Federal Ministry of Health

Nutrition Policy for Sudan
and
Strategy for Implementation

16 April 2006

King Sherkarer of Meroe handing over war captives to the Sun-god,
who rewards the king with a bouquet of sorghum heads

(figure reproduced in Dirar HA, 1993, The Indigenous Femented Foods of the Sudan: A Study in African Food and Nutrition, CAB International)

Summary

This Nutrition Policy for Sudan addresses a **vision** of a country at peace, investing its national wealth in its people and in economic development which focuses on eradicating poverty.

This vision is very different from Sudan's recent past and from many present trends. While public services have been in decline, the Sudanese nutrition community has persisted in drawing up plans for improved nutrition, and has engaged with internationals in nutrition programmes addressing humanitarian needs. But they have seen **no improvement** in the general situation. In fact, the reverse: national levels of malnutrition are now among the worst in the region.

However, with peace, and with judicious **investment** in the country's human capital, Sudan's people could again be well-fed and healthy, and Sudanese children could reach their full potentials for growth, intellectual capacity, and contributions to the country's wealth.

The Policy opts for this vision, but makes it clear that the vision may take two or more decades to achieve. Consequently the Policy sets out guidelines for the first five-year Strategy for Implementation that will establish the type of structure and **working methods** that will be required to maintain the impulse and leadership for realising the vision in subsequent strategy periods. This task is to be carried out alongside pursuing and expanding coverage of all existing Essential Nutrition Actions, as well as pursuing humanitarian nutrition in a coordinated and efficient manner, and helping to minimize HIV prevalence and optimize AIDS treatment.

The focus of **leadership** in this endeavour will be with the health sector, whose Federal Ministry of Health has been mandated by Sudan's Government to take responsibility for nutrition, and who has taken the initiative to develop this Policy and this Strategy. One of the key **responsibilities** that this leadership role entails is the development of a modern **culture** among health and other professionals with regard to nutrition. Nutritionists have valuable skills and should be playing key roles far beyond the current limited scope of child malnutrition. The Strategy outlines ways of developing these roles in all fields of health, focused on breaking the inter-generational cycle of malnutrition, as well as working with other sectors to develop the **inter-sectoral links** that will enhance and sustain the nutrition of the population.

In the document, Part A is the Policy; Part B the Strategy, and Annexes are found at the end. Within the Strategy there are three strands, NH being nutrition-in-health strategies, NC being strategies for nutrition across the sectors, and NL being strategies to develop nutrition leadership.

Readers with limited time can

- re-read this summary
- study the diagrammes on p10 & p25 to identify role(s)
- read the overview of strategies on pp. 21-23 and identify relevant actions

Glossary and abbreviations

A **policy** sets the aim, the objectives and key guidelines for the work.
A **strategy** indicates the steps needed to achieve the aim of the policy.
A **plan of action** determines intermediate objectives and targets for the steps in the strategy, and allocates responsibilities to relevant actors
Workplans, devised by/for individual actors/agencies, break the steps into tasks, determine the sequence for achieving them and the time by when they will be achieved.

CA	Consumers' Association
CBO	Community-based organisations
CC	Community College
CPA	Comprehensive Peace Agreement
DNIEU	(proposed) Data and Nutritional Impact Evaluation Unit
ENA/MNP	Essential Nutrition Actions/Minimum Nutrition Package
EPI	Expanded Programme of Immunisation (PHC Directorate)
F&N	food and nutrition
FAO	Food and Agricultural Organisation of the United Nations
FMOH	Federal Ministry of Health
FRC	Food Research Centre
GAM	Global Acute Malnutrition
GDP/GNP	Gross Domestic/National Product
GM	Growth Monitoring
H/C	Health Centre/Facility
HAC	Department for Humanitarian Coordination
HFA	height-for-age (stunting measure)
IDD	Iodine Deficiency Disease
IDP	Internally Displaced Person
IGCM	Inter-generational Cycle of Malnutrition
IMCI	Integrated Management of Childhood Illnesses
INGO	International Non-Governmental Organisation
MDG	Millenium Development Goal
NC/ NH/ NL	Strategies for nutrition, in health/ across sectors/ leadership
NGO	Non-governmental organisation
NND	National Nutrition Directorate
NSCSE	New Sudan Centre for Statistics and Evaluation
PHC	Primary Health Care
RH	Reproductive Health
SFP/C	Supplementary Feeding Programme/Centre
SGNED	School Gardening and Nutrition Education Department (Education)
SH	School Health (Dept in PHC's Directorate of Health Promotion)
SIFSISA	Sudan Integrated Food Security Information System for Action
SNAP	Sudan National AIDS Programme
TFP/C	Therapeutic Feeding Programme/Centre
UNICEF	UN Children's Emergency Fund
VAD	Vitamin A Deficiency
WFA	weight-for-age (general malnutrition measure)
WFP	World Food Programme
WFH	weight-for-height (wasting measure)
WHO	World Health Organisation

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Map of Sudan showing the location of State Nutrition Directors/Officers

A. NUTRITION POLICY FOR SUDAN 2006

1. Vision

Commitment to promoting nutritional well-being for all our people becomes an integral part of all humanitarian and development policies, plans and effective programmes in Sudan.

2. Rationale: why a nutrition policy, and why now ?

a. The context

Sudan's potential, for agricultural production, a major food industry and now the development of its petroleum products sector, is still significant. However, both that potential and the **potential** for ensuring the entire population is well-fed are still unfulfilled. With peace, with judicious management of the country's water, arable land, forests, pastures, livestock and wildlife, and mineral resources, and with equitable distribution of products and wealth, the whole population could benefit from being well-fed, from good services, and from rising prosperity.

Recurrent episodes of natural and manmade **disasters** have crippled the economy and livelihoods of both urban and rural populations. Failures in the quantity, duration and place of the annual rainfall has often led to food shortage and famine, and to migration of people from the areas affected to towns on the banks of the Nile and its tributaries. Those who stay, living on the fringes of towns and cities, are marginalised in many ways, and lead precarious lives there, while the pressure on services makes life difficult for themselves and the urban population.

Conflict has had similar effects. That between the south and north of the country resulted in immense losses, of human life, of the potential for constructive skilling and in lost opportunities for development. Added to this is the destruction of the environment, largely indirectly as exclusion zones were lost to food production and grazing, and as that and other stresses on local economies put undue pressure on water, fuel sources and land in many parts of the country hosting displaced people. These trends have all been exacerbated by insecurity.

Health, education, social **services**, and vital **infrastructures** for transport and utilities have all stagnated in recent years. Closely associated with these trends is a rising prevalence and spread of all forms of malnutrition and poor health,

tracking the rising numbers living below the poverty line, currently at well over half of the population. A low but significant and rising prevalence of HIV+ and AIDS adds to the threats to health, productivity and wealth, and must be approached preventively, now, as well as through treatment. A full table of nutrition indicators for Sudan is included in Annex A.

The **future** may nevertheless be much brighter, for four reasons. First, the conclusion of the CPA has started a process leading away from conflict and towards socio-economic development. Secondly, the revenues from exploitation of oil resources in the country are rising. Thirdly is a recognition by decision-makers that many reforms affecting public welfare are both important and possible. Fourth, and most significantly, are the Sudanese capacities that can now be released. Not least are the large numbers of IDPs, and of refugees outside the country, who despite having paid high personal prices during the conflict, also embody development potential if their skills and other resources are to be used to regenerate their home areas and the country. However, continuing conflict and tension, particularly in the West and the East, are compromising this potential.

Nutrition will remain a key element in ensuring **security**: adequate food is literally "vital" in keeping people alive, and keeping them without complaint regarding this basic need and human right.

Nutrition is also a vital aspect in **development**, and particularly in the accelerated development that may now be possible. Good nutrition ensures the strength, stamina and productivity of all Sudanese to work to escape from poverty and contribute to the country's wealth.

The Policy and Strategy establish steps towards this, making the role of nutrition explicit. Most **Sudanese policies** hitherto have omitted to do this. Annexe B lists which policies have addressed nutrition. The FMOH 25-year strategic plan's targets for child nutrition are directly relevant to meeting MDGs 1-6. Other national policies mentioning nutrition are listed in Annexe C. An overview of which nutrition strategies relate to which **MDGs** can be found on pages 21-23.

b. Health = wealth

Despite efforts by Sudan's nutritionists and their many national and international partners, the **nutrition situation** as mirrored in the status of under-fives continues to deteriorate. Currently in the North there is GAM among 18.5% of the children, and 21.5% among children in the South (2005 FMOH 25-year Strategy, and NSCSE/UNICEF *Towards a Baseline*). GAM of 15% or over is the trigger for relief intervention. More serious for development perspectives are the **stunting** figures (46% of children under 5) reflecting long-term, chronically poor nutrition. This has a variety of negative economic as well as health effects among all age groups in the whole population. The MDG1 **underweight** indicator (average 41%

low weight-for-age in our children) also reflects this, and is **unlikely to be halved by 2015 without substantial reductions in levels of poverty**.

Studies of other age-groups show that large sections of the adolescent, adult and elderly population are equally malnourished; growing numbers of young and old are diabetic or obese due to inappropriate food habits; and the accelerating rise in heart disease and cancers is in part due to **unhealthy eating habits**. Together these are indicators of a debilitated population in which sickly family members compromise family livelihoods, workers without stamina compromise workplace productivity and industry profits, while underfed teachers and other public employees lack energy for either enthusiasm or innovation.

The **root causes** of this deteriorating situation are the management of the country's resources which has disfavoured those without skills, land, other resources or adequate social and political networks, compounded by the under-resurced public services and the natural and man-made disasters referred to above. The main **immediate causes** are inadequate consumption due to low incomes, and high rates of disease due to poor sanitation and domestic water supplies as well as to inadequate levels of health care.

In addition, the **health sector** is being left to deal on its own with the effects. But there is little the health sector alone can do to address inequities and shield people from economic austerity and conflict, or indeed to remedy a poorly regulated food industry and trade, and a poorly-informed media encouraging unhealthy eating habits in people with minimal food knowledge beyond their traditional diet. Neither health nor **other relevant sectors** currently recognise the diverse roles to be played by each of them, together, to remedy this anti-nutritional situation, prevent it deteriorating further, and build up a healthy, well-nourished labour force.

In a **different Sudan**, children would be well-fed and healthy, would get better grades, and fewer infections, and they would recover quickly from infections and illnesses which take their parents' time from their work. Well-nourished workers could maintain higher productivity levels for longer. Farmers would produce what is needed to feed them. Industry could make healthy foods available and fortify foods to ensure everyone gets the right nutrients in their basic foods. Health workers and teachers could make sure everyone knows how to feed and look after themselves properly.

Such a scenario is what we find in developed countries, and is gradually being established in many other countries. By contrast, in Sudan, much crucial support for establishing this has disappeared, is not yet in place or is not yet working properly. Neglect of the nutritional health of the population is **costing Sudan** over 5% GDP every year, equivalent to $100 per capita (Hunt J, 2005), because women are anaemic, workers have goitres or are undernourished, children cannot stay awake at school, and nutritional night-blindness hampers family

Fig 1

activities after dark. Moreover, health services are spending more than necessary on malnutrition and nutrition-related avoidable diseases like TB. A healthy, well-nourished population can be expected to need less health care, can benefit more from education and skilling, escape more quickly from poverty, and contribute more to steadily rising GDP and GNP. Figure 1 on page 10 illustrates the relationship between investment in nutrition, and the economy.

c. Nutrition for everyone

Leaving nutrition to the health sector alone has skewed the focus to those groups who are most affected by lack of food and poor health, and who turn to health services for help – the very young, and their mothers. Focusing on them too narrowly ignores the rest of the family, and ignores the action needed to remedy the economic and social contexts which predispose to poor nutrition. Sudan now needs to also ensure that the children's fathers and other adults are fit and able to support their families. To ensure the future of the family and the development of the country, the children's brothers and sisters need to be better nourished to make the most of their education and their potential. This suggests that a **life-cycle approach** to nutrition should be adopted by the health sector; and that the interests of all age-groups be addressed by health's partners in other sectors. See the framework for this approach in Fig.2 (p. 25), and Annexe E (p.76).

Furthermore, the **diversity** of cultures and local economies in Sudan suggests that local adaptation is key to success in improving nutrition evenly and reducing also this effect of poverty, disadvantage and marginalisation.

d. Time to act

More than 30 years ago, experts from many relevant sectors at Sudan's First National Food and Nutrition Seminar in 1972 recommended even then that a "malnutrition problem of such magnitude needs a coordinated and well-planned approach requires the **active cooperation** of a large number of agencies". The seminar's findings are still relevant: the same course of action is still the key to improving the situation. The recommendation was repeated in Sudan's National Plan of Action on Nutrition, written at the request of the 1993 FAO-WHO International Conference on Nutrition, and adopted by the Government of Sudan on 21st May 1995. In 2002 the UN Sub-committee on Nutrition published "A Foundation for Development" which reiterated the recommendation and noted "good nutrition will help countries meet a wide range of goals that are crucial to accelerating development. As such, it is an **excellent investment**." The statement needed now is for Sudan's government to commit to a higher priority for action on nutrition; what Sudanese people need is practical action, and financial commitment to programme support from both Sudanese and international sources. This Policy addresses their needs; its adoption will establish commitment; and the associated Strategy for Implementation will provide an appropriate framework for action.

In accordance with current national trends, pro-poor objectives and equity goals set in the Poverty Eradication Strategy, as well as several targets indicated by the Millenium Development Goals, are all addressed within the framework of the attached Strategy. See pages 21-3 for how the strategies address the MDGs.

d. Peace and oil, for jobs and community development

Peace dividends, Sudan's oil revenues, and current planning which takes advantage of both these new assets, all favour the development of contexts in which the need for emergency interventions is reduced and **sustainable nutrition** improvements are possible. At local level, **jobs, clean water and good sanitation** are key to this - jobs for family income, and water and sanitation for reducing diarrhoeas and encouraging better hygiene. Oil companies have a duty to contribute to these community assets in the areas they operate in. The associated nutritional gains from these and other measures will show up as reduced health care needs and as rising economic wealth, equivalent at national level to 5% GDP or more.

3. Organising for making progress

Changing perceptions and programmes

Leadership in several sectors is called for to support the professional and technical staff engaging in the wider issues involving nutrition. Agricultural officers need to think more often of the consumers of food, and their access to food products and markets. Health staff need to broaden the scope of nutritional action, keep the whole population in mind, and the stages that today's infant will pass through, hopefully healthily, before reaching old age. Teachers at all levels need to keep in touch with the lives their students leadd, and to adapt material or introduce examples which address their needs for knowledge about foods and about nutrition.

The nutrition agenda which best addresses this perspective for the whole health sector is that of **breaking the cycle** of intergenerational malnutrition (see Fig 2 and Annexe E). It is developed under the NH strand in the attached Strategy.

In order to maximise the diverse roles to be played by each of the sectors, decision-makers at **national, state and local levels** can be helped to gain this understanding and improve the impact of their and other sectors' activities on the nutrition and welfare of the population.

Peace is the first pre-condition for good nutrition, as for much else. In addition, economic, social and service sectors can adapt their activities to create the other

vital pre-conditions for sustainable good nutrition: more employment, improvements in service provision, especially sanitation and clean water, and rising living standards. The strategy for implementing this policy will help to define the tasks inside and outside the health sector which impact positively on nutrition. A programme for **leadership in nutrition** will equip nutritionists, planners and programme managers across the sectors to both implement and oversee the Strategy.

Meanwhile this vision lies far in the future in many places in Sudan. The most **pressing needs** in areas of conflict and drought are for basic food supplies, clean drinking water, and adequate care for children and others suffering from severe nutritional stress. In many other places these needs will persist as long as local people's **livelihoods** are unable to support them and their families.

Support for government efforts during conflict and drought comes from many directions: all of it is welcome as long as the relevant government **guidelines** are followed, and as long as government **structures** are supported and strengthened and not sidelined or duplicated. While also pursuing and monitoring the essential nutrition actions within Primary Health Care, the FMOH's National Nutrition Directorate (NND) is creating a body of technical guidelines for humanitarian work, as a basis on which to discuss innovations and other departures from the guidelines with the aid agencies proposing them. Meanwhile, UN guidelines provide a default resource. See Annexe D.

Nutritionists at every level should liaise with other health sector officers over the preventive role of good nutrition in all disease, but particularly in delaying the onset of AIDS and being a crucial part of medical treatment for that disease.

Collaboration and coordination

In the course of this strategy period, and during programming for the partner clusters identified in the Strategy, it will become clear to the many sectors whose activities relate to nutrition, and should address it, what their nutrition-related tasks are. Sudanese nutritionists will be able to develop this Strategy and future strategies into comprehensive frameworks for addressing these tasks, both for government work and as a coordinating vision for government, NGOs, business, communities, and all their development partners. Sudan will also need a suitable informal **discussion** forum and **information** network for nutrition practitioners and planners, as well as a nutrition oversight body to monitor levels of activity throughout this framework of programmes, **monitor** their impact, and to advise on changes needed to achieve targets set.

For this first strategy period, important steps are proposed for building strong professional networks on nutrition, between sectors, which will develop the experience and the nutritionists needed to support a future nutrition body or council.

4. Policy goal

In order to maximise contributions to **economic growth** as well as promote **personal well-being**, Sudan's government and its many partners will strive to improve nutrition in the whole population.

This can only be done successfully by challenging the **food and trade** sectors to make healthy and affordable food products available to and accessible by all; by encouraging the **health** and **education** sectors and the **media** to instruct in and advocate for appropriate diets; and by ensuring that health services have adequately skilled staff, resources and partners to help the nutritionally-disadvantaged back to happier, more productive lives.

A Strategy for achieving all these outcomes, from Sudan's low starting-point, will stretch over two decades. The attached Strategy for the first five-year period, 2006-2010, will map out the actions needed in order to proceed to subsequent multisectoral Strategies, under this or future Nutrition Policies. The 2006-10 Strategy will outline the programme context for the emergency work which is currently the primary focus of interest of international nutritionists in Sudan. It will also make clear the roles of nutrition in minimizing HIV-prevalence and in the treatment of AIDS.

Sudan's nutrition coordinators are the National Nutrition Directorate in the Ministry of Health in Khartoum, and the Nutrition Department in the Ministry of Health in Juba. The Federal Government's Council of Ministers has decided that health is the primary home of nutrition. However nutrition can with time have **greater influence, also beyond the health sector**. The 2006-2010 Strategy is consequently built around developing the profile and reach of these Sudanese nutritionists, with a view to their leading the multisectoral nutrition strategies of the future.

5. Policy objectives: shared responsibilities, shared benefits

The five key objectives of the policy are:

- Reverse the current deterioration in nutritional status, among various population groups, of all ages; and gradually improve it, particularly among the physiologically vulnerable.

- During the short-term improvements brought about by emergency interventions, increase local skills and develop adequate programmes to sustain the improvements.

  Sudan needs to upgrade and expand emergency staff in both publicly and privately-funded programmes and those liaising between sectors. Also needed are discussions on the requirements for managing nutrition-related emergency activities, and ensuring adequatecapacity-building for Sudanese to meet the specifications for such management posts.

- Expand nutrition resources for state- and local-level activity, both human and financial.

  Capacity-building and the working environment in the federal system will need to improve, with local teams adapting and developing programmes appropriate to local needs. Funding will be required for this upgrading.

- Actors across the sectors will talk together and coordinate activities

  Sudan will need a broad nutrition forum, or a series of formal and informal fora, in which the implications of this policy can be discussed along with other nutritional issues between those working in many sectors. To enhance coordination, an oversight body to monitor the level of activities outlined in the Strategy and to propose relevant changes will be needed, and proposals for this could emerge from the different level of fora..

- Mainstream nutritional status as a key development indicator during Recovery and Reconstruction

  Monitoring in Sudan will correlate various nutrition indicators with those of improved health, rising incomes, economic and social growth.

6. Partnership action: guiding principles for the implementation strategy

The following eleven principles should all be incorporated in programmes addressing nutrition. Clusters of partners are suggested for each strategy.

- Understanding for each sector's contribution to nutrition

  Good nutrition results from, and is sustained by, effective work in many sectors. Malnutrition results from failure in one or more sector. The proof that this is understood will be the growth and spread of collaboration and coordination between all sectors, and greater emphasis on integrated preventive work in the health sector.

- Collaborative action within and between administrative levels

  Federal, state and local levels share responsibility, but play different roles in ensuring appropriate actions for maximum impact.

- Integrated and whole-population approach

  People become malnourished for different reasons at different rates in different contexts. Clarity over the needs of different age-groups as well as the impacts of food shortage, poor hygiene and sanitation, underemployment, stress of displacement and other marginalisation, will lead to well-focused programming for each group.

- Community action

  All planning and programming will aim at enabling local communities and families to make the most of their own skills and capacities in improving their nutritional situation. This should be done in a participatory manner wherever possible. Community action should include an enabling environment for small enterprises servicing food and nutritional needs.

  This will be critical for developing community preparedness for known threats to nutrition and food security, like droughts and flooding.

- Indigenous knowledge

  Sound traditional knowledge about the healthy use of Sudan's foods and other resources is largely unwritten and is being lost as older generations die. Efforts will have to be made to save this heritage, and build on it for nutritional benefit, including through bringing it up-to-date using modern technology and modern means of communication.

- Private sector involvement

  Public and private employers as well as the service and productive industries will all benefit from a better-nourished workforce as well as from developing services and products which promote the nutritional health of the population. In order to achieve this, partnerships should be sought with them where relevant.

- Appropriate joint programming

  Programmes in different sectors with a similar focus should be combined and managed as intersectoral programmes. These will provide examples of coordination and collaboration for other nutrition-related work, as well as maximising efficiencies, savings and cost-effectiveness.

- Information, communication and research

  All actors in nutrition-related activities bear a responsibility to inform each other of their work, and to communicate to others how they achieve their successes. This includes communicating research results and data within and between sectors.

  Coordination of the flow of key regular information for decision-making purposes will be through a system of nutrition and food security surveillance, and an associated multisectoral early warning function, partly in collaboration with SIFSIA.

- Monitor impacts against objectives from the start, including against MDGs, selected poverty reduction targets, and equity ratios.

- Awareness of relative costs and savings

  Least-cost options in the medium- to long-term may involve up-front investment in programmes and capacity-building. Early investment may help achieve greater impact, and may guarantee longer-term financial savings by minimising the alternative economic and health sector costs of inaction on nutrition.

- **Phasing:**
  Some strategies should be implemented urgently (short-term), some are less urgent (medium-term), and some need action in this strategy period in order to have longer-term impact. Below are this Strategy's target years for establishing good practice for sustainable improvements in nutrition.

  S = Short-term priorities for 2006-7 - this Strategy
  M = Mid-term priorities 2008-10 - this Strategy
  L = Longer-term impacts from 2011 - act now for future impact

7. Financial and human resources

- A review of the effectiveness of government institutions and resources allocated to nutrition work could form part of choosing how to realign work in accordance with this policy.
- Sudan will encourage current and potential donors to allocate financial resources for nutrition on the basis of this policy.
- Private sector involvement will allow greater investment in to-day's and to-morrow's labour force.
- Sudan will plan and seek funding for upgrading and expanding federal, state and local staff directly working on nutrition, to ensure relevant programming, policy and monitoring capacities. As part of this process Sudan will establish professional standards required for partner nationals and internationals; we will encourage all sectors to identify and build staff capacities to liaise on policy, planning and programming as well as on monitoring impacts related to improved nutrition.

8. Evaluating this policy

The useful life of this policy and strategy could be around 10 years. Both documents should be reviewed no later than in a mid-term evaluation after 5 years, ie by 2010. This should establish what proportion of recommended actions have been or are being pursued, whether adequate impact indicators are in place and which need sexpanding or adding to. This will suggest how much longer the policy and strategy will be valid, and what need there will be at that point to formulate terms of reference for a further policy exercise. The timing of this review could be proposed through any level of the Forum to be set up.

The policy alone may be evaluated against the usefulness of the strategy to which its guiding principles gave rise.

The policy-strategy package may be evaluated in terms of the extent to which its main thrust - coordination, partnership and increased resources for a wide variety of programmes, materialises

This policy is designed to reformulate the basis for nutrition work in Sudan along multi-sectoral and preventive lines. It is anticipated that donors will appreciate the resulting programmes presenting a more interesting development prospect for investment in nutrition than hitherto. The policy-strategy package may therefore also be evaluated according to whether relatively more development funding, compared to humanitarian, is made available once the policy is published and disseminated.

Finally, this policy assumes that open conflict within Sudan's borders will subside. Should this not happen, then this policy, like development in general, is unlikely to find sufficient funding for its implementation.

B. 2006-2010 Strategy for Implementing Sudan's Nutrition Policy

Introduction

The 2006 Policy sets out the potential for improved nutrition in Sudan; this first 5-year Strategy adds to ongoing activities the building-blocks needed to ensure that the vision can be reached in a further ten to twenty years.

The first of the three strands of the Strategy focuses on the key sector – health, which holds the nutrition mandate, a second has a broad address to collaboration and coordination across the sectors, and a third addresses the human resource development required to guide and coordinate the implementation of the first two.

The Strategy is not an action plan; what it does is outline the steps needed to achieve the Policy. These steps are elements to be incorporated into workplans and fleshed out there, ready for implementation as financial and human resources become available.

1. Layout and priorities

- Each **strategy** and its **sub-strategies** are allocated to one of the three strands (NH = nutrition-in-health, NC = nutrition across sectors, or NL= nutrition leadership), according to the objectives for the strand and the rationale for the strategy.
- The **numbering** of each strategy and its sub-strategies follows whichever strand they are allocated to. Ongoing nutrition activities are denoted by "0", eg NH 1.0.
- The internal **priorities** for each strategy are indicated by **S** = short-term, 2006-7; **M** = medium-term, 2008-10; and **L** = should be done now to ensure development towards the Policy Goal in the next strategy period.
- **Suggested leads in the partners clusters** are marked **(*)**

2. NH: developing nutrition throughout the health sector

The **objectives** of the NH strand are:

- developing a broader vision and operating framework for nutrition within the health sector, for nutritionists in NND/FMOH and in MOH (South).
- creating strong partnerships within the sector for improving the nutrition of every age-group

The **framework** for the NH strand is Breaking the IGCM (inter-generational cycle of malnutrition), see fig. 2 on page 25. The NH strategies make explicit the assumption of a family context, and addresses nutrition for those without families and those families and individuals finding themselves in difficulties during emergencies.

3. NC: collaboration on nutrition across sectors

The **objectives** of the NC strand are

- fostering strong and active partnerships in many sectors around key issues of nutrition
- identifying relevant stakeholders for each cub-strategy, and thus maximising the number of sectoral partners relevant to nutrition in each sub-strategy
- raising the level of discussion around nutrition within and between sectors

The **framework** for the NC strand is Practice and Learning, incorporating elements of the food chain/system, elements of education, and elements of public health beyond the current mandate of the health sector.

4. NL: strategies for nutrition leadership

This strand of the Strategy addresses the people and organizational aspects that will be needed to lead the implementation of the Policy in the next five years, and what institutional issues they may be expected to address.The Federal Ministry of Health is the **government body** mandated to address nutrition. FMOH has established the National Nutrition Directorate (NND) in the Primary Health Care General Directorate in Khartoum, headed by a Director and currently staffed by 11 professional officers, of an establishment of 25. There is a similar nutrition unit in the Juba ministry.

Meanwhile, there are nutritional aspects to many areas of work across the health sector. In addition there are significant nutritional aspects to work in other **sectors**, notably Agriculture, Education and Social Affairs; and nutritional concerns are addressed in Water, Industry, Trade, and not least in the Media. As the only government nutrition agency, it is national level nutritionists, together with the Nutrition Directors in the various **States**' health ministries, who will be responsible for taking and developing a leading role in pursuing the vision outlined in the Policy. They will be expected to advise on, coordinate, monitor and evaluate many elements of its associated Strategy, as well as initiate or be involved in planning in their own and other sectors, at both Federal and State levels.

During the five years of this Strategy, nutritionists working in and with the health ministries in North and South, coordinating, implementing, monitoring, evaluating, and advising, as well as planning at State and Locality level, will need support, upgrading, and expansion of their numbers. The **objective** of the NL strategies is to address this. The main focus for the NL strategies is Sudanese government nutrition professionals. The **framework** for these strategies is nutrition-friendly institution-building, all supporting the life-cycle approach of the NH strategies and the cross-sectoral collaboration of the NC strategies.

Strategies, rationales, MDG relevance, and key sector involvement in implementing Sudan's Nutrition Policy

Ref no	Nutrition-in-Health strategies - (NH) Titles and Rationales	Key Sectors
NH 1 MDGs 1,2,3,4,5,6	**Supporting good food, health and care in the family** As the context for most meals and health care, the family is the main influence on individual nutrition behaviour. Ensuring that this influence is as healthy as possible provides each member with the basis for his/her food and diet choices, also in adversity and humanitarian contexts.	Health, Univ's, Education, Media, SocAff, Community CBOs
NH 2 MDGs 1,2,3,4,5,6	**Nutrition in crises** During natural disasters, displacement and conflict, as well as in medical crises like AIDS in the family, it is family units who are able to stay together who are best able to maintain health and nutritional levels. Their own strategies under stress, for finding drinking water, and for getting, preparing and eating food they know, will need supporting. When one or more family members becomes malnourished, s/he should as far as possible be able to get help while remaining together with his/her family. People separated from their families may need special support.	Community, Health, Water, Humanitarian, International Civil Defence Local org's.
NH 3 MDGs 1,2,3,4,5	**Pre-marital and newlywed nutrition** Small babies are less healthy and at greater risk of early death or of illness in adulthood. Young men and women both need to know that prospective mothers must be well-nourished in order to have healthy babies. They and their families may need support in order to put good nutrition for prospective mothers into practice.	Youth, Media, Community, Health, Education
NH 4 MDGs 1,2,3,4,5	**Pregnancy, lactation and nutrition** Small babies are less healthy and at greater risk of early death or of illness in adulthood. The mother herself needs reserves of strength and energy. All family members should be aware of this and encourage her to eat well. Where eating well during pregnancy is difficult, support and advocacy in the local community contributes to healthy outcomes. All family members should encourage lactating mothers to eat well. Where eating well during lactation is difficult, support and advocacy in the local community contributes to healthy outcomes.	Youth, Media, Community, Health, Education
NH 5 MDGs 1,2,3,4,5	**Nutrition at birth** New babies belong with their mothers, and both may need help to start breastfeeding soon after birth. Babies who are exclusively breastfed for the first few months thrive more, and their mothers return to normal health quickly.	"
NH 6 MDGs 1,2,3,4,5	**Infants and nutrition** Low birth weight pre-disposes infants to poor health. Breast-milk is the best food for infants under 6 months (even for infants with HIV+ mothers) since it contains immunising and other protective ingredients. If infant growth falters significantly after 6 months, the carer may need supporting with relevant advice and directing to nutritious weaning products.	Health, Media, Community, SocAff, Food industry Agr, Millers
NH 7 MDGs 2,3,4	**Young children and nutrition** By the age of 6 months infants are already becoming interested in foods in addition to breastmilk. These need to be as nourishing as possible if child growth is to be given the best chance. Carers may need advice on weaning preparations and the introduction of solid foods.	Health, Food research, Food industry Media
NH 8 MDGs 2,3,4	**Pre-schoolers, school-age children and nutrition** Children at school need to be well-nourished in order to stay awake and learn attentively, as well as walk to and from school and do their home chores properly. Those children kept at home need to be well-nourished to do their home chores properly.	Community Education, Health Media
NH 9 MDGs 1,2,3,6	**Adolescents and nutrition** Adolescent growth is not as rapid as that of infants, but the development of critical potential takes place, including boys' bodily strength, and girls' reproductive capacity. Good nutrition maximises these potentials.	Media Health Education Sports
NH10 MDGs 1,3,4,5,6	**Adult nutrition** Most adults have families to support, and risk the well-being of their dependents if they neglect their own nutrition, particularly in a crisis (v NH 2) Any nutritional programme for other age-groups should consider the nutritional situation of the relevant adult carer(s), and if they need help should also advocate on their behalf.	Employers Labour, Media, Health Education
NH11 MDGs 1,3,4,5,6	**Elderly nutrition** Many elderly work hard into old age, often supporting the social, care and even financial needs of younger members of their families. They need to eat well to do so; but both they and more sedentary elderly people have changing nutrient and food needs, not least as their digestive systems and teeth become less robust with increasing age. They and their families need to know how to manage this well on a daily basis.	SocAff, Media, Health, Labour Communities

Ref no	Nutrition across sectors - Titles and Rationales (NC)	Key Sectors
NC 1 MDGs 1-6	**Media and nutrition** Advertising and TV are playing an ever greater role in influencing which foods urban Sudanese look for when shopping or going out to eat, as well as which health products and remedies people try. Media influence is also growing in rural areas. The sub-strategies throughout suggest some ways the various media can access reliable information from professionals, and create the variety of collaborative partnerships that can be formed which impact positively on nutrition.	Media Universities Health Research Food industry
NC 2 MDGs 1,4,5	**Nutrition in food security** A well nourished, healthy workforce is a precondition for successful economic and social development, and nutritional status is internationally recognised as a key indicator of food security and national development. Agriculture and its related activities constitute a major source and often the main source of employment and income. Thus direct investment in improving the nutritional status of rural populations is likely to have a significant pay-off in raising labour productivity and incomes. National agricultural research, in its role of enhancing food production and productive capacity of a country, can benefit from information about the specific nutritional needs of populations in order to contribute towards the nutritional well-being and productive capacity of the agricultural work force. Nutrition is also a major factor in deciding when food is needed to support hungry people, and what types of food the support should consist of.	Agriculture (Food security) Health Universities International Trade Industry Finance Food industry
NC 3 MDGs 1,4,5,6,7	**Water, sanitation and nutrition** More food is lost to children through diarrhoeas caused by unclean drinking water and poor sanitation than through storage losses and food spoilage. Reducing diarrhoeas and other intestinal complaints associated with poor sanitation will both improve health and save food.	Water Health Agriculture Media
NC 4 MDGs 1,2,3	**Schools, nutrition and foods** After the family, the school is, or should be, the best source of general knowledge about foods, diets and nutrition. Teachers, parents, pupils and the local community can all support this learning by contributing to school plots and school meals, which can in turn be used as practical examples in lessons.	Education Health Agriculture Community Media
NC 5 MDGs 1 thru' 7	**Higher learning, Community Colleges, Nutrition teaching** The currently limited scope of nutrition work in Sudan neither challenges nor enhances the scope and depth of nutrition teaching, learning and research in the country. As economic development refreshes perspectives on a broader spectrum of nutritional activity, medical health horizons will lift beyond the purely curative; agricultural knowledge and practice will stretch beyond a production focus; and social and cultural studies will also encompass food culture.	Universities Media Health Education
NC 6 MDGs 1 thru' 7	**Adult and non-formal education** Many adult learners, especially those who missed out on some years of schooling, are surprised to find that there is a great deal about foods, diet and nutrition that can be learnt. They are keen to learn and to apply what they learn immediately. This opportunity to improve nutrition habits should not be missed.	Community Education SocAff Health Media
NC 7 MDGs 1,4,5	**Food industry and retailing – a healthy foods code** Rapid developments in Sudan's food industry have seen an imbalance develop; on the one hand growing investment in and advertising for sure-sale foods and drinks with high fat/salt/sugar content, and on the other little attention to developing and promoting healthy food products. This is one factor contributing to rising rates of diabetes and heart disease in urban areas. This is now an opportunity to right the imbalance and encourage Sudan's food industry to profit from developing the healthy eating market.	Consumers Association, Industry Health Agriculture Media, Food research
NC 8 MDGs 1,5	**Restaurants and caterers – a healthy eating code** The market for meals as well as products that support eating healthily will grow. Restaurants and other eating places can profit from developing this market.	Food trade, Health,SSMO Consumers'A.
NC 9 MDGs 1,2,5	**Healthy institutional feeding** Sports clubs, schools, army camps, hospitals, prisons should all be budgeting for nutritional balance in the meals they provide, as well as keeping costs low.	Health Institutions
NC10 MDGs 1,4,5	**Monitoring nutritional impacts** Hitherto monitoring data has largely been kept by central officers and funding agencies. There is now an opportunity to make more use of this data, to inform the development of nutrition and other programmes.	Health Research Community
NC 11 MDGs 1,4,5	**Evaluating nutritional progress** Making use of monitoring data from many sectors can give a rounded picture of how far nutritional progress develops in parallel with the impacts of relevant programmes in those sectors. This is crucial to understanding nutritional mechanisms in development, and consequently for formulating and adapting programmes in the relevant sectors in order to maximise nutritional and other impacts.	Health,SocAff Planning Community Agriculture International

NC 12 MDGs 1,4,5	**Surveillance** Routine responses to the trigger-levels provided by nutritional status will continue to play play an important role in crisis situations where speedy action is of the essence. However this limited data is insufficient for monitoring the role of nutrition in recovery, rehabilitation and development processes. A broader surveillance and more nuanced interpretation and discussion is required.	International Agriculture Health
NC 13	**Food safety, food quality and food hygiene** More awareness of this nutrition and health contribution to consumer protection will help raise awareness of foods and food products.	Food industry SSMO, Health
NC 14 MDGs 1 thru' 7	**Nutrition research and nutritional aspects of research** Many areas being researched by agriculture, education, social sciences and economics have nutritional elements.	Food research Universities health
NC 15 MDGs 1 thru' 7	**Nutrition competencies** Regularising the status and employability of nutritionists, and filling the quotas for government recruitment should encourage more to join the profession.	Health Other sectors Universities
NC 16 MDGs 1 thru' 7	**Food and Nutrition Forum** As more nutrition work in areas other than emergencies and MCH is developed, the network of people working in nutrition in several sectors will need a forum for discussing their work and its perspectives.	All
NC 17 MDGs 1 thru' 8	**2012-2017 Policy &/or Strategy Development** Before 2012 this Policy will need reviewing to establish its level of continuing validity in the context at that time. Similarly, a new Strategy may need to highlight other priorities or be re-formulated. The F&N Forum could draft terms of reference for this work and recommend people and institutions capable of doing it.	All

Ref no	Nutrition Leadership strategies - (NL) Titles and Rationales	Key Sectors
NL 1 MDGs 4,5,6	**Nutrition-friendly programming in health** Nutrition in Sudan should be more than a problem of malnourished children that falls to the health sector to sort out. A capable and competent nutrition leadership is urgently needed as the basis for developing support for both the NH and the NC strategies. Much learning can be done by meeting other sectors and developing their own nutrition focus with them. This work and this approach should start in Health.	Health
NL 2 MDGs 4,5,6	**Nutrition-friendly health facilities** The ongoing process of integrating services at this level supports the involvement of nutritionists in many aspects of people's lives and health. This can only benefit the communities using the health facilities where this is effected.	Health Community Education SGNED
NL 3 MDGs 3,4,5,6	**Nutrition-friendly hospitals** When dietitians and nutritionists are involved in consultations with medical doctors, after-care as well as in-patient care will benefit.	Health
NL 4 MDGs 1thru'7	**Nutrition officers do nutrition; trainers do training** The broad Nutrition Policy and pro-active first five-year Strategy require nutritionists with breadth and depth who can operate pro-actively within Health and in other sectors. While Nutritionist numbers remain inadequate, their non-nutrition work (administration, data-entry, training) should be done by others.	Health
NL 5 MDGs 1thru'7	**Leading through advocacy in other sectors** Thinking nutrition, broad nutrition, may be new to many; specific projects will be need to be promoted by nutritionists in order to illustrate the links and the need to work inter-sectorally.	Health All sectors
NL 6 MDGs 1thru'7	**Focal-point nutrition** Many sectors, and many departments in Health, will need to appoint and train a Nutrition Focal Point to liaise with nutritionists in NND and elsewhere, with a view to achieving inter-sectoral action on nutrition.	Health,SSMO Agriculture Education Food industry Planning

Fig 2

Annexe A: Key national indicators in Sudan

Annexe B: ICN 1992 Themes and 2006 Strategies

ICN Themes		Key 2006 Strategies		
		NH	NC	NL
I	Improving household food security		2	
II	Protecting consumers through improved food quality and safety		5 7	
III	Caring for the socio-economically deprived and the nutritionally vulnerable	2 5-7 11		
IV	Preventing and managing infectious diseases	1	3	
V	Promoting appropriate diets and healthy lifestyles	1 3-11	6- 8	
VI	Preventing micro-nutrient deficiencies	1& 2 4- 8	7	1
VII	Assessing, analyzing & monitoring nutrition situations	7	4 10-12	
VIII	Incorporating nutrition considerations into development programmes		15-16	5-6
IX	Promoting breastfeeding	4- 6		

Annexe C:

Sudan policies addressing nutrition and relevant to the 2006 Nutrition Policy and Strategy

Ministry/sector	English title	Policy area/reference
JAM	A National Poverty Eradication Strategy – Concept Note, Sept. 2005	(nothing on nutrition or food security)
Agriculture	Rural Development, Food security and Poverty Alleviation Act, 2005	Only reference to nutrition is as supplying impact/performance indicators
Agriculture	SIFSIA	Programme proposal for data collection and proposed Council for Food (and Nutrition?) Security
Education		SGNED mandate
Health, SPLM	The New Sudan Nutrition Policy and Plan of Action 2004-2010 (July 2004 DRAFT)	Focuses on activities in PHC context
Health, FMOH	25 Years Strategic Plan for the Health Sector, 2005 National Policy on HIV/AIDS, 2004	especially children's "Nutrition" under Goal #3 "The main policy objective is to promote appropriate nutritional, medical, social and moral support to PLWHAs to enable them to enjoy a good quality of life, remain productive and live much longer with the HIV/AIDS" (p. 17)

Annexe D: Nutrition guidelines in Sudan:

1. Current national guidelines, protocols and manuals

Year Adopted /progress	Title	Source
	Health promotion: principles and practice (NB focus on lifestyle considerations)	
	Action point on promoting and supporting 6 months' exclusive breastfeeding	WHO
	Guidelines for prevention and treatment of Vitamin A Deficiency	
	Guidelines on IDD prevention and distribution of Libidol capsules	adapted from WHO
	Guidelines on treatment and management of Anaemia	adapted from WHO
	Guidelines for the diagnosis and management of non-communicable diseases (diabetes, CHD, mental health), supplemented by patient information leaflets	
In process	Prevention and early detection of cancer	
In process	Guidelines for nutrition surveys	
In process	Adoption of the international code on breast-milk Substitutes	
In process	Infant and child feeding manual	
In process	Growth monitoring manual	
In process	National protocol on management of severe acute malnutrition	WHO, M. Golden

In process Ministerial decree on flour fortification

In process Ministerial decree on salt iodisation

In process nutrition manual for Sudan

In process Health education: concept and practice

2. Key international guidelines (as default guidelines for nutrition work in emergencies)

The SPHERE Project, 2004,
Humanitarian Charter and Minimum Standards in Disaster Response, Oxford

UNHCR/UNICEF/WFP/WHO, 2003(?), Food and Nutrition Needs in Emergencies, Geneva

Annexe E:

Breaking the Inter-generational Cycle of Malnutrition in Sudan - proposed core of nutrition work in the Ministry of Health

Stage in life-cycle	MDG	Negative Cycle	Positive Cycle	Collaboration & records involved
Adoles-cent	1	Stunted	Good HFA	Records
	1,2,3	Reduced mental capacity	Alert and intelligent	School Employer
	1	Inadequate food, health and care	Adequate food, health and care	Family
Man /husband	1	Low productivity	Hard-working and productive	Employer
	1,4,5	Unable to support family	Supports family	Standard of living Community
	1, 3	Inadequate food, health and care	Adequate food, health and care	Men's contribution Family
Woman /wife	1, 3, 4, 5	Undernourished	Healthy BMI	PHC Own motivation
	1,4,5	Anaemic	Strong	PHC
Preg-nancy	3,4,5	Low weight gain	Good weight gain in pregnancy	Ante-natal RH
	4,5	Inadequate foetal nutrition	Adequate foetal nutrition	Ante-natal care RH
	4,5	Higher maternal mortality	Mother and infant in good health	Peri-natal care
	1,4,5	Inadequate food, health and care	Adequate food, health and care	Extended family
Elderly	1	Malnourished	Well-fed and healthy	Family
	1, 3, 4, 5	Reduced capacity to care for infants & help young marrieds	Has enough strength/stamina to care for infants & help young marrieds	Family /Community /PHC

Baby	1, 3, 4, 5	**LBW (<2.5kg) @ +/- 30% in Sudan**	Goal: <10% <2.5kg	Mother/Family Midwives, RH Peri-natal care
	4	Higher mortality rate [IMR in 99: 68/1000]	Falling IMR	Health records RH, PHC
	1,2,3	Impaired mental development	Playful and alert Reaching mental development potential	Family, RH Paediatricians Community nurses
	1	Increased risk of adult chronic disease	Good chance of healthy adulthood	Health records
	3, 4	Untimely/inadequate weaning	Exclusive breastfeeding to 6 months; weaning on nutritious mixes	Women relatives Midwives PHC/ GrMon Weaning food producers
	3, 4	Frequent infections	Healthy baby	PHC/records
	3, 4	Inadequate catch-up growth	Reaching growth potential	PHC / Growth Monitoring
	3, 4	Inadequate food, health and care	Adequate food, health and care	Family, carers, PHC
Child	3, 4	Stunted	Good HFA	Nutstat records
	3, 4	Wasted	Good WFA	Nutstat records
	2, 3	Reduced mental capacity	Bright, curious and eager to learn	Family School
	2,3,4	Inadequate food, health and care	Adequate food, health and care	Family & carers
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Annexe F: Key references

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