative nutrition situation in different parts of the world and gained an overview of sets of interrelated factors which influence nutrition. The burden and impact of malnutrition has also been discussed and quantified. We hope you have found it interesting. Look back at the outcomes for this session to see if you have achieved them. If so, well done, if not, please go over the relevant sections of this session again.

8 REFERENCES

- ANC. (1994). *The Reconstruction and Development Programme.* Cape Town: ABC Book Printers.

- Steyn, N., Abercombie, R. & Labadarios, D. (2001). Food security - an update for health professionals. *South African Journal of Clinical Nutrition* 14(3): 98-105.

- Pelletier, D. (1994). The Role of Information in Enhancing Child Growth and Improved Nutrition: A Synthesis. Ch 16 - *The role of information in enhancing child survival?* Place Publisher to be provided. 306-334.

Unit 1 – Session 2
Context and History of Public Health Nutrition Policies and Programmes

Introduction

Welcome to Study Session 2 of Unit 1, *Learning from the Nutrition Situation Worldwide*. In Session 1, we examined the global nutrition situation as well as the burden of malnutrition. In this session we will present an overview of the context and history of Public Health nutrition policies and programmes.

Contents

Timing of this session

This session contains one reading and four tasks. It should take you about two hours to complete.

1 LEARNING OUTCOMES OF THIS SESSION

By the end of this session, you should be able to:
▪ Describe a broad range of interventions that address the different nutrition problems and their contributing factors. ▪ Develop a brief summary of the historical development of nutrition interventions. ▪ Differentiate between policies and programmes and understand their inter-relatedness.

2 READINGS

There is one reading for this session. You will be directed to reading it in the course of the session.

Author/s	Publication details
Gillespie, S. & Mason, J.	(1991) Some Options for Improving Nutrition in the 1990s. *Nutrition Relevant Actions.* Geneva, UN, ACC/SCN.

3 INTRODUCTION TO NUTRITION POLICIES

International policies have been developed and changed over the years in an attempt to address malnutrition. Such policies are linked to economic development, which usually includes permutations [or different arrangements] of the following approaches:

- Development that generates employment for the poor.
- Safety nets for those excluded from economic progress to cushion shocks.
- The building of human capital.

Let's begin this session by examining the history of Public Health nutrition policies in South Africa in order to clarify the meaning and significance of policy.

3.1 Nutrition policies in South Africa

When studying policy, it is always important to bear in mind that policy is developed by members of society who are part of or work on behalf of a government. Policies shift in accordance with the vision and economic policy of a government. Policy itself must therefore be looked at critically to establish whose interests it serves, and whether it takes all critical conceptual issues related to, for example, nutrition, into account.

In the last couple of decades, health-related policies evolved around the Primary Health Care Approach focussing initially on Selective Primary Health Care (PHC). More recently the focus has broadened to include GOBIFFF (Growth monitoring, Oral rehydration, Breastfeeding, Immunisation, Female education, Food supplementation and Food gardens) and lately the Integrated Management of Childhood Diseases (IMCI).

In addition, population-related policies and programmes have relevance to the nutrition situation. Whereas they tended to focus very strongly on population control, there has been a recent shift to emphasising reproductive health and women's rights.

The focus of nutrition programmes has also shifted: they used to focus and concentrate on applied nutrition programmes (protein, nutrition education, supplementary feeding). This involved using a systems analysis approach and comprehensive nutrition planning. The realisation that nutrition requires an intersectoral approach has resulted in a much stronger emphasis on incorporating nutrition issues and considerations into other sectors. Nutrition programmes usually include community-based programmes, in service delivery (including IMCI) and micronutrient programmes.

In South Africa up to 1990, relevant policies tended to be food focussed and concentrated on overnutrition. In the early 1990's, a report on food aid programmes was compiled and shortly afterwards, a National Nutrition and Social Development Programme (NNSDP) was instituted to deliver food to people in need. The drought of 1992 was a significant event in the development of nutrition policy-related actions, with the initiation of a drought forum. Here people concerned with the nutrition problem in South Africa met and discussed the effect and results of the problem. Subsequently a nutrition committee was appointed by government to develop a nutrition strategy. This culminated in the Integrated Nutrition Programme (INP) which is currently being implemented in South Africa through the Nutrition Directorate in the Department of Health. The core of the INP is regarded as the Community Based Nutrition Programme which aims to be a multi-sectoral programme. In addition the Health Facility-based Nutrition Programme aims to provide supportive programmes such as the Protein-energy-malnutrition scheme, breastfeeding promotion etc. Other policy initiatives that impacted and could impact on nutrition in South Africa are the Reconstruction and Development Programme (RDP) which lasted from 1994-1999 as a direct programme, and now exists only as an underlying context, poverty alleviation, GEAR (Growth, Employment and Redistribution), land reform and redistribution, and social grants, specifically the child support grant.

TASK 1 – Clarify the concept of *policy*

From the preceding description of Public Health nutrition policies, describe the meaning of *policy* in your own words.

FEEDBACK

We hope your definition included the following elements:
Policy has been defined as a set of guidelines that determine priorities, goals, and actions (Frankle & Owen, 1994). Public policy governs the actions of government units.

You should note that in the absence of a clearly defined nutrition policy in many countries, policy is often set *de facto* [in fact] by a number of programmes and legislative actions. Policy may be further defined by a sub-set of policies in other areas such as agriculture and health.

Often it is assumed that nutrition policy is synonymous with food and agricultural policy. This perspective that "nutrition policy is food policy" is now

changing, especially in view of the increasing awareness and understanding of the role of nutrition in disease prevention and health promotion.

3.2 Key elements of nutrition policy

When evaluating policy, it is useful to bear in mind what the ideal, integrated Public Health nutrition policy would include. Frankle & Owen (1994) identify six key elements of nutrition policy which could be used to evaluate policy. These are:

- Providing an adequate food supply at reasonable cost.
- Ensuring a safe and wholesome food supply (covering areas such as food safety, pesticides, microbial food contamination, food additives, food fortification and enrichment, genetic modification, etc).
- Providing food access and availability to all (regardless of income).
- Providing research-based information and educational programmes to encourage informed food choices.
- Providing for an adequate science and research base in the area of food and nutrition.
- Integrating support for nutrition services as part of the health system.

You should now be ready to think about various nutrition problems in your district, or those of which you are aware nationally.

TASK 2 – Conducting a programme gap analysis

In this task, you are asked to explore the gap that exists between nutrition problems and relevant policy and programmes.

a) Complete the table below by listing, in the middle column, the nutrition problems that you are aware of in South Africa or in your district.
b) Add current interventions or programmes that are available to address these problems in the left-hand column.
c) Also list any policies that are in place to address these problems, in the right hand column.

Table 1: Programme gap analysis

Programme	Nutritional problem	Relevant policy

Use the data from the references below as source of information or to verify your understanding of the situation in South Africa or your district.

References:
Department of Health (1999): INP
- SAVACG (1994)
- NFCS (2000)

FEEDBACK

How did you do? We hope you were able to identify the policies that address the nutrition problems in your district and to identify where policy is falling short of addressing existing nutrition problems. Now let us take this task one step further and evaluate current policies as well as identifying policies and programmes which would improve the nutrition situation. To do Task 3, you need to refer to the following reading.

Reading:
Gillespie, S. & Mason, J. (1991) Some Options for Improving Nutrition in the 1990s. *Nutrition Relevant Actions.* Geneva, UN, ACC/SCN: 93-116.

Task 3 – Evaluate current nutrition policies

a) Use the reading to help you review the information in Table 1 above and think of any additional programmes and policies that could be implemented to improve the nutrition situation.
b) Write short notes on the programmes and policies listed in Table 1 above to indicate whether these programmes and policies have been successful or not, and why.

FEEDBACK

We hope you found this task useful. To end this session let us describe a new direction in which some nutrition programmes are moving.

4 FROM NEEDS TO RIGHTS

"A child needs to be healthy, well fed, and cared for, in order to thrive."

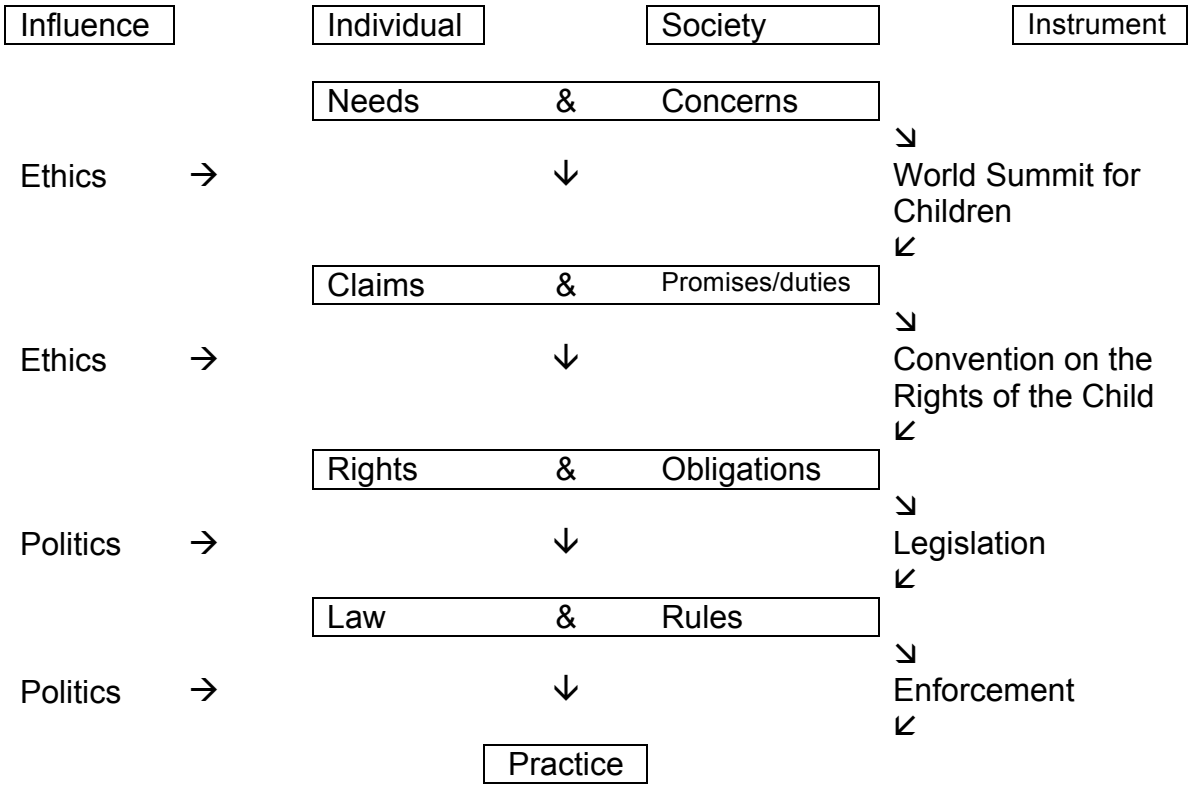
The World Summit for Children (WSC) expressed these needs as promises by Heads of State, in order to achieve the WSC goals. The Convention on the Rights of the Child translated these promises into rights, imposing obligations on the signatories.

In some cases, these obligations have been turned into law, for example salt iodisation and the protection against infant formula misinformation. In other situations they are already in law as part of the social welfare system. For

example, in many European countries, malnutrition is essentially illegal because it is regarded as the result of neglect.

The process of shifting nutrition from needs to rights is summarised below.

Figure 1: Nutrition and the rights of the child



(Jonsson, 1992, UNICEF)

TASK 4 – Write an argument expressing your views on South Africa's progress in reaching the WSC goals

Write a short text expressing your own opinion on the extent to which South Africa has achieved the goals of the World Summit for Children. Give reasons for your position.

FEEDBACK

We cannot check the information you have provided, but consider whether you have done the following in your text:

- Have you introduced the text stating your position.
- Have you presented reasons for your point of view, giving evidence that your position is valid?
- Do you conclude by reinforcing or re-stating your viewpoint?

This is, in essence, the key of academic texts or arguments. You cannot make an academic claim without substantiating it or giving reasons, and you usually

cannot give reasons until you have a sound background knowledge of the issues and evidence for or against a position. This is therefore a good test of how much you have absorbed while you studied.

5 SESSION SUMMARY

Well done! You have come to the end of this session. Hopefully you have gained more understanding of the development of nutrition policies in South Africa, and of the importance of different sectors addressing nutrition in their policies.

Through the tasks, you have probably also developed ways of looking critically at policy and have some sense of where the gaps lie in South African nutrition policies. You should by now have a broad understanding of the extent to which South Africa is addressing malnutrition through their programmes. In the next session, we look at a set of international nutrition programmes and reflect on what has made some of them successful and others not.

We hope you enjoyed Session 2. Take a short break before you begin the last session of this unit.

6 REFERENCES

- Department of Health, South Africa: South Africa Demographic and Health Survey,1998.

- Frankle, R. T. & Owen, A. L. (1993). *Nutrition in the Community. The Art of Delivering Services.* St Louis, Missouri: Mosby.

- Jonsson, U. et al. (1992). *The UNICEF Nutrition Strategy* . Handout from class by John Mason, Nutrition Programming and Planning, 2000: 5-33.

Unit 1 – Session 3
Success Factors in Country Specific Case Studies

Introduction

Welcome to Session 3. This session introduces you to four case studies of different countries. They should provide you with the opportunity to analyse these nutrition programmes and to identify factors contributing to the success or lack of success of these programmes.

Contents

Timing of this session

This session contains nine readings and three tasks. It should take you about four hours to complete. It would be logical to take a break at the end of each country study.

1 LEARNING OUTCOMES OF THIS SESSION

By the end of this session, you should be able to:
▪ Identify contextual factors that contribute to successful nutrition programmes. ▪ Define programme specific factors that contribute to successful nutrition programmes. ▪ List features which indicate success in nutrition programmes.

2 READINGS

There are nine readings for this session which are listed below. You will be directed to reading them in the course of the session.

Author/s	**Publication details**
Kachondham, Y., Winichagoon. P., Tontisirin, K.	(1992). *Nutrition and Health in Thailand: Trends and Actions.* UN ACC/SCN country case study supported by UNICEF. Institute of Nutrition, Mahidol University.
Tontisirin, K. & Winichagoon, P.	(1999). Community-based programmes: Success factors for public nutrition derived from the experience of Thailand*. Food & Nutrition Bulletin.* 20(3).
Soekirman, I.T., Jus'at, I., Sumodiningrat, G. & Jalal, F.	(1992). *Economic Growth, Equity and Nutritional Improvement in Indonesia.* UN ACC/SCN country case study supported by UNICEF, UN Administrative Committee on Coordination, Subcommittee on Nutrition.
Rohde, J.	(1993). Indonesia's Posyandus: Accomplishments and Future Challenges. Rohde, J., Chatterjee, M. & Morley, D. *Reaching Health For All.* Delhi: Oxford University Press.
Measham, A.R. & Chatterjee, M.	(1999). *Wasting Away: The Crisis of Malnutrition in India.* Washington: The World Bank.
Reddy, V., Shekar, M., Rao, P. & Gillespie, S.	(1992). *Nutrition in India.* National Institute of Nutrition, Hyderabad, India. UN ACC/SCN country case study supported by UNICEF**.**
Kavishe, F. P.	*Nutrition-Relevant Actions in Tanzania.* UN ACC/SCN country case study supported by UNICEF. Tanzania Food and Nutrition Centre.
Gillespie, S., Mason, J. & Martorell, R.	(1996). *How Nutrition Improves.*ACC/SCN State-of-the-Art Series, Nutrition Policy Discussion paper No 15.
Sanders, D. (1999).	Success factors in community-based nutrition programmes. *Food & Nutrition Bulletin,* 20(3).

3 WHAT MAKES NUTRITION PROGRAMMES SUCCESSFUL?

In this section, you will read a number of case studies of successful nutrition programmes in Thailand, Indonesia, India and Tanzania. There are two readings each on the countries in South East Asia. As you read, try to identify

contextual factors and programme specific features that make them successful.

Readings:
Kachondham, Y., Winichagoon. P., Tontisirin, K. (1992). *Nutrition and Health in Thailand: Trends and Actions.* UN ACC/SCN country case study supported by UNICEF. Institute of Nutrition, Mahidol University. 35-50.

Tontisirin, K. & Winichagoon, P. (1999). Community-based programmes: Success factors for public nutrition derived from the experience of Thailand. *Food & Nutrition Bulletin.* 20(3): 315-321.

TASK 1 – Identify factors that contribute to the success of a nutrition programme in Thailand

Identify the contextual factors which contribute to the success of the nutrition programme in Thailand described in Kachondham, Winichagoon and Tontisirin. Include factors arising from:
the demographic situation;
the economic situation;
the population situation in Thailand.

Then summarise the success features of the nutrition programme that has been implemented.

It will be helpful to do this series of tasks as a comparative table with four columns, one for each case study. Divide the length of the page into two sections, one for contextual features e.g. demographic and economic conditions, and the other for programme specific features. It might look like this:

Factors which lead to successful nutrition programmes

	Thailand	Indonesia	India	Tanzania
Contextual factors				
Programme specific features				

We hope you found this case study on Thailand interesting. To complete this activity, study the reading by Tontisirin and add to your notes based on your understanding of this reading.

FEEDBACK

Feedback to this task is provided after the next task. The next task requires you to read the other three case studies and to extract information from them.

Readings:
Soekirman, I.T., Jus'at, I., Sumodiningrat, G. & Jalal, F. (1992). *Economic Growth, Equity and Nutritional Improvement in Indonesia.* UN ACC/SCN country case study supported by UNICEF, UN Administrative Committee on Coordination, Subcommittee on Nutrition.
Rohde, J. (1993). Indonesia's Posyandus: Accomplishments and Future Challenges. Rohde, J., Chatterjee, M. & Morley, D. *Reaching Health For All.* Delhi: Oxford University Press.
Measham, A.R. & Chatterjee, M. (1999). *Wasting Away: The Crisis of Malnutrition in India.* Washington: The World Bank.
Reddy, V., Shekar, M., Rao, P. & Gillespie, S. (1992). *Nutrition in India.* National Institute of Nutrition, Hyderabad, India. UN ACC/SCN country case study supported by UNICEF.
Kavishe, F. P. *Nutrition-Relevant Actions in Tanzania.* UN ACC/SCN country case study supported by UNICEF. Tanzania Food and Nutrition Centre.

TASK 2 – Compare success factors from programmes in Indonesia, India and Tanzania

Now study the five case studies from Indonesia, India and Tanzania and try and do the same task as above for these countries.

In other words, identify the contextual factors which contribute to the success of their nutrition programmes and summarise the success features of the programmes that have been implemented.

FEEDBACK

Put very simply, a successful programme is one that achieves its objectives! Programmes may have very different objectives. One example is: reducing malnutrition and mortality rates of children under three years of age in the example of Tamil Nadu.

Check the information you selected from the four case studies against Table 1 which was compiled by Johnson.

TABLE 1 – SUCCESS FACTORS IN SOUTH ASIAN COMMUNITY-BASED NUTRITION PROGRAMMES

CONTEXTUAL SUCCESS FACTORS:

1. Political commitment at all levels of society.
2. A culture where people, particularly women, are involved in decision making.
3. The presence of community organisations.
4. A high level of literacy, especially among women.
5. Infrastructure for the delivery of basic services, including committed and capable staff.
6. Empowered women.
7. A local culture with a first call for children, including favourable child care practices.
8. Charismatic leaders in the community who can mobilise people to do more for themselves in a genuinely self-reliant way.
9. The parallel implementation of poverty reducing programmes particularly where the nutrition-oriented programme/project is integrated with these programmes.

PROGRAMME SUCCESS FEATURES:

1. The creation of awareness of the high prevalence, serious consequences and available low-cost solutions of the nutrition problem.
2. The initiation, promotion and support of a process where individuals and communities participate in assessing the nutrition problem and decide how to use their resources and additional outside resources for actions.
3. Clear identification and definition of time-bound goals (targets) at all levels of the programme/project.
4. Strengthening the awareness and understanding of the causes of malnutrition including the hierarchy of immediate, underlying and basic causes, and the need to address causes at all three levels.
5. The identification and support of facilitators and community mobilisers.
6. Community mobilisation and participation.
7. Community-based monitoring as one of the processes described under feature 2.
8. Both the community and government's felt ownership of the programme/project.
9. Income-generating activities supported by low-interest credit arrangements for the poor, particularly poor women.
10. Capacity building through training and continuing education of facilitators, community mobilisers and community members in general, particularly women.
11. Good management of the programme/project including effective leadership, supervision and coordination.
12. Increased cost consciousness and capability to estimate resources requirements.
13. The involvement of non-governmental organisations.

[Source: Jonsson, 1995]

Reading:
Gillespie, S., Mason, J. & Martorell, R. (1996). *How Nutrition Improves.* ACC/SCN State-of-the-Art Series, Nutrition Policy Discussion paper No 15: 59-88.

Chapter 5 of this reading also provides a valuable overview of factors which influence the success of nutrition programmes. Skim it and remember that it may be helpful in evaluating nutrition programmes in the future.

Do you feel you could put forward a set of features or principles to guide a successful programme? This is one of the competences that you are expected to develop. In the next section, we focus on what is actually meant by *success* in the context of nutrition programmes.

4 DEFINING SUCCESS IN COMMUNITY-BASED NUTRITION PROGRAMMES

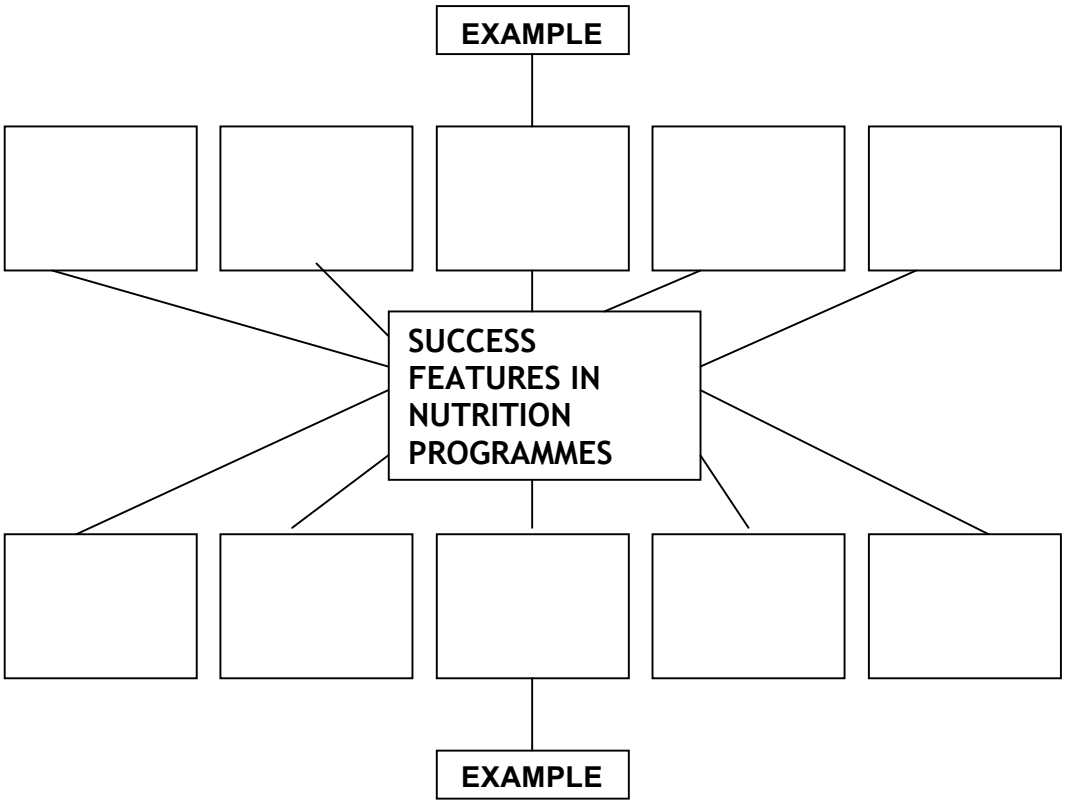
Having studied the contextual factors and programme specific features which contribute to success in nutrition programmes, let's look more closely at what we actually mean by *success* in such a programme. For example, "reducing malnutrition and mortality rates of children under three years of age" may be too narrow a definition of success to make a programme fully effective.

Defining what constitutes success would be important in planning or evaluating a nutrition programme, but bear in mind that there may be more than one way in which success can be achieved. This reading by Sanders (1999) proposes some challenging categories which could be used to define success when planning or evaluating a nutrition programme.

Reading:
Sanders, D. (1999). Success factors in community-based nutrition programmes. *Food & Nutrition Bulletin,* 20(3): 307-311.

TASK 3 – Mind map the potential success features of nutrition programmes

While you read, make a mind map which captures the range of categories of success mentioned in the reading. In each category, define or explain what each category means, and try to find at least one example. If you are not a regular user of mind maps for note taking, consult the section on note taking in your *Academic Handbook*. It is a very helpful and immediate way of taking notes and provides a useful tool for reviewing information.



FEEDBACK

Sanders puts forward a number of clusters of features which constitute success in a nutrition programme. These are:

- Socio-political factors including community participation and political will. For a nutrition programme to be successful, community participation, which is one of the central principles of Primary Health Care, is essential. Without community participation, ownership of the programme is lost. This outcome is affected by power arrangements and social relations. For example, community participation can influence the decision-makers in society to initiate or support such programmes. The concept of *political will* is a socio-political success factor and relates to the government's responsiveness to its constituency. Zimbabwe's post-independence nutrition programmes are cited as good examples of this feature of success.
- Technical factors include two broad components - programme hardware, for example, buildings, equipment, transport and other material; programme software, which has to do with the technical capacity of programme personnel to design, initiate, manage and evaluate nutrition programmes.
- Financial factors are both external and internal. Sustainability is dependent on internal financial capacity and its reliability.
- There may also be *process objectives* or objectives which aim for effectiveness in the process of implementation, such as increasing community participation and expanding coverage. An example is Indonesia's UPGK. Certain processes may be facilitated or even initiated as a result of the programme design, or, in some cases, as an unexpected by-product of the programme. Such an example is Zimbabwe's strengthened self-organisation of village people.
- At times, unintended or unforeseen effects may occur such as influencing policy: one example of this is Zimbabwe's CSFP/SFPP which influenced agricultural policy.
- Another important measure of success is sustainability. Sustainability refers not only to the financial viability of programmes but also to the ability of programmes to continue being functional when external input has been terminated.

Review your notes on the four country case studies from Tasks 1 and 2. Which of these programmes seem to be *sustainable*? If you do not think that they are sustainable, try to explain why, and also think of possible measures that could be applied to improve their sustainability.

5 SESSION SUMMARY

You have now come to the end of this session and of the first unit. In the process of completing it, you should have developed a fairly wide frame of reference for thinking about the success of nutrition programmes and the factors which contribute to their effectiveness. Look back to see if you have achieved the intended outcomes. If so, well done - you are ready to start the next unit. If not, review the relevant parts of Unit 1 before starting Unit 2. Unit 2 provides a closer look at the socio-political factors which impact on the success of nutrition programmes.

6 REFERENCES

- Jonsson, U. *et al.* (1992). *The UNICEF Nutrition Strategy*. Handout from class by John Mason, *Nutrition Programming and Planning*, 2000.